Europe’s Northern Resource Frontier

The political economy of resource nationalism in Sweden and Norway 1888-1936

Andreas R. Dugstad Sanders

Thesis submitted for assessment with a view to
obtaining the degree of Doctor of History and Civilization
of the European University Institute

Florence, 28 June 2018

European University Institute
Department of History and Civilization

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Introduction

Trade in raw materials was a crucial part of what is now often referred to as the "first global economy". As populations increased and the west industrialized, demand for raw material surged. Helped by falling barriers to trade, improved transport and communication technology made it possible for localities further and further afield to efficiently supply the industrial centres. Technology also created demand for completely new resources, or made the price of resources previously considered worthless soar. The Thomas-process turned phosphorescent iron ore from inconsequential rocks into a strategic commodity. Modern paper production turned useless timber into the raw material of the ever-increasing mass media. And electricity turned picturesque waterfalls into unlimited suppliers of "white coal".

This had a pronounced effect on countries where resources were in greater abundance than people and industry. It opened up new opportunities for growth and prosperity, and a chance to benefit from the surge in industrialization and trade. However, this was not wholly unproblematic. Increased trade also meant increased dependence on the more populous and powerful industrial centres, and sceptics claimed that they would eventually be stuck as "the hewers of wood and the drawers of water" in a perpetually unequal arrangement. These worries only intensified as the international economy was increasingly politicized and commodity prices fluctuated during and after the Great War. And this was not the only worry. The capital needed to expand the resource industries often come from the very same centres. This capital often came with direct foreign ownership of the resource industries, potentially drawing surplus earnings out of the country. This posed a further question – who should benefit from these resources and the rents they yielded?

As resources vastly increased in value, but without any effort of the owner, should he also have the right to be the sole beneficiary of this? During the turbulent first decades of the 20th century, these became recurring question in many resource rich countries – including Sweden and Norway. Over the years, the two states would to varying degree put their countries most valuable comparative advantages under political regulation.

I. Resource nationalism and economic nationalism

The process where a state tries to increase its take or control over a natural resource or the wealth it generates is often referred to as *resource nationalism*. The concept of resource nationalism itself seems to have first appeared in the late 60s or early 1970s, as a concept to describe the

nationalization, taxation and other state interventions exerted by resource exporting (mostly post-colonial) states taking place at the time.[1] The use of the term has broadly followed the trends of raw materials prices, before becoming more widely accepted following the resource boom of the late 2000s. The term itself was an obvious derivative of "economic nationalism", or rather *economic nationalism as it pertains to natural resources*.[2] While it has at times been labelled as "ill-defined", there is also little trace of obviously competing definitions or etymological evolution of 'resource nationalism' in the 1970s. In the cases more precise definitions were given, attempted, such as the "the attitude of resource possessing countries […], attempting [to] fully materialize sovereignty on indigenous resources"[3] or "behavioral assertion of national interests and control in extractive industries [by raw material exporters]"[4] they were very much in line with the underlying consensus of 'resource nationalism' as 'economic nationalism' in natural resource sector.[5] Thus, resource nationalism has been primarily used as an umbrella term denoting state interventions aimed to increase national control over its domestic resource industries, which is also how it is most commonly used today.[6]

Such 'resource nationalist' interventions can take many forms. The most visible and controversial are outright nationalization and expropriation of (primarily) foreign owned resource industries. However, this is far from the only – or indeed the most common – resource nationalist policy employed by resource rich states. Nationalization can also take less clear cut forms, through forced contract renegotiations, or by so called 'creeping nationalization' where governments puts regulatory or other obstacles in the way of an effective running of a foreign owned resource company, inducing it to sell its holdings to the state or a domestic owned enterprise. Other means

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[1] The earliest use of the term 'resource nationalism' that I have been able to verify, is in *The Oriental Economist's Japan Economic Yearbook*, 1970.

[2] The earlies texts that use the term does not even both to define the consept, but leaves it implied by the obvious allusion to economic nationalism. See for instance: Yoichi Itagaki, "Economic Nationalism and the Problem of Natural Resources," *The Developing Economies* 11, no. 3 (1973); Saburo Okita, "Natural Resource Dependency and Japanese Foreign Policy," *Foreign Affairs* 52, no. 4 (1974); Frank C. Langdon, "Canada's Struggle for Entrée to Japan," *Canadian Public Policy / Analyse de Politiques* 2, no. 1 (1976).

[3] Ministry of International Trade and Industry, "White Paper on the International Trade," (Tokyo: Ministry of International Trade and Industry, 1975), p. 20.

[4] Tong Whan Park and Michael Don Ward, "Petroleum-Related Foreign Policy: Analytic and Empirical Analyses of Iranian and Saudi Behavior (1948-1974)," *The Journal of Conflict Resolution* 23, no. 3 (1979).

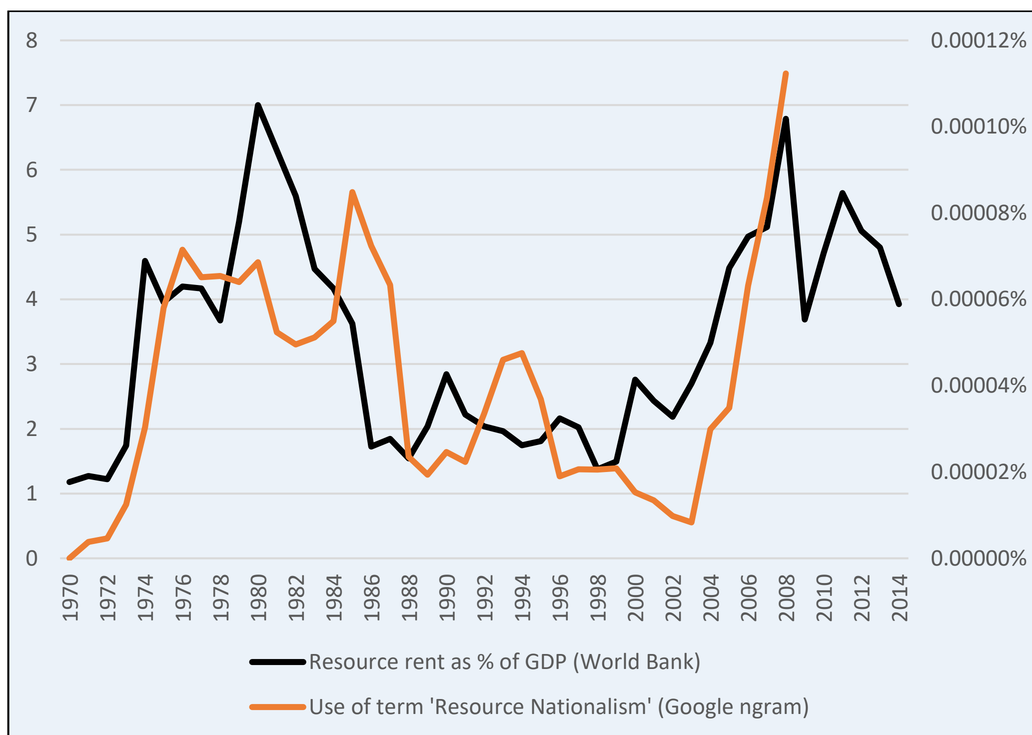
[5] Resource nationalism as a sub cathegory of economic nationism is explicitly explored in Peter J. Burnell, *Economic Nationalism in the Third World* (Wheatsheaf Books Ltd., 1986), pp. 116ff.

[6] See for instance: John Childs, "Geography and resource nationalism: A critical review and reframing," *The Extractive Industries and Society* 3 (2016): p. 539; Kevin Young, "Blood of the Earth: Natural Resources, Economic Visions, and Revolution in La Paz, Bolivia, 1927-1971" (Stony Brook University, 2013), p. 3; George Joffé et al., "Expropriation of Oil and Gas Investments: Historical, Legal and Economic Perspectives in a Age of Resource Nationalism," *Journal of World Energy Law & Business* 2, no. 1 (2009): p. 4.

include targeted increases in taxes and royalties from resource industries, contractual demands or tariff barriers to increase upstream and/or downstream integration.[7]

Yet, while the term is related to “economic nationalism”, this does not mean that the terms should be used interchangeably. Resource nationalism is in many ways very different from trade protectionism, often closely associated with economic nationalism. Tariffs to support infant industry protection aims at replacing imports with domestic productions, thus reducing international trade. Most resource nationalist policies on the other hand do not seek to break the trading relationship between raw material exporter and importer, as the resource rich state usually has a surplus beyond the needs of its own economy. Instead, the resource nationalist policies aim to achieve a more favourable deal for the resource rich state. Furthermore, the high tariff barriers often induce foreign companies to set up branch plants within its own borders, thus intentionally or unintentionally, promoting foreign direct investments. Conversely, a common aspect of resource nationalist policy is precisely to secure domestic or state ownership over valuable natural resources.

Figure 1: Use of the term 'resource nationalism'



[7] For similar attempts to list the forms of resource nationalism, see: Halina Ward, "Resource nationalism and sustainable development: A primer and key issues," in *Working Paper* (IIED, 2009), pp.8-9; Burnell, *Economic Nationalism in the Third World*, pp. 116ff; Mcebisi Ndletyana and David Maimela, eds., *Resurgent Resource Nationalism? A Study into the Global Phenomenon*, Research report (Mapungubwe Institute for Strategic Reflection) (Johannesburg: Real African Publishers Pty Ltd., 2016), pp. 7-10; Michael Solomon, "The Rise of Resource Nationalism: A Resurgence of State Control in an Era of Free Markets or the Legitimate Search for a New Equilibrium?," (Cape Town: Southern African Institute of Mining and Metallurgy, 2012), p. 73.

II. Natural resource regulations in history

Much of the literature on resource nationalism either lack or is simply indifferent to the longer historical aspects of these questions. Yet, this criticism can also be turned on its head, as historians have shown only sparing interest in the evolution of the political economy of natural resources regulations and how this has changed over time. This is especially marked for the period often referred to as the "first global economy", which fragmented after the great depression of the 1930s. Trade in raw materials were central to the first global economy, and "the first sector where entrepreneurs discerned and exploited opportunities to create value by operating across borders".[8] This development depended to a large degree on the policies pursued by the states with abundant natural resources. Yet, while the return to protectionism beginning in the latter part of the 19th century is well documented, the introduction and spread of policies aimed at restricting ownership, profits and exports have received much less attention from historians. In particular, there have been no serious attempts at examining this as an international or a transnational phenomenon in this period, barring a few works on selected resources – mainly on the oil.[9] The accounts that deal with natural resource policy as a point of contention in the international economy, and include some historical perspective, are mostly concerned with the debate on nationalizations and taxation of natural resources in the developing world following de-colonisation. Here the passing of the *Principle of Permanent Sovereignty over Natural Resources* in the UN in 1961 is highlighted as an important turning point for state control over natural resources.[10]

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[8] Geoffrey Jones, *Multinationals and global capitalism : from the nineteenth to the twenty-first century* (Oxford ; New York: Oxford University Press, 2005), p. 45.. The importance of natural resources in the global economy has led
Edward Barbier to name it the "golden age of resource-based development". Edward Barbier, *Scarcity and frontiers : how economies have developed through natural resource exploitation* (Cambridge, UK ; New York: Cambridge University Press, 2011), p. 368.

[9] A good – if not exhaustive – overview of the evolution of royalties and concession systems for large oil producers in developing countries can be found in: Bernhard Mommer, *Global Oil and the Nation State* (Oxford: Oxford University Press, 2002), pp. 107-33.. Another broad international oil history which also occationally goes into the changes in regulation is Daniel Yergin, *The Prize: The epic quest for oil, money & power* (London: Simon & Schuster, 1993).. An honourable mention should also go to William J. Hausman, Peter Hertner, and Mira Wilkins, *Global electrification : multinational enterprise and international finance in the history of light and power, 1878-2007* (Cambridge ; New York: Cambridge University Press, 2008)., which also deales with broad international trends and the backlash against foreign ownership during and after the First World War. This work does not deal as much with natural resources per se, but rather with electricity as a utility. However, these two aspects were closely connected in many countries, particularly those with a considerable hydropower resources.

[10] See Nico Schrijver, *Sovereignty over natural resources : balancing rights and duties* (Cambridge ; New York: Cambridge University Press, 1997); Kamal Hossain and Subrata Roy Chowdhury, *Permanent sovereignty over natural resources in international law : principle and practice* (New York: St. Martin's Press, 1984).

While there has been a lack of international historical studies of resource nationalism before World War II, the politics of resource regulations have been studied in individual countries where natural resources have played a significant role in the economy, even if few of them actually use the term "resource nationalism". This is particularly the case for mineral dependant countries in Latin America, such as Mexico, Chile, Bolivia, Venezuela and to a lesser extent Peru.[11] However, as these countries for the most part took a liberal approach to foreign direct investment and natural resource policies – at least before the latter parts of the 1930s, these works do not discuss resource nationalist policies of the first global economy, but rather the effects of their absence. Thus, a recurring topic was to what extent the natural resource based export enclaves had benefitted the host economy, or if foreign owners and/or importers reaped unreasonably high profits.

The interest in the natural resource sectors, especially in Latin America, was in large part spurred by a wider debate on raw material exports in economic development. After World War Two, structuralist economists – most notably Raúl Prebisch and Hans Singer – criticised the then mainstream opinion that raw material exports were a favourable avenue for developing countries, as it would act as a much-needed source for capital. Instead, they argued that promotion of commodity exports would be detrimental to economic development in poorer countries, as they predicted that over time, the terms of trade for raw materials would decline in relation to industrial goods.[12] Solution to prevent this ranged from promotion of import substituting industrialization behind tariff walls, regulations on natural resource ownership on extraction to promote economic spill over effects or outright nationalization of the country's resources. Based on these ideas, proponents of the *dependencia* school, popularized in the 1960s and 70s tried to show how this exploitative development had been established historically through by the richer west in collaboration with domestic elites.[13] However, for the dependencia school, foreign ownership of

[11] These are of course far too many too numerous to list, and as significant parts of it are in languages I do not master, some will undoubtedly have passed me by. However, a number of them are available in English, for instance: Marvin D. Bernstein, *The Mexican mining industry, 1890-1950; a study of the interaction of politics, economics, and technology* (Albany: State University of New York, 1964); I.G. Bertram, "Development Problems in an Export Economy: a Study of Domestic Capitalits, Foreign Firms and Government in Peru, 1919-1930" (University of Oxford, 1974); Markos Mamalakis, *The growth and structure of the Chilean economy : from independence to Allende* (New Haven: Yale University Press, 1976); Manuel E. Contreras, "Debt, Taxes, and War: The Political Economy of Bolivia, c. 1920 - 1935," *Journal of Latin American Studies* 22, no. 2 (1990).
[12] Raul Prebisch, *The economic development of Latin America and its principal problems*, United Nations Document (Lake Success,: United Nations Dept. of Economic Affairs, 1950); H.W. Singer, "The Distribution of Gains between Investing and Borrowing Countries " *The American Economic Review* 40, no. 2 (1950).
[13] The most famous works on dependency are undoubtedly: Andre Gunder Frank, *Capitalism and underdevelopment in Latin America; historical studies of Chile and Brazil* (New York: Monthly Review Press, 1969); Walter Rodney, *How Europe Underdeveloped Africa* (Dar-Es-Salaam: Bogle-L'Ouverture Publications, 1973); Fernando Henrique Cardoso and Enzo Faletto, *Dependency and development in Latin America* (Berkeley: University of California Press, 1979).. For an broader overview, see: Tulio Halperin-Donghi, ""Dependency Theory" and Latin American Historiography," *Latin American Research Review* 17, no. 1 (1982).

natural resources was only one factor among many, and was often overshadowed by import substituting industrialization.[14]

In Canada, ideas were popularised through the so-called *staple thesis*. The staple thesis, originally been set forth by historians such as Harold Innis and W.A. MacIntosh in the 1920s and 30s, postulated that much of Canadian history, politics and society could be explained by the successive exploitation and export of *staples* i.e. raw materials, such as fur, fish, timber and wheat.[15] This was not originally presented as something inherently negative, but was later reinterpreted as a *staple trap thesis,* where the country's reliance on raw material exports and inward foreign direct investments had created a dependant, subservient and economically inferior relationship to its big neighbour to the south.[16]

These theories somewhat eventually fell out of favour after nationalization of key natural resources and import substitution tariffs failed to prove as effective a development solution as the structuralists had hoped. Despite taking a larger share of profits generated by their natural wealth, the results remained mixed at best, and many resource rich countries failed to build on their natural wealth. Instead, rapid economic growth was instead most prominent in resource poor developing countries, such as the four Asian Tigers.

Consequently, new theories about the challenges of natural resource based growth were developed where the relative lack of rent from raw material exports flowing to the host economy were no longer the problem, but precisely the opposite. The idea of natural resources as a "curse" rather than a much needed source of capital was greatly strengthened by a highly influential econometric study by Jeffrey Sachs and Andrew Warner, which showed that between 1971 and

---

[14] This is noticeable in the research led by Dieter Senghaas and Ulrich Menzel (mainly in the 1980s), one of the few larger works attempts to systematically compare historical development strategies between developed and developing countries. While this works highlights Sweden and Norway examples of successful development in late-coming economies, the work focuses more on selective trade protectionism than natural resource policies. See: Ulrich Menzel, "The Experience of Small European Countries with Late Development. Lessons from History," in *Contributions to the Comparative Study of Development.*, ed. Lars Mjøset (Oslo: Institute for Social research (ISF), 1992); Dieter Senghaas, *The European experience : a historical critique of development theory* (Leamington Spa: Berg Publishers, 1985).

[15] Some of the most important works are: are Harold Adams Innis, *The fur-trade of Canada* (Toronto,: University of Toronto library, 1927); *Problems of staple production in Canada* (Toronto,: The Ryerson press, 1933); *The cod fisheries; the history of an international economy* (New Haven & Toronto: Yale University Press, 1940); W. A. Mackintosh, "Economic Factors in Canadian History," *Canadian Historical Review* 4, no. 1 (1923).

[16] Kari Levitt, *Silent surrender: the multinational corporation in Canada* (Toronto,: Macmillan of Canada, 1970); Gary Teeple, *Capitalism and the National Question in Canada* (Toronto: University of Toronto Press, 1972); Mel Watkins, "The Staple Theory Revisited," *Journal of Canadian Studies* 12 (1977); Glen Williams, *Not For Export: Toward a Political Economy of Canada's Arrested Development* (Toronto: McClelland and Stewart, 1983); Gordon Laxer, *Open for business : the roots of foreign ownership in Canada* (Toronto: Oxford University Press, 1989).

1989, countries with high raw material exports had overall experienced slower economic growth than countries without.[17] Consequently, a number of theories has been proposed to as exactly how abundance is turned into a curse, such as causing "Dutch disease",[18] irresponsible pro-cyclical government overspending, bankrolling inefficient import-substitution schemes, increased political corruption, rent seeking, creating complacency which stifles innovation and increased likelihood of political instability and armed conflict.[19] In recent years, a number of scholars have tempered the idea of an outright 'resource curse' and instead adopted the idea that natural resource riches are a mixed blessing, whose problems can be overcome if it is handled right, especially highlighting the importance to the quality of institutions within resource rich states.[20]

Resource nationalism as a concept has not been widely adopted by historians. Instead, it has been mainly used by political commentators, business analysts and political scientists' interested in predicting and managing investor risk, and studying the way sustainable compromises can be found between investors and host economies interests. [21] This literature has a distinct focus on how developing countries deal with natural resources, particularly the question of taxation, investor risk and the bargaining relationship between companies and host governments in terms of resource windfalls. One highly influential work in this regard is the 1971 book "Sovereignty at bay" by Raymond Vernon. Vernon argues, through his "obsolescing bargain model" that nationalization and contract renegotiations should be understood as a natural result of the shifting power relationship

[17] Jeffrey D. Sachs and Andrew M. Warner, "Natural Resource Abundance and Economic Growth," in *NBER Working Papers* (NBER, 1995).

[18] The term 'Dutch-disease' was coined by the Economist in 1977 when describing the negative effects the exploitation of the Groningen gas field upon the Dutch manufacturing industry. This theory stipulated that commodity booms hurt other export oriented sectors of the economy, both by outcompeting them for labour and investments, as well as through an appreciation of the currency, likely to follow from a commodity boom.

[19] The literature on the "resource curse" is absolutely enormous, but good overviews can be found in: Jeffrey Frankel, "The Natural Resource Curse: A Survey," in *Beyond the Resource Curse*, ed. Brenda Shaffer and Taleh Ziyadov (Philadelphia: University of Pennsylvania Press, 2012); Michael L. Ross, "What have we learned about the resource curse?," (Los Angeles: UCLA Political Science, 2014); Erika Weinthal and Pauline Jones Luong, "Combating the Resource Curse: An Alternative Solution to Managing Mineral Wealth," *Perspectives on Politics* 4, no. 1 (2006).

[20] James A. Robinson, Ragnar Torvik, and Thierry Verdier, "Political Foundations of the Resource Curse," *Journal of Development Economics* 79, no. 2 (2006); Halvor Mehlum, Karl Moene, and Ragnar Torvik, "Institutions and the Resource Curse," *The Economic Journal* 116, no. 508 (2006); Anne D. Boschini, Jan Pettersson, and Jesper Roine, "Resource Curse or Not: A Question of Appropriability," *The Scandinavian Journal of Economics* 109, no. 3 (2007); Henry Willebald, Marc Badia-Miró, and Vincente Pinilla, "Natural resources and economic development -- what can we learn from history?," in *Natural Resources and Economic Growth: Learning from History*, ed. Marc Badia-Miró, Vincente Pinilla, and Henry Willebald (London & New York: Routledge, 2015). A more all-encompassing deliberation on the crucial role of institutions for economic and political development has been popularised in Daron Acemoglu and James A. Robinson, *Why nations fail: the origins of power, prosperity, and poverty* (New York: Crown Publishers, 2012).

[21] A good summary of this literature can be found in Bruce McKern, ed. *Transnational corporations and the exploitation of natural resources* (London ; New York: Routledge, 1993); Naazneen H. Barma et al., *Rents to riches? : the political economy of natural resource-led development* (Washington D.C.: World Bank, 2012).

between host country and multinational enterprise.[22] Whereas a multinational enterprise can initially obtain favourable contracts as the host country needs both capital and technology provided by the foreign investor, once the investments have been sunk, power shifts towards the host, who can then renege on the conditions previously agreed upon. As natural resources are bound in place, and often require high initial exploration and development costs, the obsolescing bargain effects are consequently more pronounced in these industries compared to other sectors. This model has later been dubbed the "resource nationalist cycle".[23]

Others have found that this simple model fails to explain the great variety of resource nationalist efforts, and how they have differed from state to state. Instead, they emphasize the need to take account of the ideological and political underpinnings of resource nationalist policies, which are often just as much driven by demands from 'below' than imposed from 'above'.[24] Indeed, a recent book on the issue finds that resource nationalism is more likely to occur in states with some democratic accountability, but weak checks and balances than in outright dictatorships.[25]

The debate on the causes of resource nationalism in some ways parallels the debates on the causes of economic nationalism and protectionism. Many political scientists have highlighted the role of interest groups as a key driving force behind protectionist policies. Viewed from an economic liberalist perspective, this theory sees protectionist policies as a politically derived privilege given at the expense of the rest of society. Another view, popularised by "realist" international political economists sees protectionist policy as mainly motivated by state interests for protection or advantage in an international economic system. It should be noted that these theories are not monolithic dichotomies in protectionist theory, and a number of scholars have tried to nuance these extremes, by either proposing a combination of the two models, as well as emphasising the role of ideas and sociological factors.[26]

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[22] Raymond Vernon, *Sovereignty at Bay: The Multinational Spread of US Enterprises* (New York: Basic Books, 1971).
[23] Paul Stevens, "National oil companies and international oil companies in the Middle East: Under the shadow of government and the resource nationalism cycle," *Journal of World Energy Law & Business* 1, no. 1 (2008); Brent Z. Kaup and Paul K. Gellert, "Cycles of resource nationalism: Hegemonic struggle and the incorporation of Bolivia and Indonesia," *International Journal of Comparative Sociology* 58, no. 4 (2017).
[24] Stevens, "National oil companies and international oil companies in the Middle East: Under the shadow of government and the resource nationalism cycle," pp.5-6.
[25] Sangwani Patrick Ng'ambi, *Resource Nationalism in International Investment Law* (New York: Routledge, 2016), p. 4.
[26] Well known examples of accounts that focus on interest group explanation included Alexander Gerschenkron, *Bread and Democracy in Germany* (Berkely: University of California Press, 1943); Raymond A. Bauer, Ithiel de Sola Poole, and Dexter A. Lewis, *American Business and Public Policy: The Politics of Foreign Trade* (New York: Atherton Press, 1963); Peter Guourevitch, *Politics in Hard Times: Comparative Responses to International Economic Crises* (Ithica, NY: Cornell University Press, 1986). while the scholarly works espousing the "realist" or "statist" position include Robert Gilpin, *The Political Economy of International Relations*

In comparison, the theories on resource nationalism focused much less on special economic interest groups as an explanatory factor. This is perhaps a bit surprising, as the influence of narrow economic interest groups over key strategic parts of the economy very much plays into the 'quality' of institutions in a resource dependent country – which again has been suggested as a key variable in overcoming the "resource curse". Indeed, most of the theoretical explanations of the "resource curse" are only indirectly related to how ownership, extraction and export of natural resources are regulated. However, some scholars have proposed closer connections between resource nationalism and the resource curse, which are also related to natural resources and institutions. Namely, scholars such as Michael Ross and Nathan Jensen have suggested that institutions within resource rich countries have been corroded by resource nationalist policies.[27] Several states who introduced rent-capture policies did so through nationalization or forced contract negotiations, thus sidelining liberal conceptions of property and contract rights – the very institutions often highlighted as pre-requisites for sustained economic growth.[28] The negative effects of this has been suggested to manifest itself in different ways, such as undermining respect for property rights outside the resource sector and thus weakening checks on the executive, leading private companies to adopt shorter term extraction policies in anticipation of future expropriation as well as scaring away new companies from investing and bringing in the technology and capital to utilize the resources in the most efficient way.[29]

In summary, despite its relevance for the overall understanding of resource-based development, the phenomenon of resource nationalism has received only scant historical analysis. The historical accounts that do exist are both lacking in longer term historical perspectives, or lack international context. This is especially for the case for western countries, where domestic natural resources in general occupy a less dominant economic role, and where ideas of colonial or neo-colonial exploitative resource extraction do not hold such a strong hold of the popular imagination.

(Princeton: Princeton University Press, 1987); Richard Rosecrance, *The Rise of the Trading State* (New York: Basic Books, 1986); Stephen D. Krasner, *Defending the National Interest: Raw Material s Investments and U.S. Foreign Policy* (Princeton: Princeton University Press, 1978).

[27] Nathan M. Jensen and Noel P. Johnston, "Political Risk Reputation, and the Resource Curse," *Comparative Political Studies* 44, no. 6 (2011); Michael L. Ross, *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations* (Princeton & Oxford: Princeton Univesity Press, 2012).

[28] For liberal institutions as central to long term economic growth, see: Dani Rodrik, "Institutions for High Quality Growth: What they are and how to acquire them," in *NBER Working Paper* (Cambridge, MA: National Bureau of Economic Research, 2000); Daron Acemoglu, Simon Johnson, and James A. Robinson, "The Colonial Origins of Comparative Development: An Empirical Investigation," *The American Economic Review* 91, no. 5 (2001).

[29] Joffé et al., "Expropriation of Oil and Gas."; Jensen and Johnston, "Political Risk Reputation, and the Resource Curse."

A closer look on the resource nationalism in Sweden and Norway thus offers a good way to begin to address these shortcomings. Such an examination allows us to not only study how resource nationalism was initiated and handled in two countries that are now usually considered "success stories". It also allows us to examine the differences in how these policies were created and implemented in two states, which for all their similarities, also had some very notable differences. They shared many of the same resources, but their value and geographic spread were different. Moreover, their domestic economic structures were different. And last, but not least, they also had political differences. Besides any cultural differences, they also democratised at different times. Norway was a parliamentary democracy with universal male suffrage as early as 1898, while parliamentarism was a more gradual process in Sweden, and the first election with universal suffrage was in 1921.

III. Resource nationalism in Scandinavian historiography

While there is no literature that specifically deals with resource nationalism in Scandinavia, the policies introduced to regulate ownership of natural resources in the first globalized economy have received some attention within the national historiography. This is especially the case in Norway. The introduction of the Norwegian concession laws, the most radical reform of natural resource regulations in Norway was perhaps the most prominent political issue between the dissolution of the Swedish-Norwegian union in 1905 and World War I, and thus has a prominent place in Norwegian historiography.

Consequently, even most general Norwegian histories that covers this period will include some information on the Norwegian concession laws. The origins of these laws are usually ascribed to a combination of wanting to regulate foreign ownership, monopolies and a distrust towards rapid industrialization.[30] Some of the literature have also tried to make further distinctions between these causes. Lars Thue, who has written numerous books on the development of Norwegian hydroelectricity has in particular emphasised the influence of Georgism on the thinking of key actors involved in shaping the Norwegian concession law.[31] Trond Nordby on the other hand has taken

[30] See for instance: Berge Furre, *Norsk historie 1905-1940* (Oslo: Det norske samlaget, 1971); Fritz Hodne, *Norges økonomiske historie 1815-1970* (Oslo: Cappelen, 1981), pp. 366-69; Knut Kjeldstadli, *Et splittet folk 1905–35* (Oslo: Aschehoug, 1994); Einar Lie, *Norsk økonomisk politikk etter 1905* (Oslo: Universitetsforlaget, 2012), pp. 20-24.

[31] Thue especially elaborates on this in Lars Thue, *For egen kraft : kraftkommunene og det norske kraftregimet 1887-2003* (Oslo: Abstrakt forlag, 2003).

more of an interest group approach, highlighting the role of Norwegian farmers, and their scepticism towards rapid industrialization.

Another, more controversial, aspect of the historiography relates to the consequences of these policies. In the first historical work that gives significant attention to the Norwegian concession law, Wilhelm Keilhau concluded that the concession laws had a detrimental effect on the Norwegian economy, as "Norway lost its natural position as the world's big producer in the electrochemical sector".[32] This interpretation was largely accepted by Norwegian historians, until it was challenged by Even Lange in 1977, who showed that there had been no significant fall in mining and hydroelectric investments between the introduction of the first laws and the outbreak of World War I.[33] Others have also highlighted the concession laws as establishing an important principle of public ownership of natural resources, which formed a precondition for a later successful Norwegian oil policy from the 1960s and onwards.[34]

Despite the importance given to the concession laws by many Norwegian historians, little actual historical research has gone into how they how they worked or evolved in practice. In 1983, this was partially remedied by a *Hovedfagsoppgave* (roughly equivalent to a Master's Degree) penned by Erling Annaniassen. Annaniassen explored the implementation on the concession law for hydroelectric plants between 1906 and 1910, and concluded that the Norwegian governments had applied the law liberally, which again supported Lange's findings.[35] However, as Annaniassen also acknowledges, the conclusions drawn from the short time period would not necessarily prove valid for the time after that. Moreover, Annaniassen only examined concessions for new hydropower plants. Other important concessions, such as for mining or for power leases were left unexplored.

In Sweden, by contrast, the question of natural resource policy have garnered less widespread attention. While the ownership of natural resources was a hotly debated topic at the time, the declining importance of natural resources to the Swedish economy overall has presumably played an important part in lack of interest given to these topics by most Swedish economic

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[32] "[…]Norge mistet sin naturlige stilling som verdens storprodusent på det elektrokjemiske område." Wilhelm Keilhau, *Det norske folks liv og historie: I vår egen tid* (Oslo: H. Aschehoug, 1938), p. 145.
[33] Even Lange, "The Concession Laws of 1906-09 and Norwegian Industrial Development," *Scandinavian Journal of History* 2, no. 4 (1977).
[34] Helge Ryggvik, *The Norwegian Oil Experience : A toolbox for managing resources?*, trans. Lawrence Cox (Oslo: Senter for teknologi, innovasjon og kultur (TIK), 2010).. Similar views can be found in in other left-leaning publications, for instance: Knut Gjerseth Olsen, Jo M. Bredeveien, and Askild M. Aasarød, *Hvem skal eie Norge?* (Oslo: Manifest, 2015), p. 11.
[35] Erling Annaniassen, "Rettsgrunnlag og konsesjonspraksis: en undersøkelse av rettsgrunnlaget for vassdragskonsesjoner og dets håndhevelse i tidsrommet 1906-1910" (University of Oslo, 1983).

historians.[36] In his account of foreign direct investments in Sweden, Sven Nordlund states that the Restriction Act, introduced in 1916, erected a “Chinese Wall” around the Swedish economy.[37] But the impact of the law would largely depend on how it was implemented. Besides the long lasting row over the ownership of the iron ore in Lapland from 1890 to 1907, examined by a group of Swedish historians in the 1960s, [38] there have been little research into how resource policies were applied. This has however not prevented others from applying great significance to the regulations. In his comparative work of foreign ownership in Canada and Sweden based on secondary sources, Gordon Laxer concludes that: “Sweden’s decision not to alienate its resources to foreign interests and instead to utilize them to build up domestic manufacturing was important for the country’s economic success.”[39]

There is a long tradition in the Swedish historiography of highlighting a close relationship between the state and Swedish industrialists, sometimes described as “organised capitalism”. This term, borrowed from the early 20th century Marxist economist Rudolf Hilferdling, has been used to describe the development of a society where the state and organized industry share interests and outlook, and where the state generally acted to support industrial development over other interests.[40] As for natural resources, the idea of “organised capitalism” has been most pronounced in the study of Swedish hydroelectricity which has been marked by a cooperative atmosphere between private, municipal and state owned power production, as well as the Swedish electrotechnical giant ASEA.[41] Others, notably Nils Edling, have used natural resources (forests) as an example on how the idea of “organised capitalism” is not borne out in the case of forest ownership, which became heavily regulated against the wishes of the forestry industry.[42]

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[36] The most recent economic history of modern Sweden does not mention the issue at all. See Lennart Schön, *En modern svensk ekonomisk historia : tillväxt och omvandling under två sekel*, 2. ed. (Stockholm: SNS Förlag, 2007).
[37] Sven Nordlund, *Upptäckten av Sverige : utländska direktinvesteringar i Sverige 1895-1945* (Umeå: Umeå universitet, 1989), p. 44.
[38] Martin Fritz, *Svensk järnmalmsexport 1883-1913*, Meddelanden från Ekonomisk-historiska institutionen vid Göteborgs universitet (Göteborg1967); Nils Meinander, *Gränges : en krönika om svensk järnmalm* (Helsingfors1968); Bo Jonsson, *Staten och malmfälten : en studie i svensk malmfältspolitik omkring sekelskiftet* (Stockholm: Almqvist & Wiksell, 1969).
[39] Laxer, *Open for business*, p. 107.
[40] The concept was widely used in the 1970s and 1980s to describe Imperian Germany. See: Heinrich August Winkler, ed. *Organisierter Kapitalismus : Voraussetzungen und Anfänge* (Göttingen: Vandenhoeck und Ruprecht, 1974).
[41] Eva Jakobsson, *Industrialisering av älvar: studier kring svensk vattenkraftutbyggnad 1900-1918* (Göteborg: Historiska institutionen, 1996); Jan Jörnmark, *Skogen, staten och kapitalisterna : skapande förstörelse i svensk basindustri 1810-1950* (Lund: Studentlitteratur, 2004).
[42] Nils Edling, "Staten, Norrlandsfrågan och den organiserade kapitalismen," *Historisk Tidskrift* 2 (1994).

Nevertheless, a comparatively closer relationship between industry and state in Sweden as opposed to Norway is a recurring theme in historical comparisons between the two states. In Olle Gasslander's 1950s two volume tome on *Stockholms Enskilda Bank* and its investments around the turn of the 20th century, Gasslander puts the lighter regulatory touch of the Swedish system down to "partially the constricting influence of the [less democratic] First Chamber [of the Swedish Riksdag], and partially that that exploitation of natural resources only to a lesser extent was conducted by foreign capital or under foreign leadership".[43] More recently, in the final chapter of Svein Ivar Angell's Ph.D. thesis on the modernization and identity building in Sweden and Norway at the turn of the 20th century, Angell uses the contrast between the wide-encompassing Norwegian concession laws, and absence of a similar system in Sweden as an example of the two countries different modernization strategies. In Sweden, the economic aspect of modernization was prioritized, spearheaded by industry-friendly conservatives, while in Norway the "political-democratic side of the economic modernization that came into focus in the modernising political discourse".[44] The reasons for this difference can, according to Angell, be ascribed to differences in the two countries capitalist classes (the Norwegian being dominated by ship-owners, while the Swedish was more industry oriented), different socio-political alliances, and the more conservative oriented nationalism of Sweden as compared with the liberal oriented nationalism of Norway. Similar views are also presented in Francis Sejersted's "Age of Social Democracy" published in 2005.[45]

Contrasts between industry friendly Sweden, and more heavily regulated Norway is also a central topic in Eva Jakobsson's 1992 article comparing Swedish and Norwegian hydropower legislation in the early 20th century.[46] Jakobsson's account of hydroelectric regulations up until 1920s sets the Swedish as going from a conditional system to a liberal, while the Norwegian going from a very liberal to a more heavily regulated one. In addition to some of the reasons listed above, Jakobsson also astutely includes the "quality" of the resources themselves, with Norwegian hydropower being easily available for export industries on the ice free western coast, while the richest Swedish resources were on the large rivers in the Swedish north, far from the large population centres.

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[43] "[…]dels första kammarens bromsande inflytande, dels att exploateringen av naturtillgångarna endast i mindre utsträckning skedde med utländskt kapital eller stod under utländsk ledning.»Olle Gasslander, *Bank och industriellt genombrott: Stockholms Enskilda Bank kring sekelskiftet 1900*, vol. II (Stockholm: Generalstabens Litografiska Anstalt, 1959), p. 409.
[44] Svein Ivar Angell, *Den svenske modellen og det norske systemet : tilhøvet mellom modernisering og identitetsdanning i Sverige og Noreg ved overgangen til det 20. hundreåret* (Oslo: Det Norske Samlaget, 2002), p. 323.
[45] Francis Sejersted, *Sosialdemokratiets tidsalder: Norge og Sverige i det 20. århundre*, Norge og Sverige gjennom 200 år (Oslo: Pax Forlag, 2005), pp. 28-43.
[46] Eva Jakobsson, "Norsk och svensk vattenkraftutbyggnad. En komparativ studie," *Polheim* 10 (1992).

These explanations are all important to understand the different policies adopted by the two kingdoms, yet they are not without their own blind spots. For instance, Eva Jakobsson's article illustrates one of the challenges of analysing resource policy strictly along its sector. When she lists regulation on foreign ownership as one of the key differences between Norwegian and Swedish hydropower legislation, she overlooks that Swedish law did indeed have restrictions on foreign ownership of hydropower through the 1916 Restriction Act, even though the introduction of that law had been more concerned with mining and mineral rights than hydropower. In more general terms, the explanations offered above are for the most part all grounded in internal causes and there is little reflection on the impact from the wider international economic system in which these events take place. This leads to a second and somewhat related point, which is the tendency to view the differences in regulations as primarily ideological, while disregarding their practical side and the possibilities of circumvention.

This thesis seeks to overcome these shortfalls precisely by studying the regulations in more detail and paying more heed to international circumstances. Through this it is not only possible to provide new insight into resource nationalism as a phenomenon in the early 20th century, but also provide new knowledge and perspectives to the two states national historiographies.

IV. Research questions and sources

In a larger sense, this thesis aims to increase our knowledge of how smaller states responded to economic globalization, and how the interaction between democratic demands and business interests shaped the responses. I have not set out to test any model of development or historical theory, as I have found none truly suitable as a lens into the issue of early Scandinavian resource nationalism. Instead, the research questions are set as a series of rather straightforward interconnected questions that drive the core narrative and analysis. Here, the thesis will deal with how these findings relate to with presentations or theories in both the international literature on resource nationalism, as well as Scandinavian literature, subsequently.

First, the thesis will simply try to answer *why* the two kingdoms introduced resource nationalist policies. In other words, what events sparked these reactions? What were the reasons given by its promoters? And how were they effected by the wider international economic system? Answering this question is of course central to getting a better insight into the political economy of these policies, and answer other questions such as: What was the influence of interest groups in the

formation of these policies? Were the resource nationalist policies shaped to benefit any particular economic interest group or is it possible to talk about regulatory capture of the natural resource policies? In order to answer these questions, it is also necessary to look at how the resource nationalist policies worked, and how they were implemented and if and how they evolved over time. This leads us in turn over to the final set of question, namely *how and why* were the two countries' resource nationalist approach different.

For this thesis, I have made two difficult methodological choices related to the scope of this work, which are not without their drawbacks, but which I believe ultimately strengthen the work and are in many ways necessary to deal with the questions the thesis poses. The first is the choice to do a parallel and comparative study of two polities rather than just one. This of course means that I only had half as much time to work (and half as much space to write) on each as I would have had if I had only chosen one. It is possible to imagine a thesis like this with only one of the countries, which would have left more room for details on individual actors, businesses and political factions.

Despite this, the extra details would likely not have made much difference to the overall conclusions of the study. Moreover, such an approach would have had one serious deficiency that would be hard to overcome – which is the lack of international context. As the literature on resource nationalism and natural resource policies in this period is as thin and fragmented, writing about one country alone would always leave the open the question as to whether these policies and practices were commonplace. While it is possible to get some insight into how natural resources were regulated in other countries through secondary literature (which I have also done to some extent in Chapter 1), these are in any case not extensive enough to provide a fully adequate comparison. Especially when it comes to examining how legislation was implemented in practice, simply looking at the legislation for a country itself is not enough. As laws that regulate access and ownership of natural resources in general leave much power to a government discretion, how these laws are actually applied would not necessarily be apparent without an actual empirical study – which is simply lacking for most countries.

The second choice of scope that I have made is the time period of this thesis. The thesis cover nearly 50 years, which is a somewhat long period for a narrative history of two countries, even if the field of focus within those two countries is limited. Nevertheless, I believe that this long time frame is necessary to get a better grasp of the evolutionary aspects of the resource nationalist institutions established in these two countries. The resource nationalist policies examined in this thesis were put in place in the three decades leading up to the First World War. However, some of the key legislation regulating foreign investors' access to acquire natural resources were set up

during, in the years immediately preceding the First World War. Therefore, to see how these regulations worked in practice, it is necessary to extend the study into the inter-war era. With this time frame it is not only possible to study the origin of these policies, and how they were introduced, but also how they were implemented or changed in reaction to challenges of changing political and economic circumstances. The debates in the early 1930s of whether or not to reform the resource nationalist regulations mark the end of the thesis. With this limitation, the thesis also ends before the build up to the next world war began to affect the resource industries of the two countries, which would warrant a much deeper study than what is possible with the available time and resources.

Sources

As this is a thesis first and foremost about political regulation of the economy, introduced by parliaments and enacted by governments, the source that is used most thoroughly and consistently through this whole study is the parliamentary records of the two countries – namely *Riksdagsprotokollene* (Sweden) and *Stortingsforhandlinge* (Norway). These records gives an overview over the legislative process, from motions, drafts, committee reviews and law proposals. With the addition of the transcript from the parliamentary debates, these also offer an insight into the intentions, objections, input from interest groups behind these legislative initiatives, as well as the political discourse these regulatory systems were established. In addition to the parliamentary debates, further political context is garnered from leading newspapers at the time, across the political spectrum.

The political context is of course not just limited to what was going on inside the country. To understand why the two Scandinavian countries' resource nationalism was shaped the way that it was, it is necessary also to take the international dimension into context. The most important element here is how the government and legislature perceived the likely reactions of foreign states, rather than how foreign powers perceived the situation. In addition to the sources mentioned above, information on this can also be found in the foreign ministry archives of the two countries; however, the thesis supplements this with sources from the British Foreign Office.

However, in order to find out how these regulatory systems worked in practice it is necessary to take a closer look at how they were implemented in practice. Sources for this can be found in the departmental archives. In the Norwegian case, the preparatory documents for natural

resource concessions are scattered between different archives. Before 1907, these were handled by the Ministry of Justice, while afterwards they were split so that mineral concessions were put to the Ministry of Trade, hydropower concessions to the Ministry of Public Works and forest concessions to the Ministry of Agriculture. Due to later ministerial reorganizations, the former two can now be found in various archives of the later Ministry of Industry.[47] Rather thorough summaries of the cases can also be found in printed form as supplements to the Norwegian parliamentary protocols. The annual review of the property concessions to foreigners and foreign owned companies is also listed in the Storting's annual review of the governmental protocol.

However, the printed supplements only include concessions that were granted. Concession which were denied outright are included in the annual review of the governmental protocol, however this does not include cases that were permanently put on ice, or where the applicant withdrew the application when a concession seemed impossible to obtain. In order to find concessions that were not granted, I have used the protocols of the advisory Mining Commission, the Watercourse Commission and the successor to the latter, the Executive Board of NVE. As these bodies were charged with reviewing all incoming application, they provide a full overview of all concession applications.

In Sweden, the sources are not sorted by geography or resource type. Instead, the documents relating to each inward foreign acquisition permission can be found in the *konseljärenden* (cabinet meeting acts) for the Ministry of Justice, with the formal decision recorded in the *statsrådsprotokol* ministerial protocols of the same department. An overview of all incoming Restriction Act-cases is compiled from the diaries of incoming mail, located in the ministry's archives, which lists application for inward foreign acquisitions as a separate category. Moreover, recommendations and reports on cases and legislation relating to mining can be found in the archives of *Kommerskollegium, Bergbyrån* (Royal Board of Trade, Bureau of Mining).

In addition to primary sources, this thesis also builds on a plethora of secondary literature. The long scope, numerous actors and very varying archive availability[48] make it impractical to do an

[47] Hydropower concessions were handled by the Ministry of Public Works. However, a curious sorting issue had has divided the old archive in two. Journals, summary protocols (*referatprotokoller*), copies of outgoing mail (*kopibøker*) and ministerial decisions (*statsrådsforedrag*) can all be found in the archive labeled: *Industridepartementet, Avdelingen for vassdrags- og elektrisitetsvesen*. It also contains a case archive, with documents of some power lease concessions cases as well as the registry and case archive for classified cases. However, the more elaborate case archive can be found in an archive labelled: *Industridepartementet, vassdragsavdelingen*.

[48] Due to their involvement in so many of the different cases mentioned in this thesis as well as close ties to the Swedish government, the Wallenberg archive would have been a usefull exemption. However, due to the archive's rules that only scholars who already have a Ph.D. are allowed in, I have been unable to access it.

archive-based study of the companies who sought to invest in the two countries. Thus, besides the information that can be garnered from their communication with state institutions, insight into the reactions and broader strategic outlook of the investing companies are based on secondary literature. This literature includes a broad selection of business histories of rather varying quality, ranging from rather simple stories written by former CEOs or journalists, to well-funded commissioned histories with large degree of investigative freedom,[49] as well as academic studies that cover select companies and/or a specific business sector.[50] In addition, the thesis is also helped by a number of previous studies conducted into certain aspects of Scandinavian resource policies, which make it possible to paint a more detailed picture of the topic than otherwise would have been the case. The best example of this is Bo Jonsson's 1969 work on the Swedish ironwork owners' interests and the part-nationalization of the Lapland-mines in 1907, but also Paul Tage Halberg's study of the forest owners' interest groups and Eva Jakobsson's study of pre-1918 hydropower regulations have been very useful.[51] The thesis is also indebted to the context provided by the larger Swedish and Norwegian literature on domestic and foreign policy.

Addressing similar topics using similar sources in both countries does not however make the empirical studies equal in size. Natural resource regulations were big political topics in both countries, but were given different prominence at different time. In particular, the intensive Norwegian legislation process from the introduction of the first temporary concession law in 1906 until the final concession laws in 1917 were full of twists that need to be explained. Furthermore, the study of how the Norwegian concession laws were implemented is also given much more room than the Swedish Restriction Act. Not only where the Norwegian concession laws introduced ten

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[49] Good examples of well written an researched commissioned histories relevant for this thesis include Ketil Gjølme Andersens' volume on the early history of Norsk Hydro (Ketil Gjølme Andersen, *Flaggskip i fremmed eie : Hydro 1905-1945* (Oslo: Pax forlag, 2005).), Trond Bergh and Even Lange's history on the initially British owned pulp and paper giant Borregaard (Trond Bergh and Even Lange, *Foredlet virke : historien om Borregaard 1889-1989* (Oslo: Ad Notam, 1989).) or Olle Gasslander's multi-volume study of Stockholms Enskilda Bank's role in industrialisation around the turn of the 20th century (Olle Gasslander, *Bank och industriellt genombrott: Stockholms Enskilda Bank kring sekelskiftet 1900*, vol. I (Stockholm: Generalstabens Litografiska Anstalt, 1956); *Bank och industriellt genombrott II*, II.).

[50] An example of the former is for instance Martin Byrkjelands very detailed *hovedfagsoppgave* on A/S Bjølvefossen (Martin Byrkjeland, "A/S Bjølvefossen 1905-1931" (Universitetet i Bergen, 1985).) or Jan Glete's seminal study of Ivar Kreuger's empire and its relationship to the mining company Boliden (Jan Glete, *Kreugerkoncernen och Boliden* (Stockholm: LiberFörlag, 1975).). A good and usefull example of the latter is Espen Storli's Ph.D. on the Norwegian aluminium industry (Espen Storli, "Out of Norway falls aluminium : the Norwegian aluminium industry in the international economy, 1908-1940" (NTNU, 2010).) or a number of Swedish studies into the country's iron and steel industry, such as: Artur Attman, *Svenskt järn och stål 1800-1914* (Stockholm: Jernkontoret, 1986); Martin Fritz, *Svenskt stål : nittonhundratal, från järnhantering till stålindustri* (Stockholm: Jernkontoret, 1997).

[51] Paul Tage Halberg, *Bjelker i bygde-Norge: skogeierorganisasjonen og skogbruksnæringen 1894-1994 med fokus på Glomma-vassdraget* (Elverum: Glommen skogeierforening, 1999); Jakobsson, *Industrialisering av älvar: studier kring svensk vattenkraftutbyggnad 1900-1918*; Jonsson, *Staten och malmfälten*.

years before the Restriction Act, but their flexible form and numerous policy changes also has to be explored. In contrast, the implementation of Swedish Restriction Act saw no noticeable policy changes over the twenty years covered by this thesis. Thus, the study of the Restriction Act covers much less space in this thesis.

Chapter 1: Natural resources and the "rules of the game" in the pre-War World (1860-1913)

As this thesis aims to study the evolution of Swedish and Norwegian natural resource policy, it is important first to take a closer look at the international stage where these events took place. This chapter outlines the importance and transformation of both the geography and the range of raw materials in international trade. Furthermore, it attempts to explore the international political economy of the first globalized age, and what norms and practise can be construed as constituting the accepted norms or 'rules of the game' for government intervention in raw material exporting countries.

I. Primary goods trade in the 'First Globalized Economy'

In the century preceding World War One, the world experienced a massive rise in economic interconnectedness. In what is now often referred to as *The First Age of Economic Globalization*, trade liberalization, technological advances, infrastructure investments and the opening of new frontiers through European war and conquest all helped create a world were capital, commodities and communication flowed in ever increasing speed and intensity. Between 1800 and 1913, total world trade per capita had increased by 25 times.[52]

Different endowments of natural resources around the world helped to fuel this development. Industrialization and population growth in Europe led to an ever-increasing demand for foodstuffs and raw materials, much of which could not be accommodated from within the industrialized countries home territories. Throughout the period, primary products accounted for roughly 2/3 of all trade.[53] As railways and steamships both reduced costs and increased speeds, it became possible to trade in bulkier, lower value raw materials, and there was a significant

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[52] A. G. Kenwood and A. L. Lougheed, *The growth of the international economy 1820-2000*, 4th ed. (London ; New York: Routlege, 1999), p. 79.

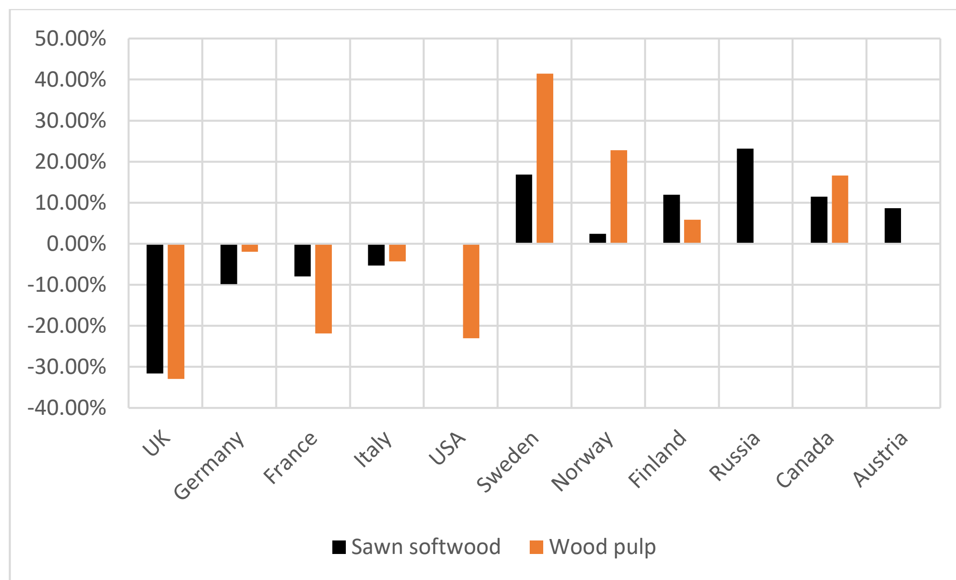
[53] Simon Kuznets, "Quantitative Aspects of the Economic Growth of Nations: X. Level and Structure of Foreign," *Economic Development and Cultural Change* 15, no. 2, Part 2 (1967): p. 33, Table 6.

convergence of world raw material prices.[54] While not ignoring the simultaneous increase in trade between industrial countries, much of the international trade in the first globalization followed a centre-periphery trajectory. In other words, the industrialized or industrializing centres – mainly Western Europe – imported primary goods in exchange for industrial goods. The quest for primary goods was also a crucial factor in forming the first multinational enterprises, who facilitated much of the economic integration.[55]

A large part of the increase in trade of primary products was due to an overall increase in worldwide agriculture production. Much of this took place in the southern hemisphere as colonialism – new and old – extended the tropical frontier and made tropical goods accessible to Europe. Some of these goods had long been staples in the slave fuelled Atlantic economy, such as sugar, cotton and tobacco. In addition to those, the period saw a further increase in the production and export of tea and coffee. But the technological advances of the 19th century saw an increasing specialization in export led plantation products. This included bananas and cocoa from Central America, palm oil from West Africa and rubber from Southeast Asia.[56] However, the North-South model overshadows the fact that much of the primary products in the world economy also came from the north, based on staples already established in Europe. Cheap grain, especially, from the North America and from the Russian empire expanded rapidly in this period. In addition, the large newly settled plains in Australia, New Zealand and South-America provided excellent opportunities for sheep rearing. Moreover, after the introduction of refrigeration technology, the pampas of the Argentina and Uruguay also produced frozen and chilled beef for American and European tables.[57] International trade in timber-based raw materials also flowed from countries closer to the industrial centres, with the Nordic countries, Russia and Canada emerging as the dominant exporters of sawn timber and wood pulp.[58]

[54] Kevin H. O'Rourke and Jeffrey G. Williamson, *Globalizaton and History: The Evolution of a Nineteenth-Century Atlantic Economy* (Cambridge, MA: MIT Press, 1999), pp. 29-55.
[55] Jones, *Multinationals and global capitalism*; "Globalization," in *The Oxford Handbook of Business History*, ed. Geoffrey Jones and Jonathan Zeitlin (Oxford & New York: Oxford, 2007).
[56] John R. Hanson, *Trade in Transition: Exports from the Third World, 1840-1900* (New York: Academic Press, 1980), pp. 97-113.
[57] P. Lamartine Yates, *Forty years of foreign trade; a statistical handbook with special reference to primary products and under-developed countries* (London,: Allen & Unwin, 1959), p. 80, Table 43, D.
[58] See Figure 2

Figure 2: Percentage of world imports and exports in wood-based raw materials, 1913[59]



During the latter part of the 'first globalized economy', a new renewable natural resource was making an entrance, namely hydropower. Rivers could be harnessed to produce hydroelectric power, which was usually considerably cheaper than fossil-fired plants. As the technology to transmit high voltage electricity over large distances was still in its infancy, there was little international trade in electricity. However, cheap and reliable electricity formed a decisive input in the production of new electrochemical staples, such as calcium carbide, synthetic nitrates and aluminium.[60] Important exporters of these new energy intensive products were Canada, Norway, Switzerland, and to a lesser extent Sweden.

The worldwide expansion of the resource frontier did not only expand the trade of renewable natural resources, but also of non-renewable resources. In particular, this was the case for minerals. Some of these resources, like silver and gold, had long been mined in European overseas colonies – particularly in Latin America. The search for precious metals helped spread European settlement across North America, Oceania and South Africa, and output was greatly increased as rich new sources were discovered. From the first to the last quarter of the century, annual global gold output increased 16-fold.[61] Indeed, the steady extraction of gold was crucial for

[59] Calculated from Yates, *Forty years of foreign trade*, pp. 119-20, Table 67 and 68. Positive values mean net exports while negative values are net imports.
[60] L. F. Haber, *The chemical industry, 1900-1930: international growth and technological change* (Oxford,: Clarendon Press, 1971).
[61] C. J. Schmitz, *World non-ferrous metal production and prices, 1700-1976* (London, Totowa, N.J.: Frank Cass, 1979), p. 6, Table 1.

the global economy, as more and more currencies adopted the gold standard over the latter half of the 19th century, as the amount of gold had increase at the rate of the global economy, to stave of deflation.

This period also saw vast increases in extraction of other metals, which until then had mainly been mined in Europe, such as copper and tin. Large new mines were opened up in Chile, Mexico, Australia and Spain, who came to dominate world exports of copper.[62] Technological advances also made it possible to use the low-grade copper ores of western United States, which became the world's leading copper producer by 1886, but most of it was consumed domestically.[63] Tin, which for centuries had been dominated by the Cornish mines, was overtaken by new discoveries in the mountains of Bolivia and alluvial plains of Malaya and Indonesia.[64] Exploding demand and increase in transportation also made it possible to trade iron ore over longer distances, even though transport costs prevented a truly global market in iron ore.[65] France was a major ore exporter to its neighbouring countries, but the rapidly expanding west-European steel industry increasingly obtained their iron ore from further afield, such as from Spain, Sweden and Algeria.[66] The global economy also saw the introduction of entirely new metals, such as aluminium and steel alloy metals, such as nickel, chromium, manganese and molybdenum.[67] The richest ores of these metals were often located in far off locales. A good example is nickel, which was almost entirely dominated by mines in New Caledonia and Northern Ontario.[68]

Nor were mineral extraction solely restricted to metals. The 19th century was in many ways the age of coal, which fuelled much of the industrialization of the age. However, coal was one of the raw materials that the industrialized centres had in ample supply, and did not follow the general centre-periphery flow, but often rather the direct opposite.[69] Coal had a low value to weight ratio, and therefore transportation costs still made coal a regional, rather than a global commodity. Mineral oil was on the other hand more transportable, and had few ready supplies in Europe itself.[70] Instead, mineral oil market in the pre-World War One world was dominated by the United States

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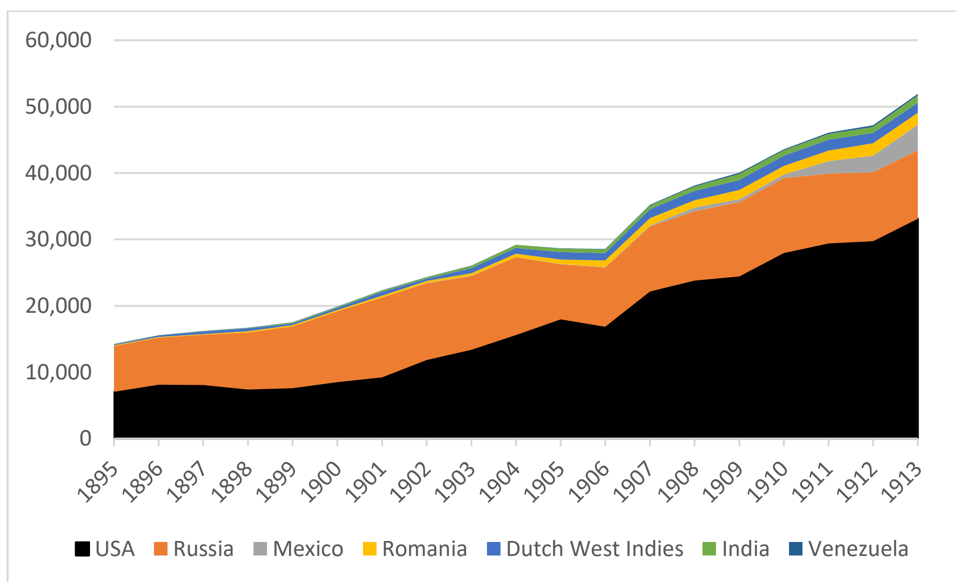
[62] Hanson, *Trade in Transition*, p. 177, Table D-13.
[63] Schmitz, *World non-ferrous metal production and prices, 1700-1976*, p. 213, Table 17.
[64] Mats Ingulstad, Andrew Perchard, and Espen Storli, "The Path of Civilization is Paved with Tin Cans," in *Tin and Global Capitalism: A history of the devil's metal 1850-2000*, ed. Mats Ingulstad, Andrew Perchard, and Espen Storli (New York & London: Routledge, 2015), pp. 4-5.
[65] Yates, *Forty years of foreign trade*, p. 127.
[66] *Forty years of foreign trade*, p. 128, Table 75.
[67] Schmitz, *World non-ferrous metal production and prices, 1700-1976*, p. 5.
[68] Royal Ontario Nickel Commission, *Report of the Royal Ontario Nickel Commission* (Toronto: A.T. Wilgress, 1917), pp. 495-505.
[69] Paul Bairoch, *Economics and world history: myths and paradoxes* (Chicago: University of Chicago Press, 1993), p. 59.
[70] Yates, *Forty years of foreign trade*, pp. 153-56; Bairoch, *Economics and world history*, pp. 61-62.

and Russia. Nevertheless, by the outbreak of the Great War significant quantities of oil were also exported from the Dutch West Indies, Romania, Mexico and Venezuela.[71] Another mineral that played an important part in the first globalized economy was nitrates, used in fertilizers and explosives. As worldwide guano supplies were exhausted, nitrate extraction came to be completely dominated by the world's richest occurrence of sodium nitrate in the Atacama Desert, which became Chilean territory after the War of the Pacific (1879-1884).[72]

Figure 3: Leading crude oil producers (1,000 metric tons)[73]



In the expanding world trade, minerals differed from agricultural primary goods on several crucial points. While all export oriented production required some form of market access, capital and know how to start up, there were in general a lot fewer entry barriers for agricultural products. Agriculture required less capital, and could easily expand as long as there was access to land.[74] Minerals, on the other hand, were restricted to the localities were the resources actually were located, and the richness and extent of ores varied enormously. Mining was also very capital intensive compared to agriculture. Mineral exploration was expensive and required specialized

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[71] See figure Figure 3, p. 4

[72] G. J. Leigh, *The world's greatest fix : a history of nitrogen and agriculture* (Oxford & New York: Oxford University Press, 2004).

[73] "D3 Asia: Output of crude petroleum, D3 South America: Output of crude petroleum, D3 Europe: Output of crude petroleum, D3 North America: Output of crude petroleum," *International Historical Statistics* (Basingstoke: Palgrave Macmillan, 2013), http://dx.doi.org/10.1057/9781137305688.

[74] Ronald Findlay and Kevin H. O'Rourke, *Power and Plenty: Trade, War, and the World Economy in the Second Millenium* (Princeton & Oxford: Princeton University Press, 2007), p. 418.

knowledge, and mining operations themselves usually required large up-front investments before extraction could commence. International mining by nature carried higher risks, but could also lead to higher rewards, in enormous resource rents.[75] Because of this, the complexities and scales of many mining operations, as well as the high rewards, the mining industry produced some of the largest and most powerful multinational companies of the first globalized economy.[76]

As this shows, raw materials constituted a fundamental part of international trade in the first globalized economy. Consequently, the way in which the raw material exporting countries regulated access, ownership and use of their natural resources played a crucial part in shaping the this economy. Not only of the exporting countries themselves, but also for the whole international economy.

II. "Rules of the game" – Institutions of the international economic order

In order to understand the international background against which the Swedish and Norwegian resource nationalism developed, it is necessary to give an outline of the 'rules of the game' of the international system, and what kind of mechanisms could and did enforce it.

When discussing enforcement mechanisms, I will distinguish between three types of sanctions: *Political sanctions*, *trade sanctions* and *market sanctions*.[77] **Political sanctions** comprise the *use of military force*, the *threat of force*, or threats to *harm other foreign political objectives.* This differs from **trade sanctions**, by which I mean actions taken to reduce economic interaction, such as *increasing tariffs,* or imposing regulations or discriminatory policies against investments or economic activity by nationals of the target country. The first two forms of sanctions are carried out by governments. The third form of sanction, **market sanctions**, are carried by private investors or 'the market', and include capital flight, and reluctance to lend to or invest in the target country.

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[75] Jones, *Multinationals and global capitalism*, pp. 52-54.

[76] Christopher Schmitz, ed. *Big Business in Mining and Petroleum* (Aldershot & Brookfield: Edward Elgar Publishing, 1995), p. xiii, Table 1; "The Rise of Big Business in the World Copper Industry 1870-1930," *Economic History Review* 39, no. 3 (1986).

[77] The three categories builds on Juan H. Flores differentiation between 'market sanctions' and 'political sanctions' as means to punish countries that default. I have however chosen to put 'trade sanctions' as a separate category. Whereas political sanctions, at least in theory, required some clear justification, trade sanctions were rather part of the continually evolving and renegotiated system of bilateral trade treaties, and thus did not require any clear legal mandate. Juan H. Flores, "Capital Markets and Sovereign Defaults: A Historical Perspective," in *Oxford Handbook of Financial History*, ed. Youssef Cassis, Catherine Schenk, and Richard Grossman (Oxford: Oxford University Press, 2016).

The globalization of the 19th century was shaped by the spread of economic liberalism. Many countries saw old feudal privileges washed away, limits on economic activity were lifted and restrictions to movement were relaxed. Internationally, the perhaps most spectacular change was the breakthrough of something close to 'free trade'. Here the British Empire played a crucial role, both as the source of economic liberal ideology and as an example of high economic growth through industrialization. The watershed into the free trade era is often said to be the repeal of the British 'corn laws' and the introduction of unilateral free trade in Britain and its empire. Perhaps even more important were the Cobden-Chevalier treaty, and its successors, which radically liberalized international trade in Europe.[78] The growth in free trade and limited restrictions on international capital flows was also facilitated by the widespread adoption of the gold standard – both of which were again centred on London, which was the era's main financial centre.[79]

The British Empire had only limited ability and inclination to enforce free trade. Economic liberalism was one of the important reasons used to justify the British imperial expansion in China and in Africa, and British naval power was also used to pressure Latin American countries to liberalize its economies in the first part of the 19th century – in what has sometimes been referred to as the 'informal empire'.[80] However, the suggestion that the British Empire used its "hegemonic power" to force through trade liberalization in Europe holds little water according to some studies.[81] Instead, the cause of the spread of economic liberalism and trade liberalization following the Cobden-Chevalier agreement should rather be sought in the spread of liberal ideas, the example of Britain's economic growth and domestic interest groups.[82] When the European countries gradually returned to higher tariffs, the British Empire did little, and instead retained free trade unilaterally.

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[78] The above sentences are based on: Kenwood and Lougheed, *The growth of the international economy 1820-2000*, pp. 61-77; O'Rourke and Williamson, *Globalizaton and History*, pp. 77-92; Paul Bairoch, "European Trade Policy 1815-1914," in *The Cambridge economic history of Europe, Vol. VIII, Industrial Economies : The Development of Economic and Social Policies*, ed. Peter Mathias and Sidney Pollard (Cambridge: Cambridge Univ. Press, 1989).
[79] Youssef Cassis, *Capitals of Capital: A History of International Financial Centres, 1780-2005*, trans. Jacqueline Collier (Cambridge: Cambridge University Press, 2006).
[80] Alan Knight, "Britain and Latin America," in *The Oxford History of the British Empire: Volume III: The Nineteenth Century*, ed. Andrew Porter and Wm. Roger Louis (Oxford: Oxford University Press, 1999); Rory Miller, "Informal Empire in Latin America," in *The Oxford History of the British Empire: Volume V: Historiography*, ed. Robin Winks and Wm. Roger Louis (Oxford: Oxford University Press, 1999). The term was first formulated in John Gallagher and Ronald Robinson, "The Imperialism of Free Trade," *Economic History Review* 6, no. 1 (1953).
[81] Timothy J. McKeown, "Hegemonic stability theory and the 19th century tariff levels in Europe," *International Organization* 37, no. 1 (1983).
[82] O'Rourke and Williamson, *Globalizaton and History*, pp. 39-41.

Similarly, the British dominions also introduced high import tariffs, and the 'informal empire' in South America had higher import tariffs on manufactured goods than Europe.[83]

Given their prevalence, it could be argued that protectionist tariffs were accepted as part of the 'rules of the game' of the long 19th century – at least for the European countries and their descendants.[84] However, as trade agreements were hammered out bilaterally, the larger economies generally held much stronger cards in such negotiations. Thus, in any attempt to introduce resource nationalist measures, there was always the possibility that the larger economies might use trade sanctions as a counter-measure.

Tariff policy is however not the only measure of protectionism and economic integration. The short-lived period of relative free trade has led Bairoch and others to argue against the notion of the period as a 'golden age of free trade'.[85] While this criticism might be warranted as a corrective to oversimplifications of the long 19th century as a period of near free trade, compared to what came before and the tariff and trade regulation introduced in the inter-war era, the long 19th century indeed stands out for its open trade policy. More importantly, this rejection also overlooks the importance of the prevailing liberal policy on capital flows and foreign direct investments, which contrasts sharply with the 'de-globalization' of the 1930s.[86]

As to policies effecting foreign owned property, the international consensus was – at least on the face of it – clearer. When it came to what was accepted policy for host countries of foreign direct investments, Charles Lipson writes that:

> According to nineteenth-century international law, interference with alien property was permitted only in exceptional cases of expropriation for narrowly defined public purposes, and even then had to be accompanied by *prompt*, *adequate*, *convertible* compensation. Because the law implicitly assumed a narrow scope for public property, its strict principles generalized a laissez-faire conception of domestic government.[87]

Confiscation of property by the host country without full compensation was considered robbery and political sanctions, including military intervention, was considered a legitimate response.[88] This

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[83] Bairoch, *Economics and world history*, p. 37, Table 3.2.
[84] According to Bairoch's calculations of tariff levels in 1913, the semi-independent non-European countries such as China, Siam and Persia had very low import tariffs on foodstuffs and manufactured goods, compared to European countries, and former European colonies. See *Economics and world history*, p. 37, Table 3.2.
[85] *Economics and world history*.
[86] Jones, *Multinationals and global capitalism*, pp. 27-31.
[87] Charles Lipson, *Standing Guard: Protecting Foreign Capital in the Nineteenth and Twentieth Century* (Berkley: University of California Press, 1985), pp. 53-54. (My italics)
[88] Kate Miles, *The Origin of International Investment Law: Empire, Environment and the Safeguarding of Capital* (Cambridge: Cambridge University Press, 2013), pp. 47-49; Lipson, *Standing Guard*, p. 54.

principle might seem clear enough, but not all confiscations come in the form of straight up seizure by a band of armed men. Could heavy taxation, new regulations or discriminatory policies heavily skewing competition in favour of competitors be considered as a confiscation?

There was also a question of enforcement. Political sanctions by the Great Powers were at times brought to bear in cases were foreign property was threatened or 'confiscated', most prominently in foreign debt defaults. Yet, there is some controversy over how prevalent such political sanctions were, and to what extent they were understood as a likely risk for debtors.[89] What is clear however is that overt political sanctions were far from universally applied, and when they were they were imposed they were often motivated by larger foreign political or imperial ambitions.[90] Nevertheless, disputes over confiscation could in any case give legal justification for a Great Power to use force, if it was so inclined.

For both trade sanction and political sanctions, there was no 'automatic' retaliation against a nation trying to introduce resource nationalist policies. Instead, any counter measures would depend on whether the governments of the large economies found it in their interest to intervene. This again, could easily depend on the effected domestic economic interest groups willingness and ability to effectively mobilize governments to apply pressure on their behalf.

However, private actors could also act without the help of their home governments. In general, private actors did not have the ability to apply 'the stick' by themselves,[91] but could instead withhold 'carrots'. The most obvious means were divesting, or refusing to provide further investments, either direct or portfolio, instead placing their capital elsewhere. For 'the market', coordinated action was of course very difficult in many cases. If the regulations or policies of a state undeniably harmed all investor's possibility for profit, investments would likely be diverted across the board, eventually putting pressure on the state introducing these regulations. However, if a state introduced regulations or took discriminatory actions against certain investors, but left profitable opportunities open to others, it was not certain that the international capital market as a whole would 'punish' such actions.[92]

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[89] Mitchner and Weidenmier, for instance, argue that their date shows political sanctions (or 'supersanctions') as a fairly common response and a credible threat. Kris James Mitchener and Marc D. Weidenmier, "Supersanctions and Sovereign Debt Repayment," National Bureau of Economic Research.. D. C. M. Platt and other have on the other hand held that the British government was generally reluctant to use force to ensure repayment

[90] Flores, "Capital Markets and Sovereign Defaults," pp. 500-01; Lipson, *Standing Guard*, pp. 53-61.

[91] There were however some exceptions to this, where private actors for instance

[92] However, recent studies seems atleast to indicate that there was a somewhat consistent market sanctions against defaulting states. See: Luís A. V. Catão and Rui C. Mano, "Default Premium," in *IMF Working Paper* (Asia and Pacific Department: International Monetary Fund, 2015); Marc Flandreau and Frédéric Zumer, "The

Barring any formal rules or treaties, the actions of public and private actors in capital exporting/raw material importing countries would come down to their own understanding of what kind of policies could be considered as harming their interests. Moreover, market decisions to divert investments from a resource nationalist country also depended on the policies in other states that could supply similar raw materials.

When it comes to regulations on concession and ownership, the question of international norms is complicated. Different countries recognized different rights to own natural resources, which often required the investing company to obtain a government concession. According to David Smith and L.T. Wells, concessions before 1950s were usually both extensive and long term, and included few restrictions on the concessionaire, beyond a limited royalty based on output.[93] However, Smith and Wells focus mainly on the 'third world', and have little information on how this worked 'first'. Thus, in order to get a wider view of what could be considered practice in international resource policy, I will attempt to paint a more detailed overview of the policies followed by raw material exporting countries before World War One.

III. An overview of global natural resource policy

Export tariffs on raw materials are perhaps the most basic form of resource nationalism, as it both taxes and promotes domestic downstream production, without engaging in more detailed government intervention. However, in the same way as import tariffs, not all export tariffs were by definition protectionist. Sometimes tariffs work as a crude form of taxation. This is for instance reflected in the deal forced upon the Japanese government in 1858, where Japan was allowed to keep a minimal import and export duty for taxation purposes.[94] Most states had removed such forms of fiscal export tariffs by the end of the 19th century, although they were not completely unheard of. In 1901, the United Kingdom introduced a small export tariff on coal, to help pay for the recent Boer war.[95]

There were altogether very few instances in the 'first era of globalization' were export duties were introduced with outright protectionist or targeted rent-capture intent. A rare example of the

Making of Global Finance 1880-1913," in *Development Centre Studies* (Paris: Organization for Economic Co-operation and Development (OECD), 2004).

[93] David N. Smith and L. T. Jr Wells, *Negotiating Third World Mineral Agreements: Promises as Prologue* (Cambridge, MA: Ballinger Publishing Company, 1975), pp. 31-32.

[94] Bairoch, "European Trade Policy 1815-1914," p. 157.

[95] Richard Price, *An Imperial War and the British Working Class* (London: Routledge, 1972), p. 215.

former is the 40% export tariff on tin introduced by the British colonial government in Malaya to ensure smelting in Malaya rather than the United States.[96] The clearest example of the latter can be found in Chile, who during the War of the Pacific (1879-1884) increased the export duty of sodium nitrate from 4 to 22 peso, which constituted a duty of 30-70% of domestic nitrate prices.[97] This export duty would become the Chilean government's main source of revenue for the following four decades, reaching 50% of all state income in 1890.[98] The Canadian government also increased export duties on unprocessed logs in the 1880s as a measure to increase value added production in Canada. However, the duties were soon cancelled in trade negotiations with the United States, as the United States introduced increased tariffs on finished goods from Canada that automatically increased together with the Canadian export duties.[99] Similarly, the Canadian parliament passed an export duty on nickel ore in 1897, which was not ratified by the Prime Minister.[100]

Instead of export tariffs, natural resource licences or concessions could also be used to promote value added production. The most obvious example in this period is Canada. In lieu of an export tariff on unprocessed logs, the province of Ontario[101] introduced the so-called 'manufacturing condition' on timber licences in 1897.[102] This clause demanded that the timber could not be exported without first being processed in Canada. In 1900, this was extended to also include pulpwood.[103] Ontario's policy was followed by the Federal Government (1907), Quebec (1910) and New Brunswick (1911).[104] Ontario also introduced some restrictions on electricity exports from hydropower developed on government owned rivers, especially the Niagara Falls.[105] Ontario also considered a similar policy for nickel, but was in the end unable to implement it as the richest nickel

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[96] Mats Ingulstad, "Banging the Tin Drum: United States and the Quest for Strategic Self-Sufficiency in Tin, 1840-1945," in *Tin and Global Capitalism: A history of the devil's metal 1850-2000*, ed. Mats Ingulstad, Andrew Perchard, and Espen Storli (New York & London: Routledge, 2015), p. 99.
[97] John Lawrence Rector, *The history of Chile* (Westport, Conn.: Greenwood Press, 2003), p. 104; Kendall W. Brown, *A History of Mining in Latin America* (Albuquerque: University of New Mexico Press, 2012), p. 106.
[98] Gabriel Palma, "Trying to 'Tax and Spend' Oneself out of the 'Dutch Disease': The Chilean Economy from the War of the Pacific to the Great Depression," in *An economic history of twentieth-century Latin America. Vol. 1, The export age: the Latin American economies in the late nineteenth and early twentieth centuries*, ed. Enrique Cárdenas, José Antonio Ocampo, and Rosemary Thorp (Basingstoke: Palgrave, 2000), pp. 234-35.
[99] H. V. Nelles, *The politics of development: forests, mines & hydro-electric power in Ontario, 1849-1941*, 2nd ed. (Montreal: McGill-Queen's University Press, 2005), pp. 63-7.
[100] *The politics of development*, pp. 91-94.
[101] In Canada, government owned land was managed by the provinces.
[102] Nelles, *The politics of development*, pp. 68-73.
[103] *The politics of development*, pp. 80-87.
[104] Bill Parenteau and L. Anders Sandberg, "Conservation and the Gospel of Economic Nationalism: The Canadian Pulpwood Question in Nova Scotia and New Brunswick, 1918-1925," *Environmental History Review* 19, no. 2 (1995): p. 57.
[105] Nelles, *The politics of development*, 310-24.. Export restrictions on electricity were not introduced in Quebec before after WW1. See John H. Dales, *Hydroelectricity and industrial development: Quebec, 1898-1940* (Harvard University Press, 1957), p. 31.

ores had already been licenced out. However, this did not entail that these provinces banned all export of timber and pulpwood, even though the Canadian crown lands were very extensive. There were still enough loopholes, exceptions and outright smuggling that Ontario remained a key provider for pulpwood to the United States in the decades to follow.[106] The Canadian 'manufacturing condition' was a fairly unique policy, even though Norwegian hydropower concessions also introduced some measures to increase domestic manufacturing (see Chapter 3).

To use government ownership of resources as a tool for value added production, wide government ownership was a prerequisite. As a rule, large government *land* ownership was restricted to European colonies, who had obtained 'empty land' by displacing, killing or otherwise refusing to recognize land ownership by native nomadic peoples. The Russian east, as well as Northern Scandinavia also followed this pattern to some extent. Canada had however followed a rather unique policy, as much of the land would remain on public hands, instead of being privatized through settlement. This was in part because much of Northern Canada was unsuitable for homesteaders, and partially because renting out timber licences was an important part of provincial income.[107]

Government ownership of rivers was however rather widespread, and in most countries there was a precedence of regulations on the use of rivers. In continental Europe, all countries recognized public ownership over navigable rivers.[108] Some countries, like France and Bavaria, recognized private ownership over small non-navigable streams, but made instalment of turbines or damming subject to a government concession. As public-power movements championed government ownership over power production, some concessions given to private firms contained clauses that either gave the government the opportunity to buy the power plant[109] after the concession expired, or hand them over to the state *without compensation*.[110] In the common law countries (the British Empire and the United States), rivers and streams were owned by those who

[106] Mark Kuhlberg, "'Pulpwood is the Only Thing We Do Export': The Myth of Provincial Protectionism in Ontario's Forest Industry, 1890-1930," in *Smart Globalization: The Canadian Business and Economic History Experience*, ed. Andrew Smith and Dimitry Anastakis (Toronto: University of Toronto Press, 2014).
[107] Nelles, *The politics of development*, pp. 14-18.
[108] Einar Einarsen, "Oplysninger om de i forskjellige fremmede lande gjældende bestemmelser om erhvervelse og udnyttelse af vandfald," in *Ot. prp. 11* (Stortinget, 1908).
[109] This was standard practice in Italy, following a new watercourse law in 1900. "Fremmede lande gjældende bestemmelser om vandfald
" pp. 105-22.
[110] In 1908, this was the policy in the canton of Wallis, Zürich, Bern, Aargau and Geneva, and had also been used in the German Grand Duchy of Baden and once in France. "Fremmede lande gjældende bestemmelser om vandfald
" pp. 25-35, 44-45, 57-59, 60-62, 94-95, 130.

owned its shores, albeit with regulations for common use of navigable rivers.[111] This meant that all hydropower developments in navigable rivers required permission from the government.

In both the Canadian provinces and in the United States rivers were sold and concessioned off cheaply to private developers, but in Canada this was reversed before World War I. In 1907, Quebec stopped selling rivers, and instead leased them out on contracts between 50 and 99 years.[112] Ontario went even further, and started North America's first publicly owned power company in 1906.[113] At first, the company did not produce its own power, but over the following years, the Ontario *Hydro Electric Power Commission* vastly expanded its own production and bought out its competitors in the province.[114] Forming a public company, backed by public money, in direct competition to private actors, was highly controversial. Many London financiers as well as the London financial press reacted violently against what it saw as an act threatening the security of private investments in Canada, and some likened it to an outright 'confiscation'. According to the opponents of Ontario's public power project, this act would seriously hurt investor confidence in Canada, a country heavily dependent on foreign capital. However, faced with strong electoral support in Ontario for the project, and unconvinced that the City as a whole would punish Canada, Canadian Prime Minister Laurier decided not to challenge the Ontario project, despite the heavy lobbying from foreign and domestic financiers for him to do so.[115]

When it came to subsoil minerals, the issue becomes more complicated.[116] Different legal traditions recognized different property rights for minerals, with difference emphasis placed on the right of the landowner, prospector and the state. These can be separated into three different 'ideal types' of mineral property right recognition, namely 'surface right ownership', 'finders keepers' and

[111] "Oversigt over endel fremmede love og lovforslag vedkommende erhvervelse og utnyttelse av vandfald og bergverk," in *Ot. prp. nr. 1* (Stortinget, 1909).
[112] Dales, *Hydroelectricity and industrial development: Quebec, 1898-1940*, pp. 30-31.
[113] A good comparison between Ontario and Quebec's hydropower systems can be found in Christopher Armstrong and H. V. Nelles, "Contrasting Development of the Hydro-Electric Industry in the Montreal and Toronto Regions, 1900-1930," *Journal of Canadian Studies* 18, no. 1 (1983).
[114] Nelles, *The politics of development*, pp. 256-324, 63-73; Merrill Denison, *The people's power: The history of Ontario Hydro* (Toronto: McClelland & Stewart, 1960).
[115] Andrew Dilley, "Politics, Power, and the First Age of Globalization: Ontario's Hydroelectric Policy, Canada, and the City of London, 1905-10," in *Smart Globalization: The Canadian Business and Economic History Experience*, ed. Andrew Smith and Dimitry Anastakis (Toronto: University of Toronto Press, 2014); Nelles, *The politics of development*, pp. 264-300.
[116] This section is not complete. Most of the information here is based on two surveys of mineral laws that were done in preparation to the Norwegian concession law of 1909, and another related to Swedish proposals to rework the mining law in the 1920s.

'concession system'.[117] However, most systems did not adhere to one of these types entirely, and in practice usually had a combination of several.

'Surface right ownership' was found in the British Empire as well as the United States and Russia.[118] In other words, there was no separation between surface ownership and ownership of underground minerals – with the exception of precious metals, which was crown property in the UK and Russia. This meant that minerals discovered underground were the property of the surface landowner, who was then free to work them or rent them out to a mining company. This form of primacy to the landowner was also in large part copied by Mexico in 1884 and 1892, in order to attract foreign miners.[119] Romania also recognized the surface owners' right to underground minerals in theory. However – if landowners did not want to mine minerals discovered on its land, the state had the right to concession them away to a third party, with a set compensation to the landowners.[120]

The second property system was 'finder's keepers' i.e. one that recognized the prospectors right to minerals. This sort of system was found in Prussia after the mining reform of 1865, which was copied in other German polities.[121] Similar laws were also found in Sweden and Norway. The system allowed prospectors to look for minerals on all land (with some exceptions), regardless of ownership. If minerals were discovered the landowner was allowed to take a share of the mining, either as participant or a form of royalty, but in theory, neither the landowner nor the state had the right to prevent the prospector from extracting the minerals, if they fulfilled the requirements to uphold the mineral claim (such as preparations or active extraction, and/or payment of small fees). In practice, the United States in part also adhered to this, as prospectors could also automatically obtain land ownership if they discovered minerals on public land.[122] Canada, on the other hand went the other way, was much more restrictive than the US in granting land ownership to prospectors, in the late 1800s changed the system to rent out land, rather than selling it.[123]

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[117] These are my translation of the ideal types listed in Socialiseringsnämden, "Yttrande angående allmäna principer för en ny gruvlagstiftning," in *Statens offentliga utredningar* (Stockholm: Finansdepartementet, 1927), pp. 106-14.
[118] Alexander Kursky and Andrei Konoplyanik, "State Regulation and Mining Law Development in Russia from the 15th Century to 1991," *Journal of Energy & Natural Resource Law* 24, no. 2 (2006): pp. 232-35.
[119] Bernstein, *Mexican mining industry*, pp. 18-19, 27-28.
[120] Einarsen, "Oversigt over endel fremmede love," pp. 191-95.
[121] Gunnar Bendz, "Utländsk rätt," in *Betänkande med förslag till Gruvlag*, ed. 1920 års Gruvlagstifningssakkunniga, Statens Offentliga Utredningar (Stockholm: Justitiedepartementet, 1924), pp. 335-41.
[122] "Utländsk rätt," pp. 385-88.
[123] Philip Smith, *Harvest from the rock : a history of mining in Ontario* (Toronto, Ont., Canada: MacMillan of Canada, 1986).

The third property system was the 'concession system'. A concession system meant that all who wanted to mine underground minerals needed a government concession. A concession system could be based on the principle that all minerals were the property of the state, or *mining regalia*. This was the case for the mining ordinance of Philip II of Spain, which was in place in some form in Spain and its former empire until the 19th century.[124] Otherwise, the concession system could leave the actual ownership of unmined minerals unclear, but still dependant on a government concession. The Napoleonic *Code Civil* recognized a concession system for all underground minerals, but did not expressly make underground minerals the states property. Variants of the concession system was in place in France, Belgium, The Netherlands, Italy, Greece, Portugal, Spain, Japan, and most of Latin America.[125]

A concession system did in theory give the government a lot of power to set terms and award favourable mining concessions at its discretion. However, several of the concession systems held set terms for what the government could demand in terms of royalties (France, Belgium, Netherlands, Bolivia), and also provided set compensation to the finder and ground owner. Other concession systems also gave the prospector first claim to a concession on discovery, such as Greece and Portugal.[126] In addition, it is not clear to what extent these countries used these rights to ensure high taxation, domestic value added production or favouring domestic ownership. According to the surveys made in preparation for the Norwegian concession law of 1909, the concession policy in most countries was predictable and liberal when it came to foreign ownership.[127]

Restrictions on foreign ownership was altogether very rare in the 'first globalized era'. The main exception was Japan, who both had laws regulating foreign ownership and followed a very restrictive practice, even though there were some exceptions.[128] Russia also had laws that regulated foreign ownership in the Pacific border areas and in Poland, as well as regulations on the formation of private companies and changes in company charters. However, despite vocal agitation against foreigners from the landed nobility and in some of the country's press, Russia followed a liberal policy on foreign direct investments, which was actively encouraged under Sergei Witte's

[124] Bendz, "Utländsk rätt," p. 375.
[125] Einarsen, "Oversigt over endel fremmede love."; Bendz, "Utländsk rätt."; "Mining in Japan, past and present," (Bureau of Mines, Dept. of Agriculture and Commerce of Japan, 1909), pp. 35-43.
[126] "Utländsk rätt," pp. 378-83.
[127] Norges oplysningskontor for næringsveiene, "Oplysninger om de fremmede lande gjældende bestemmelser angaaende udlændingers erhvervelse af vandfald, bergverker og skoge," in *Ot. prp. 11* (Stortinget, 1908).
[128] John McMaster, "The Takashima Mine: British Capital and Japanese Industrialization," *The Business History Review* 37, no. 3 (1963).

industrialization policy.[129] As we will see in Chapter 2, Sweden also had restrictions on foreign ownership of land and mines without a government permit, and Norway introduced similar restrictions on foreign ownership in 1888. The Ottoman Empire introduced restriction on foreign land ownership in 1908. Romania also had restrictions on foreign ownership of land in the countryside, but according to the Norwegian survey, this restriction was mainly targeted against Romanian Jews.[130] Mexico also required foreigners to obtain a permit to purchase land along its northern border. In 1910, this was extended to the whole country and foreign companies were banned from obtaining further mining property.

It is important to remember is that all these restrictions were against *foreign citizens* and companies *incorporated outside the host country*. Only Japan and Russia had regulations that could limit foreign ownership of companies incorporated domestically. Otherwise, none of the countries mentioned above introduced restrictions based on foreign share-ownership of domestic companies, and they were only strictly enforced in Japan. This meant that in the other countries who had restrictions on foreign ownership, foreign investors could easily circumvent the law by acting through a domestically incorporated subsidiary. The only country to introduce legislation that expressly restricted companies' access to natural resources based on share ownership was, in fact, the United States. Here there was a strong popular reaction against foreign – especially British – land ownership in the 1880s, and several states passed laws that restricted non-residents from owning land.[131] This peaked in 1887, when the US congress passed a law that restricted land and mineral ownership in the territories to US citizens and joint stock companies with more than 80% US share ownership.[132] A further attempt to extend this whole rule to the entire United States in 1890 was however defeated. The effects of these laws were probably minor. Even the new law of 1887 was notoriously difficult to enforce, as there was no law that demanded named shares, or other forms of supervision of who actually held the shares. There is also reason to believe that these laws were liberally enforced.[133]

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[129] næringsveiene, "Oplysninger om de fremmede lande."; John P. McKay, *Pioneers for profit: Foreign entrepreneurship and Russian industralisation, 1885-1913* (Chicago: University of Chicago Press, 1970), pp. 276-90.

[130] Einarsen, "Oversigt over endel fremmede love," pp. 192-93.

[131] Colorado (repealed 1891), Idaho, Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, Texas, Washington, Wisconsin. See Mira Wilkins, *The history of foreign investment in the United States to 1914*, Harvard studies in business history (Cambridge, Mass.: Harvard University Press, 1989), p. 579.

[132] *The history of foreign investment in the United States to 1914*, p. 581. In 1887, this includes the following future states: Washington, Idaho, Montana, Wyoming, North Dakota, South Dakota, Utah, Arizona, New Mexico, Oklahoma and Alaska.

[133] In her work on inward foreign direct investments in the United States, Mira Wilkins refers to a legal expert, who ten years after the passing of the 1887, did not know of a single were a land or mining appropriation had been denied. *The history of foreign investment in the United States to 1914*, p. 581-87.

From this bird's eye view, we can see that there was indeed some precedence of specific governments control over the exploitation of natural resources in the liberal first globalized economy. This was especially the case for minerals and hydropower. Relative to much of the rest of the world, Swedish and Norwegian laws granted fairly wide rights to private enterprise over government. Rent-capture policies also occurred, but were often controversial and generally rare. Regulations on foreign direct investments and foreign ownership did sometimes occur in theory, but both liberal practice and the possibility of circumvention made restrictions non-existent in practice. Nevertheless, foreign ownership – especially of natural resources – were often contentious. While policy remained mostly liberal, it is possible to spot a trend towards increased government regulation in the international discourse on natural resources after 1900.

Chapter 2: Turning away from the liberal order (1888-1907)

While any starting point in a historical narrative has an element of arbitrariness, the year 1888 marked a turning point in natural resource policy in the dual kingdom of Sweden-Norway. After a long period of economic liberalization and international integration, in this year there were clear signs in both countries that the pendulum was beginning to swing the other way and unrestricted private ownership and trade in natural resources would come under considerable challenge. In both Sweden and Norway, this turning point was closely related to worries about the consequences of the increasing economic integration with its more powerful neighbour states.

The evolution of the political response was not a straightforward matter. Governments of both countries had to device a path that did not overtly break the 'rules of the game' and antagonize its trading partners, while also seeing to the interests of their domestic business and electorate. In both countries, domestic business interests looking out for their own economic interests played a crucial role in urging the government to intervene in the name of nationalism and national interests. This helped legitimize a more activist natural resource policy. However, these ideas soon left the confines of direct economic interests, and took on a more ideological life of their own.

I. Swedish ore on British rails: The rise and fall of the Swedish-Norwegian Railway Company (1882-89)

In Sweden, the main driver of the debates on natural resources ownership and control were the great iron mines of Northern Sweden. The existence of vast amounts of iron ore in *Gällivare* and *Kiirunavaara* had been known since the 18th century, but as they were located in such remote, sparsely populated part of the country, all attempts to exploit these resources had ended in failure.[134] While the ore had a very high iron content, most of it had a high phosphor content, which made it unsuited for the Bessemer process. However, in 1878, Sidney Gilchrist-Thomas filed a patent for a new process to remove phosphor by adding a basic refractory lining to the Bessemer converter.

[134] Meinander, *Gränges*, pp. 65-70.

This process, later known as the Thomas-Gilchrist process, turned the phosphor content in the ore from a liability to an asset, as the phosphor slag could be extracted and turned into valuable phosphate fertilizer.[135] While Sweden had its own iron and steel industry, the great demand for iron ore came from abroad. Domestic ores in Britain had already become insufficient to feed its burgeoning steel industry, and the German steel industry had been expanding at a phenomenal pace.[136]

Exploiting the rich minerals required an enormous amount of capital. The iron claims were located inland, and railways had to be constructed to transport the ore from the pits to the sea. The ore near Gällivare was closest to the east coast, where it could be shipped from the port of *Luleå* in the far northeast of the *Bothnian bay*. The richer ores in Kiirunavaara was closer to the Norwegian Atlantic coast. The Norwegian coast was also for the most part ice free, which allowed year-round shipping. The Bothnian bay on the other hand, froze for months every year. As transportation costs of the heavy, bulky iron ore would be a major factor in the operations profitability, a joint exploitation of the Lapland ore called for a railway stretching from Luleå in the east, to the *Ofotenfjord* in the west – over 400 kilometres through unforgiving terrain.

Figure 4: Map of the finshed iron ore railway

With few Swedish investors able or willing to start such an undertaking, the Swedish claim owners looked to attract interests form abroad.[137] The challenge was eventually taken up by *Wilkinson & Jarvis,* a British railway company, under its new subsidiary *Northern of Europe Railway Company, Ltd*. The company consolidated the mining rights for both the Kiirunavaara and the

[135] Fred Aftalion, *A History of the International Chemical Industry: From the "early days" to 2000*, trans. Otto Theodor Benfey (Philadelphia: Chemical Heritage Press, 2001), p.85.
[136] M. W. Flinn, "Scandinavian Iron Ore Mining and the British Steel Industry 1870-1914," *Scandinavian Economic History Review* 2, no. 1 (1954). See also p. 4
[137] Gasslander, *Bank och industriellt genombrott I*, I, p. 139.

Gällivare, and in 1882, it obtained a government concession for a coast-to-coast railway, due for completion in 1891.[138]

As the years went by, public opinion in Sweden became increasingly hostile to the venture. These objections were not limited to the conservative protectionist movement, but both within and without the Swedish Riksdag it was the protectionists who were the company's most vocal critics. Following Germany's return to protectionism in 1879, protectionism had steadily gained ground in Sweden, led by conservative oriented farmers and landowners in an alliance with parts of Swedish industry – particularly the ironwork industry. By 1888, protectionism became the main dividing issue in the First Chamber – the upper house of the Swedish Riksdag – which organized into a free trade oriented party and a protectionist party.[139]

Yet, the objections raised against the venture, were varied, and more often than not, opponent did not only resort to one line of objections alone. However, they can be summarized as follows: First of all, there was unease about the possibility that the railway could serve as a staging post for a Russian influence or outright challenge to the Kingdoms' control sovereignty over Northern-Scandinavia. This *national-security objection* was widely voiced, even by king Oscar II himself.[140] Indeed, Wilkinson & Jarvis had envisioned its railway venture as more than just an iron ore undertaking. They also hoped that the railway would in future transport goods from Imperial Russia to the Atlantic, by linking up the railway to a railway going through the Russian grand duchy of Finland on the other side of Bothnian Bay. The Swedish parliament would not accept this idea, and the company removed this link from the final concession application, leaving this possibility for the far of future.[141] Wilkinson & Jarvis also changed the name of its subsidiary to *The Swedish and Norwegian Railway Company, Ltd,* in 1885, to downplay the possible link with north European transport in general.[142] However, even without linking up with the Imperial Finnish railways, conspiratorially minded opponents suggested that Russian interests were secretly financing the venture in guise of a British company. Beating that, there remained the possibility that the railway could come on Russian hands by buying a majority shareholding in the company, at some point in

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[138] Einar Blix, "Engelskmennene og Ofot-Luleå-banen," *(Norsk) Historisk Tidsskrift* (1926): pp. 487-88.
[139] Protectionist farmers and landowners were more dominant in central Sweden, while the north and the far south was more free trade friendly. It should also be noted that these parties were still rather loose coalitions compared to the party system that would emerge later. Arthur Montgomery, "Svensk tullpolitik : 1816-1911" (Uppsala Universitet, 1921), pp. 135-69; Sten Carlsson, "Partiväsendet i den svenska tvåkammarriksdagen 1867-1970," in *Tvåkammarriksdagen 1867-1970*, ed. Anders Norberg, Andreas Tjerneld, and Björn Asker (Stocholm: 1988); Lars I. Andersson, *Sveriges historia under 1800 och 1900-talen* (Stockholm: Liber AB, 2003), pp. 84-86; Sten Carlsson, *Svensk Historia 2: Tiden efter 1718*, 3 ed. (Svenska Bokförlaget, 1970), pp. 429-37.
[140] Jonsson, *Staten och malmfälten*, p. 28.
[141] Blix, "Engelskmennene og Ofot-Luleå-banen," pp. 484-86.
[142] Meinander, *Gränges*, p. 74.

the future. Such a takeover would be impossible to prevent, as Swedish joint stock company law did not include any regulations on the nationality of shareholders.

National-security concerns about foreign ownership were not only directed towards the Swedish hereditary enemy, Russia. Even without shadowy tsarist backers hiding in the woodpile, the prospect of a British company dominating the iron ore industry was unnerving enough to some. Opponents like the conservative newspaper *Nya Dagligt Allehanda*, pointed to the experiences in Spain and Chile, where British domination of the iron and nitrate industry had "jeopardized [their] national independence".[143] A large powerful, British company could come to dominate the sparsely populated north politically as well as economically. This could lead to everything from unchecked mistreatment of Swedish workers and Swedish owned businesses being sidelined, to future unwanted political entanglements with the British Empire.[144]

Another objection came against the right of foreigners to reap high profits from Swedish natural resources, while leaving very little wealth behind in Sweden. This *rent-capture* argument came in two ways. First it attacked the possible profits made by selling the unprocessed ore itself to foreign steel mills. This made the iron ore exports into a just target for taxation or tariffs, which could improve state finances. But opponents also attacked the lack of value-added processing within Sweden itself. Following this *Listean* argument, it was not only enough to capture parts of the profits made on iron ore exports, but rather to limit or block exports of iron ore altogether in order to force parts of the downstream processing to move to Sweden – thus creating more investments and jobs in the country.[145]

The rent capture arguments were also closely connected to the third and final objection to the iron ore exports, namely its consequences for Sweden's own iron and steel industry. Sweden had been a powerhouse in the European iron industry since the 17th century, with ample supply of rich ores and charcoal to support a thriving iron export. However, as the Bessemer process had invented a cheap way of making steel using coke made from anthracite, rather than expensive charcoal, the Swedish iron industry had lost its competitive edge.[146]

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[143] Nya Dagligt Allehanda, 27/7, 1889
[144] See for instance another newspaper with a conservative bent: Svenska Dagbladet, 25/10, 1888
[145] 'Hvar taga pengarna?' Göteborg Afronblad 26/11, 1892
[146] In what came to be known as "*bruksdöden*" (The death of the [iron]works), the number of Swedish ironworks declined from 381 in 1870 to 140 by 1914. See: Lars Magnusson, *Sveriges ekonomiska historia* (Stockholm: Norstedt, 2010), p. 299. See also John Olof Edström, "Svensk järn- och stålmetallurgi genom tiderna: Allmän översikt från 1850 och framåt," in *Järn- och stålframställning: Utvecklingen i Sverige 1850 till 2000*, ed. Bertil Berg, et al. (Stockholm: Jernkontoret, 2004), pp. 47-50.

The Lapland ore seemed to further challenge the Swedish iron industry in two ways. The combination of these two ways have been dubbed the ironwork "disaster-theory" by historian Bo Jonsson, but for clarity I would like to divide them into two separate, if connected, arguments. First, opponents to the British company argued from an *anti-competitive* position, as they feared that unchecked iron ore export would further accentuate the decline of the Swedish iron and steel industry. Secondly, unchecked exports might deplete Swedish iron ore reserves, which the iron industry could come to depend on in the future. However, within this *Malthusian* vision of the future, the Lapland ore did not only spell the doom of the Swedish iron industry, but could also provide its salvation. As consumption of iron ore in Europe had rapidly increased over the previous decades without a similar increase of new ore finds, the value of the Swedish ore would increase over time. If the ore export could be limited or delayed, the ore could be exported at a much higher price – or, preferably, serve as the raw material for a resurgent Swedish iron industry, as other European iron sources became exhausted.

The combination of the *anti-competitive* and the *Malthusian* position was embraced and spread by the Swedish iron industry itself. The iron industry did not only hold a central position due to its importance to the Swedish economy, but the iron work owners themselves held a significant portion of seats in the First Chamber of the Swedish Riksdag.[147] While the ironwork owners never constituted an entirely firm parliamentary group, Bo Jonsson describes the group of ironwork interests co-ordinated by MP Christian Lundeberg[148] as both a key player in the Riksdag, as well as in influencing the Swedish public opinion in favour of state intervention in the iron ore question. Jonsson's argues that the ironworks interests' strategy was to facilitate a state takeover of the Lapland-mines, and then through their political influence in the government to limit the ore export. In order to achieve this, the British company had somehow to be brought to its knees.[149]

Despite the unease of a British giant dominating the Swedish Lapland, The Swedish-Norwegian Railway Co., was a giant with feet of clay. From the very beginning, the company had failed to raise the amount of share capital it had hoped for, and was frequently in dire financial straits.[150] Despite this, the company managed to reach Gällivarre by 1887, no mean feat, given the time and terrain. As the first shipment from Gällivarre to Luleå proved the ore to be just as rich as expected, the company's fortunes looked to take a turn for the better. But while the British capital

[147] The role of the Swedish iron work owners in Swedish iron ore politics is heavily indebted to Jonsson, *Staten och malmfälten*.
[148] Lundeberg was also CEO of the ironwork, *Forsbacka Bruk*
[149] Jonsson, *Staten och malmfälten*, pp. 46-48.
[150] An overview of the company's weak financial foundation can be found in Blix, "Engelskmennene og Ofot-Luleå-banen."

markets were beginning to look somewhat more favourably at the company's prospects,[151] the company was still in serious trouble. The railroad construction was already three years behind schedule, and the company's financial situation was still precarious.[152] Moreover, with an increasingly vocal opposition to the company, it was far from certain that the government would renew their concession if the line was not completed by 1891.

As the giant stumbled on, the opposition to the company continued to increase. The conflict came to a head in 1888, after the protectionist victory in the Second Chamber election of 1887. Protectionism had become the main dividing line in the 1887 election, and after the protectionists obtained a majority in the Riksdag, the free trade oriented Prime Minister Themptander chose to resign, and the King replaced him with a more protectionist oriented Gillis Bildt.[153]

With the shift towards protectionism, the new government adopted a more openly hostile attitude to the British mining venture. In 1887, Wilkinson and Jarvis began moves to establish an ironwork in Luleå, to smelt part of the ore brought out from Gällivare. This might have been an attempt by the company to forestall criticism of the lack of value added production in Sweden, and keenly stressed the amount of jobs the venture would bring to the small port city.[154] However, as British a company, Wilkinson & Jarvis had to apply for a licence from the Swedish government. Following a royal decree in 1829, this was a requirement for all foreigners or foreign companies who wanted to obtain real estate in Sweden. Nevertheless, the law had been liberally applied, and such permits had been easily obtained.[155]

Bildt chose to break with this practice, and refused to grant the permit. The *Kommerskollegium* (Swedish National Board of Trade)[156] – the main consultative body for such permits – along with the county governor of Norrbotten[157] had both recommended granting the permit.[158] Nevertheless, the new government chose to pay more heed to *Jernkontoret*, the iron and steel trade organization. In Jernkontoret's view, the new ironwork in Luleå would be a destructive competitor to the Swedish owned ironworks, both in domestic and foreign markets. In domestic markets, the proposed ironwork would be a foreign owned competitor within the recently passed

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[151] "Engelskmennene og Ofot-Luleå-banen," p. 502.
[152] "Engelskmennene og Ofot-Luleå-banen," p. 506.
[153] Bo Stråth, *Union og demokrati: Dei sameinte rika Noreg-Sverige 1814-1905*, trans. Eldbjørg I. Hovland, 2 vols., Norge og Sverige gjennom 200 år (Oslo: Pax Forlag, 2005), p. 310.
[154] J.J. Wilkinson and J.T. Jarvis to the King, dated 24.5.1887, Swedish National Archives **(SRA)**, Civildepartementet, Konseljakt, 29.06.1888: Nr. 19
[155] Nordlund, *Upptäckten av Sverige*, pp. 45-46.
[156] Swe. *Kommerskollegium*
[157] Swe. *Befallningshafvande i Norrbottens län*
[158] Commerce Collegium to the King, dated 30.8.1887, Befallningshafvande I Norrbottens Län to the King, dated 29.9.1887, **SRA**, Civildepartementet, Konseljakt, 29.06.1888: Nr. 19

protective tariff wall on iron and steel. Abroad, Jernkontoret argued, the company's cheaper iron made by coke and high phosphorous ore would tarnish the reputation of the high quality Swedish charcoal and low phosphorous iron.[159] While the latter argument rings rather unconvincing, it fits conveniently into the iron works owners larger plans of bringing down the company. More importantly, the government was in this case willing to heed the interests of the ironwork owners, who almost exclusively used interest group arguments.

In theory, Wilkinson & Jarvis could have circumvented the ruling by registering their new subsidiary in Sweden rather than in Britain. Swedish joint stock companies were treated as Swedish legal bodies, and there were no rules regulating foreign share ownership. The fact that Wilkinson & Jarvis applied as a British company is perhaps testament to their optimism that the ruling would continue to be liberally applied. However, not getting the necessary permit was not in itself that damaging to the company. What *was* damaging was that it proved that the government intended to work against the company. And worse was to come.

As the protectionist turn had reintroduced tariffs, protectionist MPs and newspapers began advocating the introduction of an export tariff on iron ore.[160] The following year, the ironwork owners began motioning for export tariffs in the Riksdag, suggesting rates ranged between SEK 5 to 10 per ton.[161] In practice, such a rate would be just short of an export ban on iron ore.[162] The proponents of export tariffs argued that it would limit the damaging effects of ore exports on Swedish irons competitiveness, increase domestic iron smelting, and act as a "royalty" to the Swedish state.[163] However, the press on both sides of the political aisle where ready to recognize that the export tariff was also a tool to undermine the Swedish-Norwegian Railway Co.[164]

Faced with this kind of opposition in the government and the Riksdag, the international financial markets lost confidence in the future of the Swedish-Norwegian Railway Co. An attempt in 1888 to raise the necessary capital to finalize the railway had ended in a colossal failure. In a last ditch attempt to save the company, Wilkinson & Jarvis proposed a deal with the Swedish government. In return for a promise not to use export tariffs, the company would give a 6s royalty on all mined ore from 1892, provided this money was used to pay a 4% return on the share capital,

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[159] Jernkontoret to the King, dated 16.5.1888, **SRA**, Civildepartementet, Konseljakt, 29.06.1888: Nr. 19
[160] Montgomery, "Svensk tullpolitik," pp. 162-69; Jonsson, *Staten och malmfälten*, pp. 52-54.
[161] Roughly the equivalent of 5s 6d and 11s.
[162] Income from the ore exported from Gällivare accounted to no more than between SEK 6-7 the first years, with profits of just over 0.50 kronor per ton. Fritz, *Svensk järnmalmsexport 1883-1913*, pp. 118, 20, Table 76, 79.
[163] Svenska Dagbladet 28.1.1889, 16.3.1889
[164] "Protektionistiska luftslott", Aftonbladet 28.1.1889, Aftonbladet 30.1.1889

and buy the company's bonds at face value. When the company's bonds had been paid in full, the company would pass into the government's hands. However, the government declined the offer.[165] The company directors tried to spin the government's decision as an assurance that henceforth they would receive "all reasonable assistance" to continue developing the undertaking.[166] However, as the company was rapidly running out of money, with looming export tariff and no sign that the government would renew the railway concession, the company went bankrupt and was placed under receivership in April 1889.[167]

Following the company's bankruptcy, the Swedish government moved to buy the railway. By owning the railway, the Swedish state would not only rule out future Russian control of vital infrastructure in the north, but would also control the transportation of iron ore. The Swedish Norwegian Railway Company had spent roughly £ 1,650,000[168] on the railway construction, a figure that was bloated by high interest payments. In any case, the Swedish government would not pay anything near that amount, and it held by far the best cards in the negotiation. If the railway remained incomplete by the end of 1891, the railway would pass to the Swedish state.[169]

What held the Swedish government back was how the Swedish government's actions might appear to international investors, as well as possible negative reactions from the British government. In other words, the Swedish government was unsure whether their actions would be interpreted as a clear breach of the "rules of the game" of international capitalism, which might elicit some form of sanctions. Asked by the Swedish government to assess the situation, Swedish-Norwegian consuls in London considered that the bankruptcy might harm Sweden's standing as a place to do business. And if the creditors decided to reconstruct the company, they could perhaps not claim the "right" to have the railway concession renewed, but had a "reasonable demand" that their interest would be considered.[170]

This meant that it was paramount to find some arrangement with the creditors, to avoid the risk of facing a reconstructed company demanding an extension to the railway concession. With the Swedish banking magnate Knut Agathon Wallenberg acting as intermediary, the government entered into negotiations with the company's creditors. Reconstruction did not only entail a risk for

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[165] Meinander, *Gränges*, p. 76; Jonsson, *Staten och malmfälten*, pp. 58-59.
[166] *The Swedish-Norwegian Railway Company, Fifth Annual Report and accounts*. 28.2.1889. Guildhall Library, Annual Reports, box 159
[167] *Report by the Official Receiver on the affairs of the Swedish & Norwegian Railway Company, Limited.* 6.3.1894. Guildhall Library, Annual Reports, box 363
[168] Roughly SEK 30,000,000
[169] Jonsson, *Staten och malmfälten*, pp. 58-59.
[170] Quoted in Blix, "Engelskmennene og Ofot-Luleå-banen," p. 513.

the Swedish government, but even more so for those who would want to risk putting up more capital against a hostile government. With this in mind, the company's (mainly Dutch) bondholders had little stomach to risk more capital on the venture and were willing to part with the company for £ 372,000.[171] The company's shareholders were left with nothing.[172]

As part of the deal, Wallenberg was also charged with raising the necessary loans to complete the takeover, yet was stonewalled by his usual British contacts, including the Rothschilds.[173] However, it is unlikely that this was a rejection based on a perceived transgression by the Swedish state. Instead, it was more likely related to the aftermath of the Baring crisis, which made British investors wary of signing up more Swedish foreign debt. In any case, Wallenberg managed instead to obtain a deal with Credit Lyonnais.[174]

Financial markets were however not the only ones who could act against the Swedish state. As the troubles began to mount, the directors tried to enlist support from the British government, who were sympathetic to the company's plight.[175] The Swedish government justified its actions to the British ambassador by its need to obtain the railway and ward of any future Russian designs on Northern Scandinavia. It is hard to say exactly how much the government itself believed this, or whether it was merely a convenient argument.[176] Russia was not only the traditional Swedish rival, but at the time also the main rival to British imperial ambitions in Asia. Nevertheless, neither Lord Salisbury nor his ambassador to Sweden seemed particularly convinced by the Swedish worries about a Russian takeover, as they could see no signs that the Russians had any designs for the time being.[177] The British Prime Minister issued a warning to the Swedish government against treating British companies "with injustice and even harshness",[178] but took no further action on the matter.

There are several possible reasons why the British government chose not to interfere. First of all, the company's financial difficulties preceded the company's difficult relationship with the Swedish government, and the company had agreed to a railway concession with a rather short

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[171] SEK 6,750,000. See also Gasslander, *Bank och industriellt genombrott I*, I, pp. 143-44.
[172] Meinander, *Gränges*, p. 76.
[173] Mentioned in an inverview in 1901. See: "Hr. Wallenbergs tryckfrihetsåtal". Aftonbladet 4.10.1901
[174] A study of correspondence with Svenska Enskilda Banken in the Rothschild archive in London sheds no light on the issue.
[175] Jonsson, *Staten och malmfälten*, p. 72.
[176] Bo Jonsson finds it likely that fear of the Russians was mostly a convenient argument. However, the belief that Russian harboured aggressive intentions towards Northern Scandinavia was a large part of public discourse at the time, and widely believed by the Swedish military. Gunnar Åselius, "The "Russian Menace" to Sweden: The Belief System of a Small Power Scurity Élite in the Age of Imperialism" (Stockholm University, 1994), pp. 93-149.
[177] Jonsson, *Staten och malmfälten*, pp. 83-85.
[178] *Staten och malmfälten*, p. 84.

completion time, considering the difficult terrain. In addition, the export tariffs on iron ore had only been discussed in Parliament, but had not been passed into law. In short, the argument that the Swedish government action was analogous to confiscation was not clear-cut. In Sweden the company appeared as a dangerous Leviathan, while in London, the company was seen as a minor undertaking, with only limited British capital at stake. In the words of the Swedish-Norwegian Charges d'Affaires, the "English government does not normally interfere officially on such relatively minor interests which here are at stake […]".[179] Unlike what was to be the case for the German steel industry in the 20th century,[180] British iron and steel producers had not yet grown to depend on the supply of iron ore from Sweden, and did not mobilize in defence of Wilkinson & Jarvis.[181] Nor did the big London financial papers.[182]

With minor compensation to the company's bondholders, the Swedish government had successfully brought down the foreign entrepreneurs and secured control over the key iron ore railway. The government acted – as it was well aware – on a fine line as far as the "rules of the game" were concerned. Nevertheless, in the end no one was willing to interfere to protect the British company, nor make the claim that the Swedish state had no right to discriminate against foreign capital. As we shall see later, the Swedish government's decision to interfere would make a key difference in the later struggles over who should have the right to exploit and profit from the rich ores of Swedish Lapland.

The ironwork interest of central Sweden played a key role in agitating for government interference, but their importance should not be overstated. The ironwork interests also coincided with the rising ideology of protectionism and of Bismarckian "Katheder-socialism", which were strong within the conservative opinion at the time. In addition, the ironwork interests could play on nationalist sentiments in the Swedish public, where the presence and motives of foreigners were regarded with suspicion. However, the arguments the ironwork interests brought against the British iron ore venture were at times vicarious, in order to galvanize the opposition. For the ironwork interests, the main idea was to limit exports and preserve Swedish iron for future use in Sweden. This ran counter to arguments that export tariffs should play a rent-capture policy where the state would ensure that a sizeable part of the profits from the ore export would be retained in Sweden. For this to work, the export would have to continue. In addition, the ironwork owners acted against Wilkinson & Jarvis' plans to construct a foundry in Luleå, despite the fact that this would increase

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179 Wedel Jarlsberg, quoted in Blix, "Engelskmennene og Ofot-Luleå-banen," p. 513.
180 Flinn, "Scandinavian Iron Ore Mining," pp. 36ff.
181 The British iron industry was also not well suited to deal with large quantities of phosphorous ore, unlike the German steel industry. "Scandinavian Iron Ore Mining," p. 40.
182 This statement is based on a study of *The Economist* and *Financial Times*.

added-value production in Sweden, which was one of their key arguments for limiting raw ore exports. The contradictions within the ironwork interests' arguments, as well as the limits to their influence was to become increasingly clear in the years that followed.

II. Should Sweden export raw materials? The debate over the Ofoten-railway

With the fall of the Swedish-Norwegian Railway Co. and the subsequent nationalization of the trunk lines, the danger of a foreign leviathan controlling Swedish Lapland seemed to have been averted. However, even with national control, many of the key questions remained unresolved. Would the ore export continue, now that the foreigners were out? Or should the state limit the ore exports in the interest of Swedish iron producers? And should the state go beyond just interfering in the Lapland ore? Should Sweden strive to limit or impose duties on all unprocessed raw materials? Moreover, to what extent and in which form should the state get involved as an owner of natural resources?

The Riksdag approved the deal between government and the company's bondholders on May 12th 1890; the deal did not include the iron ore mines themselves.[183] Wilkinson & Jarvis had not owned all the iron ore claims outright. Wilkinson & Jarvis owned the Kiirunavara ore claims, and had signed a cheap 50 years lease of the Gällivare mines from another British owned company, *Gellivare AB*.[184] However, parts of the Kiirunavara claims were contested in an ongoing court case. Swedish mining law was shaped to promote exploitation of mineral claims. Maintaining a mining claim was both costly and subject to stringent rules, in order to prevent claimants from laying a "dead hand" on minerals, without the intention of exploiting them. Thus, when C.O. Bergman, a Swedish MP and businessman, discovered that Gellivare AB's measures to protect their claims could be considered inadequate, he was able to stake a rivalling claim to the same ore, and sue the British owned company. As the Swedish Norwegian Railway Company collapsed, the rivalling claims to the iron ore were bought a group of Swedish banks, headed by K.A. Wallenberg. With insecure claims to the minerals, as well as a government inclined against foreign ownership of the mineral claims, the previous owners decided to settle out of court for meagre remunerations.[185]

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[183] Proposition No. 44, Bihäng til Riksdagens Protokoll. 1 Saml. 1. Afd. 1890

[184] Meinander, *Gränges*, pp. 75-76.

[185] The Gällivare claims were relinquished for £25,000 – with K.A. Wallenberg once again acting as mediator. Jonsson, *Staten och malmfälten*, p. 104; Fritz, *Svensk järnmalmsexport 1883-1913*, p. 106.

The result was the creation of two new mining companies, *Luossavaara-Kiirunavaara Aktiebolag* (LKAB) and *Aktiebolaget Gellivare Malmfält* (AGM). Both companies were owned by Swedish investors, but with considerable overlapping ownership. Despite the fact that the mining rights had been obtained fairly cheaply, the companies tied up a significant amount of capital. And much more would be needed to maintain the claims, and yet more to exploit them.[186] This was especially the case for LKAB, which still had no railway connection to its ore claims.

Just as the ironwork owners in central Sweden had done, the new Swedish owners saw the nationalization of the mines as a possible solution. Following the collapse of the British railway company, the ironwork owners had begun to advocate more openly for nationalization, and the idea had won some terrain within the conservative and protectionist oriented press.[187] As there were no laws regulating foreign ownership of Swedish companies, state ownership was the only solution that could guarantee national control of the mines also in the future. This also had the added benefit that the state would be allowed a more direct hand in regulating the extraction of the minerals. For all these reasons, many of the Swedish investors (and Wallenberg in particular) saw nationalization as a highly likely outcome, and looked to make a quick turnover by selling the mines to the Swedish state.[188]

Nevertheless, the new Swedish mine owners' plans went beyond selling the mines to the state. They wanted a deal, where the state would buy the mines, and then rent it back to them. Selling the mines to the state would free up capital, and make the company more able to invest in a long-term extraction of iron ore. Thus, there were two important economic interest group advocating nationalization, but for entirely opposite reasons. The shape of any deal between the mining companies and the state was therefore crucial. In 1891, K.A. Wallenberg offered to sell the Gällivare mining claims to the Swedish state for 2.5 million kronor (roughly £138,000). As part of the deal, AGM would then rent the mines for 35 years, and pay 0.50 kronor in royalty for each ton of ore extracted from the mines.[189] The new investors' idea was that the government would accept iron ore exports, as long as the control over and the revenue from the mines remained on Swedish hands. Thus, Wallenberg's offer flew in the face of the ironwork owners' ideas of using the state to limit the extraction and export of the Lapland ore.

The idea of using the state to limit extraction and exports of iron ore was always encumbered with a fundamental problem. Even though the government bought the unfinished

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[186] *Gustaf Emil Broms och Norrbottens järnmalm* (Göteborg: Göteborgs Universitet, 1965), pp. 7-11.
[187] Aftonbladet 01.09.1891. Jonsson, *Staten och malmfälten*, pp. 107-9.
[188] Gasslander, *Bank och industriellt genombrott I*, I, pp. 145-47.
[189] Jonsson, *Staten och malmfälten*, p. 105.

railway for a reasonable price, £ 372,000 was still a lot of money for the Swedish state. Even the line from Gällivare to Luleå, which had already been opened, needed another £ 154,000 to put it in proper working order.[190] In total, the railway cost more than 10% of the average annual state income between 1886 and 1890.[191] This sum had to be paid back somehow. Moreover, while there had been a lot of hopes as to how the railway would be a catalyst for growth in all sorts of economic activity in the future, the fact of the matter was that there were no other way for the railway to get its money back, except transporting iron ore.

Caught between two competing forms of nationalization, the protectionist Boström government chose to do neither. Instead of trying to renegotiate Wallenberg's proposal or bringing it forward to the Riksdag, the government let the proposal deadline expire on July 1892.[192] For the government there was no great urgency. As it controlled the railway, the government also held some level of control over the mines themselves.

Without a deal with the state, the Swedish mine owners were left in a bit of a quandary. AGMs future was secure enough, as the railway with Luleå was completed. Exports from Gällivare restarted in 1893.[193] LKAB on the other hand still needed to be connected to the railway, and preferably to the Norwegian coast in the west. And it was becoming increasingly clear that LKABs claims were the richer of the two Lapland companies. To make good on their investments, Wallenberg and their fellow investors had no choice but to move forward with plans to finish the railway to Ofoten themselves. A railway would be very expensive, but necessary to begin mining operations in Kiirunavara. By reopening the issue of a private railway and increased ore exports, the company could also reopen the possibility of selling the mines to the Swedish state. In 1893, the company applied for a concession to finish the railway from Kiirunavara to the Ofot-fjord.[194]

The company's application opened a new dilemma in Swedish iron ore politics. Acting against a foreign company was one thing, but could the government be justified in acting against a company owned by loyal countrymen? If the government refused to grant a concession, LKABs properties would be worthless, and in practice meant the same as destroying something Swedish investors had put a significant amount of money into. On the other hand, allowing a concession

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[190] 2,500,000 kronor. See: *Staten och malmfälten*, p. 120.
[191] 89,489,000 kronor. Statisktiska Centralbyrån, *Historisk statistisk för Sverige: Statistiska översiktstabeller utöver i del I och II publicerade* (Stockholm1960), p. 211, tab. 24.
[192] Jonsson, *Staten och malmfälten*, p. 120.
[193] Fritz, *Svensk järnmalmsexport 1883-1913*, p. 106.
[194] Jonsson, *Staten och malmfälten*, pp. 129.

would allow the company to flood international markets with unprocessed iron ore. And while it was Swedish now, it was always possible that it might be bought by foreigners at a later stage.

From the first concession application in 1893, debate over the railway concession dragged on for years. As the prospect of a quick solution waned, Wallenberg and others chose to divest parts of their stake in LKAB.[195] The controlling majority in LKAB passed instead to AGM, which again was controlled by G.E. Broms.[196] Broms – less inclined to the cautious strategy pursued by Wallenberg – was adamant to build the railway privately to prevent delays and political interference. However, the idea of a private railway met massive opposition in the Riksdag. The Boström government for its part was inclined towards a compromise solution where the state would build the railway. A government railway would thus extend the same sort of national control over the Kiirunavara-Ofoten line, as the Gällivare-Luleå line.[197]

Those among the ironwork interests and their protectionists' allies who opposed the Ofoten railway were split about the best way to achieve this.[198] Some openly opposed any railway. Others supported the government idea of a state railway, which could then be underfunded and delayed. There was also the possibility that if the government railway were refused outright, the government would be hard put to deny a private concession to a Swedish company. Denying the company any possibility of a railway link could in effect be seen as a government confiscation of Swedish private property. Thus, some of the opponents of the railway spoke in favour of a state takeover with due compensation to the Swedish investors. However, this would mean that the Swedish state would have to cough up a lot of money, without any way of earning the money back at any time in the immediate future. This argument also clashed with the other key argument that a state built railway would be too costly for the Swedish state. As a solution to this, one of the leading advocates for the iron works interest, Christian Lundeberg, proposed that the state should only connect Kiirunavara to the railway between Gällivare and Luleå, but not construct a railway to the Atlantic coast.[199] This would give the mine a railway link, but the long transport route would seriously hamper the company's profitability.

Yet again, the ironwork owners' need to use ulterior motives in their argumentation illustrates an important point: protectionist arguments alone were not enough to evoke state support in their favour. Furthermore, in the renewed railway debate, it was harder for the ironwork

[195] Gasslander, *Bank och industriellt genombrott I*, I, p. 147.
[196] Fritz, *Gustaf Emil Broms och Norrbottens järnmalm*, p. 10.
[197] See *Riksdagsproposition 54*, 1897.
[198] Jonsson, *Staten och malmfälten*, p. 142.
[199] *Staten och malmfälten*, pp. 147-50.

owners to make their interests analogous with more widely perceived national interests. Not only was LKAB owned by Swedes, but one of the most prominent opponents of the Ofoten railway was Grängesbergsbolaget – the largest ore exporter in central Sweden – which was controlled by London banker Ernst Cassel.[200]

Attempts to stem raw material exports from Sweden by way of export tariffs fared little better. In 1896, the most ardent of the iron works protectionists had tried to revive the export tariff question. When the topic had last been discussed in the Riksdag in 1889, a trade agreement with France had bound Sweden not to introduce export tariffs, but this agreement had now expired.[201] With two motions calling for high export duties on iron ore and one in favour of export duties on zinc ore, the argument followed an undisguised *Listian* rent-capture policy, in line with the "disaster theory".[202] As the most important value added production happened outside the country, foreigners were in effect "sucking the must and marrow out of the fatherland", reducing it to a "half-civilized colony",[203] harming the existing iron and steel industry in the process. However, some of the supporters of an export tariff in 1889 had changed their minds, as it would now harm a Swedish, rather than a foreign company.[204] The majority of both chambers were also unconvinced the export tariffs would do much to improve the prospects of smelting phosphor-rich ore in Sweden, as the country lacked the coal necessary for the Thomas-Gilchrist process.[205] Even in the case of zinc, where a Belgian company controlled the one major zinc mine, the Riksdag balked at introducing tariffs. The Belgian zinc producer had been a gripe for hard-line nationalist press,[206] but attempts to process zinc in Sweden had yet to prove successful. And even though the company had had some very profitable years, the price of zinc ore was so low that even a minor export duty might wreck the company's profit margins and bankrupt it.[207]

Finally, in 1898, the Riksdag accepted the governments proposed solution of a state built railroad. However, the decision was a close run thing, and Boström had threatened to resign if the Riksdag defeated the proposal.[208] The alternative proposal from the opponents for a railway that only linked Kiirunavara to Luleå was accepted in the First Chamber, but defeated by a solid margin in the Second. The railway was a massive undertaking, and was reckoned to cost the Swedish state

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[200] Gasslander, *Bank och industriellt genombrott I*, I, p. 242.
[201] Montgomery, "Svensk tullpolitik."
[202] Motioner i Förste Kammaren, No 11, No 22 and No 23. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1896
[203] Both quotes are from Motioner i Förste Kammaren, No 11. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1896
[204] Första Kammarens Protokoll No. 9, p. 30. 1896
[205] See statements by Bergman, Cavalli and Stephens, Riksdagens Protokoll No 9, pp. 23-34. 1896
[206] 'Hvar tar pengerna' Göteborg Aftonblad 26.11.1892
[207] Bevilgningsutskottets utlåtande No 9. Bihang till Riksdagens Protokoll. 5 Saml. 1896
[208] Jonsson, *Staten och malmfälten*, p. 155.

£1,185,000,[209] which would be paid back through set freight charges on the new railway. The remaining kilometres on the Norwegian coast would be built by the Norwegian state. The deal recreated the solution from the nationalization of the British built railway: Swedish owned mining companies would be allowed to export unprocessed ore, but the Swedish state would guarantee national ownership and control through the ownership of the railway. However, the deal also set an upper limit of 1.2 million ton of ore a year, adjusted down from 1.5 million ton a concession to those who opposed iron ore exports.[210] Still, 1.2 amounted to a doubling of the existing iron ore exports from Sweden.

In summary, the inflow of Swedish investors into the ore fields after the fall of the British railway company complicated the matter for the Swedish ironwork owners who wanted to limit iron ore exports. As the state got directly involved and nationalized the railway, it effectively became a struggle between two different development strategies that seemed mutually exclusive – either leaving much of the ore unextracted or exporting it with Swedish ownership. Despite the importance of the Swedish ironworks both economically and politically, the ironworks lobby could not muster the necessary influence to prevent the government or the Riksdag from funding the railway line to the Norwegian coast, which would greatly aid ore export from Kiirunavara.

III. A law for 'economic' or 'political' purposes? Regulating foreign ownership in Norway 1888-1903

In Norway, the shift towards a more interventionist policy on natural resources was initially a more muted process than in Sweden. The debate on natural resource policy was not initially dominated by one single issue, unlike what had been the case for the Norrbotten mines in Sweden. Still, there were some similarities, especially in how the debate often focused on the scarcely populated northern regions. The Norwegian north was dominated by fishing, and especially the rich cod fisheries near the Lofoten islands, which had supplied the north with its main export staple since time immemorial. Yet, the north also held significant uncut forests as well as rich mineral deposits.

A crucial turning point towards a more interventionist resource policy came in 1888, with the passing of a new citizenship law. Although this law was a reformation of the laws regulating

[209] SEK 21,500,000
[210] Jonsson, *Staten och malmfälten*, pp. 149-50.

citizenship, an essential objective of this law was to introduce regulations on land acquisitions by foreigners. Unlike Sweden, Norway had not had a law regulating foreign land ownership in the 19th century. The impetus for this new law came from the liberal MPs from the northernmost counties.[211] They were worried about the consequences of foreign investors – mainly British – gaining ownership over crucial nodes in the north Norwegian coast, especially the trading posts on the Lofoten islands. Owning these trading posts had often been synonymous with considerable local political influence. However, the debate had also brought forth other misgivings about foreign ownership. British timber companies were accused of lacking responsibility and overexploiting timber resources for short-term gain. In particular, this complaint was levelled at the British *Northern of Europe Land & Mining Corporation, Ltd*.[212] The sawmill company obtained enormous forests tracts on the Helgeland coast, most of which it cut down in less than 20 years, whereupon the company went bankrupt.[213]

The Norwegian Storting was aware that introducing legislation on foreigners' acquisitions of property might be seen internationally as a regressive act. Opponents of the law attacked it as going 'against the spirit of the time',[214] when most other European countries – even the independent minded Swiss cantons – had abolished such legislation. Sweden could be dismissed as conservative and stubborn. However, the recent development in the United States seemed to offer proof for the Liberal party proponents of the law that such a law was not necessarily counter to liberal values. In addition, the proponents were keen to stress that this new law did not necessarily entail a change in policy. Rather, the law was necessary to give the state an extraordinary tool for extraordinary circumstances.

Yet what exactly constituted as extraordinary circumstances? The government itself was split on the matter. Jacob Stang, the Minister of Justice who had been responsible for the law proposal, was keen to stress that the law was meant to intervene in matters of a 'political 'nature. This would be a contrast to the American law, which was mainly intended for matters of an 'economic' nature.[215] In other words, the law was intended for *national security* reasons, and to protect Norway from land appropriations that could lead to political entanglements with foreign states.[216] It was not intended to block foreign direct investments to protect the economic interests

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[211] 'Forslag til Lov om Udlændingers Adgang til at erhverve fast Eiendom her i Riget', Dokument No. 58 fra Konstitusjonskomiteen, 1887.
[212] See statements by Ole Wist, *Behandling Odelstingstidene 1888*, vol. 8D, p. 65
[213] See Kjell Jacobsen, *Overgangstid : Vefsnbygdene ca. 1820-1900*, vol. II, Vefsn bygdebok (Mosjøen: Mojøen Kommune, 1975), pp. 210-33.
[214] See statements by Hagbart Berner. *Behandling Odelstingstidene 1888*, vol. 8D, pp. 62-63
[215] T. H. Aschehough, "Motiver til Lovforslag om norsk Statsborgerret m. m.," in *Ot. prp. no. 16* (Stortinget, 1888), p. 2.
[216] See statements by Minister of Justice Stang. *Behandling Odelstingstidene 1888*, vol. 8D, pp. 68-69

of Norwegians, and Justice Minister Stang downplayed the relevance of the controversial British appropriations of northern trading posts. Instead he underlined the need for some control as without it "a foreign State or a Complex of Foreigners can buy Land and raise Fortifications, if they so desire."[217] Thus, in Stang's mind, the law was a tool to uphold the country's political independence and neutrality, and not usher in a new regime of government intervention in economic matters.

While no one advocated blocking all foreign investments, other proponents of the law, including Prime Minister Sverdrup and the MPs who had called for the law in the first place, disputed Stang's limited interpretation of the laws purpose.[218] Instead, Sverdrup saw the law as also:

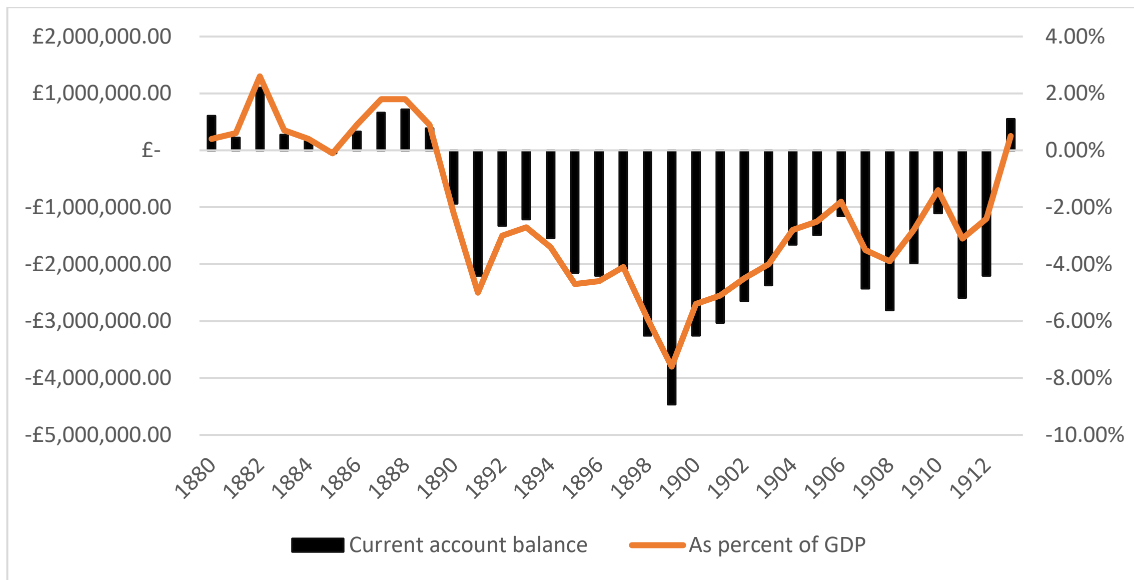
> […] creating a Guarantee that Purchases of Property or Acquisitions of Use of Property should not damage Norwegian Economic interests, and thereafter Guarantee that Foreigners In certain parts of our Land can not obtain such significant influence of Interest, that they will be the real rulers thereof, despite the Constitution and our Laws.[219]

Furthermore, it was also unclear where the line between 'economical' and 'political' lay. Fortifications on Norwegian soil was not the only activity that might possibly entangle Norway with foreign powers. As the legal advisor who had prepared the legislation also pointed out, international law allowed foreign Great Powers to interfere on behalf of their citizens and their economic interests if they were threatened. How the foreign powers saw legitimate economic interests might differ from the Norwegian perception.[220] Without clarifying this issue, the Storting nevertheless came out in strong support for the new law, which was passed with 75 against 4 votes.[221] Clarification would thus be left to the subsequent governments charged with implementing the law.

The new law did not frighten off foreign investors, and capital continued to flow into the country from abroad. Starting from 1890, Norway showed a continuous deficit on its current account balance, which would last until 1913. The deficits equalled around half of total investments 1890-1913. While the estimates of total investments have a high degree of uncertainty, this nevertheless gives some impression of the importance of the capital imports.[222]

[217] No. "Nu kan en fremmed Stat eller et Komplex af Udlændinger kjøbe Grund og opføre Fæstningsværker, om de lyster». Ibid, p. 69
[218] See also statements by Kristian Moursund. *Behandling Odelstingstidene 1888*, vol. 8D, p. 70
[219] *Behandling Odelstingstidene 1888*, vol. 8D, p. 75
[220] Aschehough, "Motiver til Lovforslag om norsk Statsborgerret m. m.," p. 2.
[221] *Behandling Odelstingstidene 1888*, vol. 8D, p. 84
[222] Arthur Stonehill, *Foreign ownership in Norwegian enterprises*, Samfunnsøkonomiske studier (Oslo: Statistisk sentralbyrå, 1965).

Figure 5: Annual Norwegian current account balance (goods and services)[223]



The 1888 law was indeed used sparingly, but it is less straightforward whether the use did just follow a strictly 'political' *national-security* line, rather than also taking 'economic' considerations into account. Wood processing, pulp and paper continued to be one of the main targets for inward foreign direct investments in the early 1890s, and here the newcomers sometimes clashed with established Norwegian interests. In 1889, the British *Kellner-Partington Paper Pulp Co. Ltd.* established a large new factory at the mouth of the Glomma River in eastern Norway, in order to exploit the company's new patents for sulphite pulp. The access to timber floated down the Glomma as well as power from the Sarpsfoss waterfall, were key factors for the new multinational's decision to locate in Norway.[224] The new factory dwarfed all other Norwegian competitors. The investment proved an instant success, making £4 profit per ton of pulp – a margin of 40%.[225] This dominant position alarmed the local Norwegian sawmill owners who among other things had to compete with Kellner-Partington for timber. This conflict came to a head when Kellner-Partington outbid a consortium of local sawmill merchants for the Hafslund estate, located on the opposite side of the Sarpsfoss waterfall.[226] The sawmill interests quickly organized a movement to put pressure on the government to use the 1888 law to disallow the Hafslund sale. According to them, if Kellner-Partington became the sole owner of the mighty Sarp Fall, they could monopolize the outflow of

[223] Source: *Foreign ownership in Norwegian enterprises*, pp. 16-17, Exhibit 1.1 a,b.
[224] Bergh and Lange, *Foredlet virke*, pp. 9-27.
[225] *Foredlet virke*, pp. 29-30.
[226] Martin Dehli, *Sagbrukstiden 1860-1914*, vol. 3, Fredrikstad bys historie : 1860-1914 (Fredrikstad: Fredrikstad Kommune, 1973), p. 158.

floated timber from Glomma if they dammed the fall. Kellner-Partington could also use the hydropower from the fall to expand further their operation, and their domination of the wood processing industry. This would, argued the sawmill-owners and their likeminded, not only be a regional, but a national disaster.[227] The calls from the sawmill owners found resonance in much of the country's press. However, their views were not shared by all forest owners along the Glomma River, where the response was more mixed.[228] Possibly encouraged by Kellner-Partington, some launched a counter protests, which derided the sawmill owners as self-serving, and noted that Kellner-Partington paid between 30-40% more for the timber than the Norwegian sawmills.[229]

After long deliberation, the government came down on the side of the sawmill owners, and blocked the sale on January 5th, 1894. Yet, in doing so, the conservative government of Emil Stang tried to maintain that it had not buckled to pressure, and that it was still acting according to the principle of the 1888-law, which could not be used "with the sole Intention of preventing Competition".[230] Instead, the government placed much weight on the 'political' consequences of Kellner-Partington's local monopoly position if it obtained full control of Sarpfossen. If the waterfall was dammed, disputes over timber transportation in the river could have to be solved by the government and "these could obviously be made more difficult in a significant Degree, if it should be necessary to then take Considerations of Avoiding possible international Conflicts into Regard".[231] However, the government also acknowledged using the law according to the wider interpretation outlined by Sverdrup in 1888, stating that Kellner-Partington's control over the river mouth and possible future electricity generated from the waterfall could leave "the whole nearby Industrial district, including the Forestry that has its main market there, in an economically damaging Dependency to a powerful foreign Company".[232]

The Kellner-Partington case had been considered an extraordinary circumstance, yet exactly what precedent it set came to be disputed. On the face of it, the decision seemed to clarify that economic considerations could justify use of the 1888 law, if the consequences were considered significant enough. However, this was later disputed by Francis Hagerup, who had been the Minister of Justice in Emil Stang's government, and would later implement the 1888-law in his own

[227] Based on numerous petitions found in Norwegian National Archives (**NRA**), S-5946 Industridepartementet, Vassdragsavdelingen, Dd, Box 5. For a summary, see: 'Salget av Hafslund' Aftenposten 25.09.1893, Fredriksstad Tilskuer 19.09.1893, Aftenposten 20.10.1893
[228] *Departements-Tidende* 1894, pp. 113-119
[229] 'Hafslund salg' Hedemarkens Amtstidende 28.11.1893. See also Fredriksstad Tilskuer 21.11.1893,
[230] No. «[…]udelukkende Hensigt at forebygge en Konkurrence.» *Departements-Tidende* 1894, p. 134
[231] *Departements-Tidende* 1894, p. 135
[232] No. […]vil kunne medføre, at saavel hele det omliggende Industidistrikt som de Skovdrifter, som der har sit hovedsagelige Marked vil kunne komme i et for Bæringslivet skadeligt Afhængighedsorhold til et mægtigt udenlandsk Selskab." *Departements-Tidende* 1894, p. 136

governments. According to him, the primary aim had been to ward of future "international political entanglements".[233] No one could convincingly claim that Kellner-Partington posed an immediate threat to Swedish-Norwegian territorial sovereignty, or was acting as an agent for an aggressive British Empire. Instead, the idea was that if it was allowed to increase its dominance, it might clash with Norwegian interests down the road, which might then prompt British intervention.[234] This might of course have been an attempt by Hagerup to deny complicity in creating a political precedent he later came to regret.[235] However, if we give him the benefit of the doubt, this again showed the difficulty in separating 'economic' and 'political' considerations, if economic dominance by a foreign private company might lead to foreign political dominance by a powerful state.

While the interpretation of the law and the decision in the Kellner-Partington case was controversial, neither of the two interested parties in the transaction decided to challenge the government's decision. In order to pre-empt protests from the Norwegian sellers of the Hafslund estate, a consortium of Norwegian investors and sawmill owners, backed by security from the Fredrikstad municipality, brought in enough money to match the price Kellner-Partington intended to pay.[236] However, the Norwegian consortium did not have the necessary capital to exploit their side of the Sarp fall, and a few years later went into a junior partnership with the German electro-technical company Schukert & Co.[237] This time the government did not attempt to intervene.

Even more significantly, Kellner-Partington did not seek support from its home government when faced with discriminatory legislation from the Norwegian government. While the company could have argued that it had been the subject of a somewhat arbitrary and unprecedented political obstruction to its commercial undertakings in favour of a competitor, it accepted the law and the ruling as within the legitimate authority of the Norwegian government. Despite the setback, Kellner-Partington had high hopes for the future of its Norwegian branch and later that year cheerfully informed its shareholders that all planned expansions of its Norwegian operation had been completed, which would further increase profits.[238] As the company did not opt for a confrontational strategy, there was also little need to bring its shareholders attention to this little disappointment, which would do nothing more than possibly lower confidence in the company's stock. Furthermore, full control of the waterfall was not a necessary pre-requisite for the company's future expansion of

[233] See statements by Francis Hagerup *Stortingsforhandlinger 1905/06,* p. 943
[234] Ibid.
[235] Francis Hagerup was a strong opponent of the extended concession laws for hydropower, passed in 1906. See section VI.
[236] Dehli, *Sagbrukstiden 1860-1914*, 3, pp. 160-64.
[237] Carl Just, *Aktieselskabet Hafslund: 1898-1948* (Oslo: Hafslund, 1948), pp.31-41.
[238] *The Kellner-Partington Paper Pulp Company, Ltd. Report of the directors*. 30.9.1894. Guildhall Library, Annual Reports, box 375

its wood pulp operations, even if it would have strengthened the company's position. Electricity generation and distribution, which was the main operation of Schukert & Co. never played a key role in Kellner-Partington's plans. There was clearly more to be gained for Kellner-Partington by continuing and expanding its profitable existing operation, rather than engaging in a confrontational strategy, risking increased opposition for dubious gains of secondary importance.[239]

While the Hafslund case can be seen as a departure from the principle of a strict national-security line into an acceptance of wider economic concerns of foreign ownership, this departure did not immediately lead to a change in policy on foreign ownership of natural resources. For the remainder of the century, there were no major cases where foreigners were blocked from obtaining Norwegian real estate, and foreign direct investments continued to flow into the country.

Government implementation of the 1888-law remained liberal, but foreign ownership of natural resources remained a political issue that could flare up from time to time as direct foreign investments increased. One favoured target for foreign investors were mineral rights, primarily for pyrites, which had begun to prove itself as a highly valuable source of sulphur.[240] Mineral rights had been exempted from the 1888-law, on the grounds that restrictions might harm the Norwegian mining industry. However, the massive increase of foreign direct investments prompted the Norwegian government in 1898 to begin exploring the possibilities of expanding the 1888-law to encompass Norwegian mineral rights. Given that the Norwegian 'finders keepers'[241] mineral law provided widespread rights for prospectors to stake mineral claims upon discovery, the government recognized that it would be very difficult to introduce a law which required government permission every time a foreigner staked a mineral claim. Instead, the law proposal of liberal Prime Minister Johannes Steen looked to scrap foreign citizens right to stake mineral claims, and make the acquisition of previously staked mineral claims would be dependent on a government permit, in a similar fashion as the 1888-law.

Regulating foreign ownership in the mining industry soon proved to be more controversial than the blanket law of 1888. Unlike the previous law that targeted no sector in particular, the new law proposal attracted considerable ire from Norwegians engaged in the mining industry. Both the *Norwegian Mining Industry Association (Norsk Bergindustriforening)* and the *Association of Norwegian Mining Engineers (Den Norske Bergingeniørforening)* advised against any new regulations

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[239] This is based on my reading of Bergh and Lange, *Foredlet virke*.
[240] Rolf Falck-Muus, "Bergverksdriften. Den historiske og tekniske utvikling i Norge samt dens betydning for landet," in *Festskrift utgit i anledning av Den norske ingeniørforenings femti-aars jubilæum den niende december nitten hundrede-fire og tyve*, ed. Den Norske ingeniørforening (Kristiania 1924: Den Norske ingeniørforening 1924).
[241] See Chapter 1: IV

on foreign ownership.[242] They argued that foreign direct investments were crucial for the future growth of the Norwegian mining industry, both as a source for expertise and capital. In addition, all of the states four regional mining officers as well as some of the northern county governors also voiced objections, for similar reasons. During the hearing, expert opinion support for the law came instead from three of Norway' leading academic geologists.[243]

The rather sharp contrast to the attitude of the Swedish mining industry towards the influx of foreigners stems in large parts from the very different structure of the Norwegian mining sector. Mining in Sweden outside of Kiruna and Grängesberg was closely tied to the ironworks, a large well-entrenched business undergoing a difficult transformation. While mining had also been an important economic activity in Norway, around the turn of the century there were practically no downstream production within Norway dependant on access to domestic minerals. Nor were there any large domestic mining companies with capital or ambition to dominate the Norwegian mining industry who might see foreign competitors as a threat. Instead, the Norwegian mining industry, as it was, was primarily interested in sparking the interest among foreign investors who would engage their services and buy their mineral rights.

For the representatives of the Norwegian mining, an expansion of the law might usher in a more restrictive policy towards foreigners engaged in mining. The law proposal also showed a continuing tension over where to draw the line between 'economic' and 'political' considerations. When arguing the case for expanding regulations on foreign ownership, Steen stressed that the 1888-law had been used very sparingly, and only in extraordinary circumstances, and that this would also be the case with a law including mineral rights.[244] However, the justification for regulating access to mineral was not framed solely in terms of preventing foreign political entanglements. Instead, the widespread foreign acquisition of mineral rights, particularly in the north, had raised the question of "whether the current unhindered access for foreigners, independent of Norwegian authorities and without leaving any remuneration to the country's citizens, to exploit the industry mentioned herein is reasonable and in accordance with the interests of the country".[245] Furthermore, Steen viewed opposition to the law as stemming from a "one-sided view of the matter", which only considered the desirability of increased mining activity, while disregarding the

[242] Ot. Prp. Nr. 25 1900/1901. *Forestillinger i anledning af lovforslag om ophævelse af udlændinger adgang til skjærping og kjøb af ertsforekomster.* Dokument nr. 54. Fra konstitutionskomiteen. 1901/1902
[243] W.C. Brøgger, Amund Helland and Johan Vogt.
[244] Ot. Prp. Nr. 25 1900/1901, p. 5
[245] Nor. «[…]hvorvidt den nu bestaaende uhindrede adgang for udlændinger til uafhængig af norsk myndighed og uden at erlegge nogen godtgjørelse til landets egne indbyggere at eksploitere den heromhandlede næringskilde er rimelig og stemmende med landets interesser.» Ot. Prp. Nr. 25 1900/1901, p. 1

benefits of “the greatest possible amount of this industry coming into Norwegian hands, and that the greatest advantages of this country’s riches flowing to the country’s own citizens”.[246] Steen’s views reflected a further expansion of the economic considerations that were used in 1894 to legitimize blocking Kellner-Partington. Regulation of foreign ownership was not only necessary to prevent foreign companies from gaining too much economic power to the detriment of domestically owned industry, but also possibly to give Norwegian citizens and companies preferred access to the resource rents stemming from an exhaustible resource.

While the law was in part an expansion of the 1888-law, removing foreigners’ right to stake claims introduced a new principle of differentiation between domestic and foreign prospectors. Unlike the 1888-law, foreigners would now be completely banned from staking claims, whereas actual discrimination against foreign investors in the 1888-law required the government to actively deny an application. Yet, supporters of increased regulations were keen to argue that such a principle could hardly be considered a break with international practice. Norway’s ‘finders keepers’ mining law foundation was altogether fairly rare. One of the academic geologists consulted in the hearing even stated that foreigners had expressed bafflement that no sort of concession was required.[247] Moreover, other countries who followed a ‘finders keepers’ system, such as Sweden and to some extent the United states, restricted this right to its own nationals.[248]

The restrictions on the right to stake claims meant that even if the law in general was applied leniently, its opponents argued that it would bring serious damage to the industry. Restrictions on foreigners’ rights to stake claims themselves would place foreigners already operating mines in a precarious position. Mineral exploration was always an ongoing and laborious process of mining, which continuously needed new finds to support their operation. Without the right to secure their future mineral needs through surface land acquisitions or staking mineral claims, foreign mining companies risked outsiders staking claims near their operations. Even if a rival might not extract these claims independently, they could be used to either disrupt or blackmail the existing operation by denying the mining company access to new ore. This would drastically increase the risk of foreign mining operations, as the mining operations usually entailed a high level of initial sunk costs. It is notable that the mining industry did not per se attack the law as a breach of international practice, but rather stressed the possible negative consequences it might bring.

[246] Nor. “[…]at den størt mulige del af denne bedrift kommer paa norske hænder, og at den størt mulige fordel af denne landets rigdomskilde kommer til at tilflyte landets egne borgere[…]”. Ot. Prp. Nr. 25 1900-1901, p. 4
[247] See statement by professor Vogt in Ot. Prp. Nr. 9 1902-1903, p. 8
[248] For the US, this right to stake claims was only valid for public lands.

The hostile response from the Norwegian mining industry led the Storting to delay the law, but not to scrap it. The constitutional standing committee first deferred resolution to 1902, and then again to the following year in order to conduct a second hearing.[249] The positions of the academic advisors, industry interest groups and regional civil servants essentially remained unchanged, yet the government decided to adjust the proposed law to allow foreigners to apply for the right to stake claims in certain areas. With this provision, the two interest lobby groups reluctantly acquiesced and accepted the proposal.

There was another significant, if more subtle, change to the tone of the law proposal. While some of those who spoke in favour of increased regulation in the hearing also included rent-capture arguments, the deliberations of the ministry no longer made explicit reference to a possible preference for national ownership for economic reasons.[250] Instead, the government remained vague on circumstances in which it would use a new expanded law, despite appellations from the Norwegian Mining Industry Association to clarify what it exactly was meant by "controlling foreigners".[251] In other words, while the new Liberal Prime Minister Otto Blehr had toned down the 'rent-capture' rhetoric, he was not willing to lay down guidelines that limited the laws strictly to prevent foreign political entanglements. Instead, he was satisfied with emphasizing that the experience with the 1888-law had not led to a decline in foreign entrepreneurship in Norway, and he did not foresee any change while the mining industry depended on foreign capital.[252]

The uniqueness of the Hafslund case highlights the importance of interest group mobilization by the Norwegian sawmill owners in turning what could be construed as a purely 'economic' issue, into a 'political' one. Yet, while a collection of Norwegian businessmen had in this instance mobilized the 1888-law to suit their interests, this is not to say that the new restrictions on foreign natural resource ownership flowed primarily from Norwegian capitalists eager to ward of foreign competition. Instead, many Norwegian businessmen often regarded these new regulations with scepticism. Rather than championing a system that would give Norwegian investors preferred access to mineral rights, Norwegians engaged in the mining sector were often wary of regulations that could impede their ability to sell mineral rights or act as intermediaries between Norwegian resources and foreign investors. Unlike Sweden, there were no established processing industries who instinctly feared foreign owned mineral exports. Yet, the creation of the 1903-law also shows the limits of economic interest group mobilization. The Norwegian mining industry's arguments

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[249] Indst. O. nr 51 1900-1901, Indst. O. nr. 58 1901-1902
[250] Ot. Prp. 9 1902-1903
[251] Ot. Prp. 9 1902-1903, p. 9
[252] Ot. Prp. 9 1902-1903, p. 10

against the law both postponed it, and also led to some moderation in its tone and scope, but could not ultimately prevent it from passing. Support for regulating foreign ownership of natural resources rested on a far wider base of nationalist and protectionist sentiment in the electorate.

IV. Who has the right to own the North? Regulating private ownership and the 'Norrland Question'

While the view that Sweden should remain a raw material-exporting country had won an important victory with the construction of the Ofoten-railway, the question of whether or not the state should regulate ownership of natural resources became an ever more pressing issue as the value of the resources in question increased. As previously mentioned, foreigners had to obtain a permit from the state to obtain real estate, obtain mineral resources or engage in mining. However, joint stock companies registered in Sweden counted as Swedish legal bodies, and did not have to apply before appropriating land. Thus, in practice there was no regulation on FDI. As we saw in Chapter I, regulations on FDI were very rare in the pre-WW1 global economy.[253] Nevertheless, regulating joint stock companies' access right to own natural resources became one of the most hotly debated economic policy issues in Sweden around the turn of the century.

This question was also centred on the abundant natural resources of the north. This was not just confined to the rich iron ore veins of Lapland, but also included other resources – in particular the vast forests of the northernmost counties. These forests had served as the raw material base for a booming export oriented sawn timber industry since the 1850s. This was followed by a rapid expansion in pulp and paper later in the century when the growth in the sawn timber industry flattened out.[254] The timber-intensive industries required a steady flow of raw materials, and forest companies quickly began to buy forest tracts or secure long-term leases from Swedish farmers, accumulating vast areas.

[253] See pp. 14-15 of this thesis.

[254] The Swedish pulp and paper industry grew by an annual average of 12.3% between 1890 and 1910. Lennart Schön, *An Economic History of Modern Sweden* (London & New York: Routledge, 2012), pp. 102-05, p. 42, Table 4.4.

Foreign owned companies played a role in this process. The earlier years were dominated by Norwegians, who expanded into Sweden when the raw material base in Norway proved too small.[255] A large British sawmill operation, *Bergvik och Ala AB*, had been established as early as 1867 and by the end of the 19th century they were still the largest British owned forest company in Sweden.[256] However, by that time they had been followed by more British entrepreneurs, as well as some Danish.[257] Some of the objections against foreign ownership of forests resemble the ones raised against foreign ownership of the Lapland ore. In particular, some feared that foreign owned companies would obtain a dominant position in a rural community, which would mean not only economic domination, but also political domination.[258] Reminiscent of the debate in foreign forest ownership in Northern Norway, opponents were also concerned about the foreigners' role in increased felling and following deforestation, without appropriate measures to ensure a sustainable forest regrowth.[259]

The most pressing aspect of what became to be known as the 'Norrland question' was the *proletarianization* of the Norrland peasantry.[260] Homesteads in Northern Sweden were often fairy poor, in large part due to the harsh climate. In order to make it, the northern yeomen often depended on selling timber from their own forests. Many were however enticed or cajoled into selling their properties for a one off fee. This could improve their short-term prospects, but also diminished the long-term viability of their homesteads. Many of the former yeomen began to work as hired labour in the forests, sawmills or paper companies. This degradation of the free-holding farmers into hired hands alarmed a wide segment of Swedish public opinion. Conservatives saw yeoman farmers as both the bearer of Swedish culture and the foundation of Sweden's defence, and feared that socialism and discord could fester among the landless. But the development also alarmed many social liberals, urban radicals and even socialists, who were dismayed at the poverty and the ever-increasing power of big business, as well as the fact many peasants also became effectively disenfranchised as voting rights were still based on land ownership.[261] This was even

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[255] Francis Sejersted, "Veien mot øst," in *Vandringer : festskrift til Ingrid Semmingsen på 70-årsdagen 29. mars 1980*, ed. Sivert Langholm and Francis Sejersted (Oslo: Aschehoug, 1980).
[256] The company was owned in part by the British banking firm Thomson Bonar. Nordlund, *Upptäckten av Sverige*, pp. 109, 18.
[257] *Upptäckten av Sverige*, pp. 106-13. Norwegians did not have to apply for a licence to obtain real estate, due to the union between Sweden and Norway.
[258] See for instance statements by Hugo Tamm, Första Kammarens Protokoll No. 17, p. 22-23. 1890
[259] See for instance Motioner i Andra Kammaren, No 40. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1890
[260] This subject is covered in Sverker Sörlin, *Framtidslandet : debatten om Norrland och naturresurserna under det industriella genombrottet* (Stockholm: Carlsson, 1988), pp. 179-89.
[261] Olle Gellerman, *Staten och jorbruket 1867-1918* (Stockholm: Almqvist & Wiksell, 1958), 67-91.

more dramatic in municipal councils, were one landowning company could effectively have an electoral majority based on its land ownership.

The fate of the Norrland peasants also became a hot topic in the emigration debate taking place in Sweden at the time. Emigration was increasingly regarded with deep unease, as the country was drained of the best of its young.[262] Between 1880 and 1905, 683,000 Swedes left Sweden to seek their fortunes outside Europe, with the vast majority going to the United States.[263] Norrland was often presented as the solution to this problem. The rich raw materials of northern Sweden formed the basis of new industries and employment opportunities to potential migrants. However, industry was often seen as too narrow to provide employment for the masses of young Swedes. Thus, there were high hopes for settlers breaking new land on the northern frontier and create an "America in Sweden".[264] In the eyes it its supporters, agriculture provided a greater 'permanence' to northern settlement, than fickle industries based on exhaustible resources and subject to international fluctuations.[265] The idea of large agricultural settlement of the north had old roots, and enormous former crown forests had been given to settlers practically free of charge.[266] Now, these forests had to a large extent come on company hands, with many of the former settlers uprooting for America. Thus, the plight of the free-holding farmers in Norrland was of double importance in the emigration debate.

Foreign owned companies constituted only a rather small minority of all forest companies in Northern Sweden.[267] Nevertheless, their presence often became the focal point for number of grievances against the forest industry, as their lack of national sentiment made them more especially prone to prioritize short-term economic gain over wider wellbeing of the nation.[268] Consequently, there were several proposals to legislate against foreign ownership. In 1890, 1895, 1898, 1899, 1900 and 1901 there were motions in the Riksdag to prevent foreign owned joint stock companies from obtaining forests. Nevertheless, while the support for regulating foreign ownership increased over

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[262] Ann-Sofie Kälvemark, "Swedish Emigration Policy in an International Perspective," in *From Sweden to America: A History of the Migration*, ed. Harald Runblom and Hans Norman (Minneapolis and Stockholm: University of Minnesota Press / Acta Universitatis Upsaliensis, 1976), pp. 106-10.
[263] Sten Carlsson, "Chronology and Composition of Swedish Emigration to America," in *From Sweden to America: A History of the Migration*, ed. Harald Runblom and Hans Norman (Minneapolis and Stockholm: University of Minnesota Press / Acta Universitatis Upsaliensis, 1976), pp. 117-18, Table 5:1.
[264] Sejersted, *Sosialdemokratiets tidsalder*, pp. 35-36.
[265] Sörlin, *Framtidslandet*, pp. 179-86.
[266] Ove Gerard, "The Norrland Question: Studies in the government's and the parliament's treatment of the Norrland Question, 1892-1901," *Economy and History* 14, no. Supplement 1 (1971): pp. 6-7.
[267] Nordlund estimates that foreign owned companies produced on average about 14.8% of wood products, and 4.6% of pulp and paper between 1895 and 1914. See Nordlund, *Upptäckten av Sverige*, p. 313, Table III.
[268] See for instance Lagutskottets utlåtande No. 51. Bihang till Riksdagens Protokoll. 7 Saml. 1. Afd. 1902, pp. 15-16

the years, all proposals were defeated in the First Chamber. There were several reasons for this. First of all, there was strong resistance to any regulation that would restrict private ownership – particularly in the First Chamber.[269] Unlike the case of the Lapland ore, there was no strong domestic industrial lobby clamouring for state intervention. Instead, the Swedish Sawmill Association fought bitterly against it.[270] The second was that few had a clear idea of how to regulate foreign share ownership without it either being too cumbersome to administrate, too easy to avoid or too restrictive on all joint-stock companies – even Swedish ones.[271]

The third reason why the Riksdag could not agree on a law regulating foreign ownership was that it became increasingly clear for the Swedish parliamentarians that 'Norrland question' went beyond just the dangers of foreign ownership.[272] Latifundialisation and marginalization of the peasant class was also a problem for Swedish owned forest companies. A law that specifically targeted foreign ownership would not solve the problem. The 'Norrland-question' was temporarily concluded in 1906, when the Riksdag passed a law which restricted companies from buying forests and farms from free-holders in the northern counties. This law however did not differentiate between Swedish or foreign owned companies.[273]

Instead, it was the fear that the Lapland ore would once again come on foreign hands that united the Riksdag to move against foreign ownership. The financial foundations of AGM and LKAB had been wobbly ever since they started, especially as G.E. Broms had been willing to use short-term credit and other financial wizardry to maintain his hold on the iron mining companies.[274] As he and his company was running dangerously close to bankruptcy, Broms was looking to cash in his shares to a foreign buyer. There were several potential buyers, and in 1902, Broms started negotiations with the United States Steel Corp. Broms had also borrowed large amounts of money from the

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[269] See Gellerman, *Staten och jorbruket*, pp. 80-87.
[270] Annagreta Hallberg, "Perioden 1900-1922," in *Svensk trävaruexport under hundra år*, ed. Ernst Söderlund (Stockholm: Almqvist & Wiksells, 1951), pp. 229-32.
[271] This paragraph is based on the Riksdag motions and debates on the issue in 1890, 1898, 1899, 1900, as well as Albert Kôersner, *Lag om vissa inskränkningar i rätten att förvärva fast egendom eller gruva eller aktier i vissa bolag given den 30 maj 1916* (Stockholm: I distribution: Aktiebolaget Nordiska bokhandeln, 1916).
[272] Among other things, this was the conclusion reached by the parliamentary Norrland-committee set down to examine the 'Norrland-question' and recommend legislation. See 'Utlänningars rätt till aktieförvärf i svenska bolag' Aftonbladet 01.03.1902 and 'Begränsningen af bolagsväldet i Norrland och Dalarne' Aftonbladet 12.02.1903
[273] See *Første Kammarens Protokoll 1906,* vol.2, no.41 and *Andra Kammarens Protokoll 1906,* vol.3, no.46. A comprehensive overview of the parliaments handling of the Norrland question can be found in Gerard, "The Norrland Question 1892-1901."; "The Norrland Question: Studier i Regeringens och Riksdagens behandling av Norrlandsfrågan med särskild hänsyn till förbudslagstiftningen, 1901-1906 " *Economy and history* 16, no. Supplement 1 (1973).
[274] An in depth study of Broms financial position can be found in Fritz, *Gustaf Emil Broms och Norrbottens järnmalm*.

company's main buyer, the commodity trader Possehl, using shares as collateral.[275] Rumours of the possible takeover by USSC created a widespread outcry in the Swedish press. The tension were also heightened by the Boer war. Swedish public opinion had for the most part sided with the Boers, and many saw the British interests in Transvaal mining as the main cause of the war, which seemed to serve as an example of how economic domination could eventually lead to political domination.[276]

In March 1902, the Riksdag unanimously approved a letter to the government demanding that it should propose legislation on regulation of foreign share ownership as soon as possible.[277] This letter was based on a motion by conservative MP Magnus Unger, who proposed to prohibit joint stock companies from owning shares in other companies and that all shares had to be registered shares.[278] However, the Riksdag Legislative Committee[279] as well as several MPs in both chambers found this approach flawed and would impede companies from raising capital and operating efficiently. Instead, the committee proposed that the government should prepare a better-targeted law.[280]

As before, the problem remained how to find a way of regulating foreign ownership of natural resources, but without severely hampering Swedish owned companies from doing business and acquiring capital. This was not easy. The law had to be comprehensive enough to prevent it being easily circumvented. On the other hand, the law had to give clear guidelines, and be created in a way that did not overload the government with a torrent of applications. The Committee as well as the Riksdag argued that there was a fundamental distinction between foreign companies of "an industrial nature" (which were acceptable) and companies who owned land and natural resources (which were not). Thus, the Committee proposed that appropriation of "plots, storage areas, smaller waterfalls or other such location"[281] should not require a government permit. However, exactly how this should be defined remained hazy.

Despite the widespread support for a way of regulating foreign share ownership,[282] justice minister Hammarskjöld found it no easier to act straight away. His own attempt to formulate a law

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[275] Jonsson, *Staten och malmfälten*, pp. 164-67, 211.
[276] Motioner i Första Kammaren, No. 17. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1902
[277] Riksdagens Skrifvelse No. 135. Bihang till Riksdagens Protokoll. 10 Saml. 1. Afd. 1902
[278] Swedish law on joint stock companies allowed such an arrangement, but it was not mandatory.
[279] Riksdagens Lagutskott
[280] Lagutskottets utlåtande No. 51. Bihang till Riksdagens Protokoll. 7 Saml. 1. Afd. 1902
[281] Lagutskottets utlåtande No. 51. Bihang till Riksdagens Protokoll. 7 Saml. 1. Afd. 1902, p. 16
[282] Even though Swedish industrialist MP Knut Tillberg went some way to downplay the perceived dangers of foreign ownership, no one object to the principle of some sort of mechanism to prevent it where big national interests were at stake. See Första Kammarens Protokoll, No. 32.

proposal was left unfinished, and the letter was instead passed on to a share law committee, who would mull over the issue for the next 6 years.[283]

There was also a running debate over whether or not to restrict joint stock companies with foreign owners from staking mineral claims. The right to stake mineral claims on all lands was formed to reward exploration, as well as promote extraction by making it expensive to maintain claims. In this way, Swedish laws gave much more rights to private prospectors and miners than was the case in many other countries.[284] However, the boom in the Norrland ore had led to a speculative surge where many claims were being made only for speculative purposes, rather than genuine plans to extract the minerals. These individual speculators also sought to offload their claims to foreign buyers, which worried those who feared a renewed foreign influence in the iron ore mining.[285] As there was yet no secure way of discerning between a foreign and a domestically owned company, the Riksdag passed a new act that temporarily restricted the right to stake claims on crown lands in the Norrbotten County – the county where the rich ore fields were located. However, as so much of Norrbotten had been explored for iron ore, and so much had been claimed already, both the National Board of Trade and the Mining Inspector in the Northern District voiced doubt as to whether this restriction would make any significant difference.[286]

Thus, legislation would not alley the fears of foreign domination in the natural resource industries. The decision to cancel the right to stake claims on crown lands temporarily was not only a measure to prevent foreign ownership. It was also a mark of a related, but also parallel political debate over the extent to which the state should take a more active role as an owner of natural resources – as we shall see in the next section.

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[283] Kôersner, *Lag om vissa inskränkningar i rätten att förvärva fast egendom eller gruva eller aktier i vissa bolag given den 30 maj 1916*, p. 14.
[284] See pp. 12-14 of this thesis.
[285] See Letter from Kongl. Kommerskollegium from Konungens Befallningshafvande i Norrbotten, Karl J. Bergström, Motioner i Första Kammeran, No. 44. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1902. This included the conservative press, see 'Med lagen makt eller pennigens?' Dagens Nyheter 20.04.1902
[286] 'Inmutningsindustrien: Kommerskollegium finner det bra som det är' Dagens nyheter 18.04.1902

V. Swedish rent on Swedish hands: Grängesbergsbolaget, and the road to the compromise of 1907

As we have seen, the political wrangling over the natural resources of the North had led to a gradual but marked increase in the level of state interventionism. During the height of the controversy over The Swedish-Norwegian Railway Company, the ironwork protectionists wanted state ownership over the Lapland ore as a way to stave off a potentially ruinous foreign competitor, and had actively encouraged this in the protectionist press. Nationalizing the mines had also been the favoured strategy for the Swedish investors who obtained the mining claims after the bankruptcy of the British company, in order to provide secure financial foundations for the company, and give the state a continued interest in the iron ore export. However, the Swedish government had come to the conclusion that the Riksdag would not accept the terms being offered by the Swedish investors. Instead, the government had been content with preserving some national control over the Lapland ore through a sector where state ownership was already common practice, namely the railways.

Alongside increased state intervention, the idea that the state had a legitimate claim to the country's natural resources grew in strength. As public opinion was turning on the Swedish-Norwegian Railway Company, protectionists in the Swedish Riksdag moved to give the Swedish state a claim in possible future iron ore claims in the northern wilderness. In accordance with their idea of using the state to advance their interests, the ironworks lobby wanted the state to have a stake in all future claims made on crown lands.[287]

As previously mentioned, the Swedish mineral law was shaped to reward exploration and extraction. The law recognized a partial separation between land ownership and ownership over subsoil minerals. A mineral explorer could make a mineral claim on all land regardless of who owned it, provided adequate proof of the minerals existence could be provided. The landowner then had the right to participate up to 50%, provided he or she was willing to bear their share of the costs. A claimant had to pay a set fee to the state for each claim, but otherwise the state had no say in the matter. This stands in sharp contrast to countries who had a concession system, where all claims were subject to a specific concession from the government, which could be withheld or granted on terms. The Swedish crown was on the other hand a considerable landowner in its own right. In particular, it owned vast tracts of land in the sparsely populated north, which was where the greatest mineral claims of the late 19th century had been made, including the great deposits of

[287] Motioner i Första Kammaren, No. 49. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1889

Gällivare and Kiirunavaara. However, since 1855 the state had forfeited its landowner rights, to further reward mineral exploration.[288] This meant that the rich deposits of Lapland could be claimed in full, for only a meagre fee compared to their worth. It was this ruling the protectionist wanted to bring to an end, and in 1889 motioned to reintroduce the state's right to claim its landowner share.[289] The Riksdag responded by suspending the right to claim minerals on crown land, which lasted until a revision of the mining law recognized the governments rights as a landowner in 1899.[290]

The idea of reintroducing state ownership of natural resources was not only limited to iron ore. In 1895, Puntus af Burén, one of the leading conservative protectionist MPs motioned to introduce an export tariff on all lumber based products, which would finance a gradual renationalization of all felled forests.[291] This garnered some support in the Riksdag, but was ultimately rejected.[292]

More important than the law proposals and law changes themselves were the changing attitudes they reflected. There was a growing sense in Swedish public opinion that the real tragedy in the natural resource questions was that the state had frivolously parted with its natural resources in the liberalist era.[293] Rather than seeing sole private ownership of natural resources as a natural order, many saw this as an unfortunate divergence from an older tradition where the state had played an active role in the mining industry. From this idea, it followed that the state had a moral right to regulate and to claim some share of money made from the resources. Once again, this question was brought to the forefront by the continuing drama over the Lapland iron ore.

While the Boström government (1891-1900) had refrained from pushing for a state takeover of the Lapland mines, the idea had not died. As AGM was verging on the brink of bankruptcy in 1901, the possibility of a foreign takeover began to loom ever larger. As there seemed to be no domestic alternative with the financial strength necessary to bear the whole company, the new government under Prime Minister Von Otter reopened the question of state ownership, and began negotiations with the mining companies for a possible state takeover.[294] After long negotiations, where Knut

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[288] 1920 års Gruvlagstifningssakkunniga, "Betänkande med förslag till Gruvlag," in *Statens Offentliga Utredningar* (Stockholm: Justitiedepartementet, 1924), p. 47.
[289] The motion also proposed to increase the landowner share for the state from 50% to 75%. Motioner i Första Kammaren, No. 49. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1889
[290] Gruvlagstifningssakkunniga, "Betänkande med förslag till Gruvlag," pp. 48-49.
[291] Motioner i Första Kammaren, No. 7. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1895
[292] Första Kammarens Protokoll, No. 19, 1895, Andre Kammarens Protokoll, No. 24, 1895.
[293] This was frequently repeated by MPs who favoured stronger regulations, but also sometimes by those who did not.
[294] Gasslander, *Bank och industriellt genombrott I*, I, pp. 115-17.

Tillberg and K.A. Wallenberg negotiated on behalf of the mining companies, and Arvid Lindman – a former director of LKAB and conservative politician – negotiated on behalf of the state, the parties reached a preliminary agreement.[295] The state would buy the mineral claims for £ 1,190,000[296], while the companies would retain the right to rent the mines for 40 years, for an annual payment of £ 51,000.[297] The deal also included increasing the annual export cap over the Ofoten-railway from 1.2 million tons to 1.5. Once again, the deal outlined a system where the government would help solidify the mining companies' finances to prevent the mines from falling into foreign hands, in return for full ownership of the mines in the future.

With hindsight, it is clear that this was in many ways a good deal for the state, but at the time, it met with a lot of resistance – particularly in the Second Chamber.[298] The idea of nationalization was widely supported, in both the Riksdag and the press, but detractors from both left and right objected to the terms. In particular, opponents to the deal were irked by the idea that the state would tie itself to renting the mines back to the companies for 40 years. Considering the large sum of money the state had to pay, the deal looked like a lucrative bailout for the irresponsible Broms and the all too clever Wallenbergs.[299] There was also no real guarantee that prevented the leasing companies, AGM and LKAB, from ending up in foreign hands, which undermined one of the main selling points of the deal. This was one of the major sticking points to the unreservedly negative report on the deal by the National Board of Trade, who also criticized the economic aspects of the deal.[300] For the owners and creditors to the mining company, a deal without long-term rent agreement was out of the question.[301] Facing strong opposition, the von Otter government chose to backpedal, placing their faith in using legislation to block foreign ownership rather than presenting the deal to parliament.[302]

As the time limit for the nationalization deal expired in June 1902, and no new legislation on foreign ownership immediately forthcoming, the Swedish owned mining companies wobbled on. Broms, still eager to cash in while he still had some control over the companies, began negotiations to offload the companies to the German steel companies who consumed most of the ore, namely Thyssen and Krupp.[303] However, the German steel magnates were well aware of public opinion in

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[295] *Bank och industriellt genombrott I*, I, p. 120. A similar deal was reached in December 1901, with a slightly higher price and a longer lease period for the company. See Jonsson, *Staten och malmfälten*, pp. 188-9.
[296] SEK 21,600,000
[297] SEK 924,000
[298] Jonsson, *Staten och malmfälten*, p. 202.
[299] *Staten och malmfälten*, pp. 175, 225.
[300] 'Staten och de norrbottniska grufvorna', Aftonbladet 09.05.1902
[301] 'Hr Wallenberg pläderar för statsinköp af malmbergen', Aftonbladet 06.02.1902
[302] Jonsson, *Staten och malmfälten*, p. 214.
[303] Gasslander, *Bank och industriellt genombrott I*, I, p. 124.

Sweden and the possibilities of a political backlash similar to what faced The Swedish-Norwegian Railway Company. Thus, they were wary of obtaining the mines without the approval of the Swedish government.[304] The Wallenbergs, who for a long time wanted to reduce their enormous stake in the mining companies[305] under favourable terms, tried to find a workable solution. However, Boström – who had regained the Prime Minister's office in July 1902 – would not accept an arrangement that did not ensure a Swedish share majority.[306]

Instead, a new player came forward as a possible solution to the iron ore problem, the rival middle-Sweden iron ore exporter *Trafikaktiebolag Grängesberg-Oxelösund* (TGO). The ore from the company's mine in Grängesberg had a high phosphor content, which was mainly exported to German steel producers.[307] As these were the same markets as the Lapland ore, the company had long been apprehensive to the consequences of the opening of the Ofoten-railway, which it had tried to lobby against in the 1890s.[308] As the railway neared completion in 1902, the company tried to come to some market sharing arrangement with AGM and LKAB, but was instead offered to buy the company by Broms.[309]

TGO – or *Grängesbergsbolaget* as it was often called – was not a fully Swedish owned company. Ernest Cassel and Fredrik Warburg, two London banking magnates, had dominated TGO since its foundation in 1896, as well as its predecessor companies.[310] However, long aware of the Swedish unease of foreign ownership, the company had also carefully worked to cultivate an appearance of a solid, responsible *Swedish* company. This included, among other things, to consistently sell shares to influential Swedes, such as politicians and respected civil servants.[311] By 1902, Cassel was still the largest shareholder, but the majority of the company's shares were held by Swedes. Foreign share ownership amounted to about 1/7 of the total shares.[312] This "greasing system" was sometimes derided, but it also helped the company win a considerable amount of

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[304] Fritz, *Gustaf Emil Broms och Norrbottens järnmalm*, p. 40.
[305] The Wallenbergs had lent more money to the mining companies, banking on a successful nationalization deal. When the deal fell through, their bank (Stockholms Enskilda Bank) held bonds in the company worth roughly £710,000 (SEK 12,871,000). Gasslander, *Bank och industriellt genombrott I*, I, p. 120.
[306] Jonsson, *Staten och malmfälten*, pp. 250-5.
[307] In 1896, close to 80% of all the ore exported from Grängesberg went to Germany. Meinander, *Gränges*, Vikblad 3.
[308] See p. 11
[309] Jonsson, *Staten och malmfälten*.
[310] Meinander, *Gränges*, pp. 33-58.
[311] Ernst Söderlund, *Skandinaviska banken i det svenska bankväsendets historia, 1864-1914* (Göteborg,1964), p. 283.
[312] Fritz, *Gustaf Emil Broms och Norrbottens järnmalm*, p. 52; Ulrich Wengenroth, "Iron and Steel," in *International Banking 1870–1914*, ed. Rondo Cameron and V. I. Bovykin (Oxford: Oxford University Press, 1991).

influence. Compared to the German steel titans circling the Lapland mining companies, the familiar Grängesbergsbolaget appeared like a veritable saviour to much of the Swedish press.[313]

Despite the fact that TGO was the largest traded company on the Swedish stock exchange, buying the Lapland mining companies was a colossal undertaking.[314] Before the Von Otter government had taken up negotiations with LKAB and AGM in 1901, they had considered it impossible for TGO to obtain the companies without an injection of money from Cassel, which would give the British interest an unacceptable amount of control.[315] Therefore, instead of seeking more money from Cassel, the company tried to negotiate a large loan from Swedish state. Prime minister Boström was very interested in a solution were a strong Swedish company obtained the Lapland mines, and was forthcoming to the idea of a state loan. During the spring of 1903, the two parties negotiated a deal were the Swedish state would provide a loan of £1,100,000 over 30 years, increase the export cap over the Ofoten-railway to 1.5 million tons a year, and provide a guarantee against export duties on iron ore. In return, the company would change its company charter, to exclude other foreigners and companies with foreign shareholder from owning shares in the company.[316]

Despite Boström's favourable disposition, the deal was unacceptable to the Riksdag. The majority of the Riksdag's State Committee refused the proposal outright,[317] as the committee was unwilling to provide an unprecedented large bailout loan to Swedish business, while at the same time ruling out one of the most important tools the state could use to control or tax the company. As a response this, TGO altered its offer to give the state the right to buy the Lapland mines after 30 years, or to let the mines pass to the state without remuneration after 50 years.[318] The issue of export duty was particularly important for the company, as the question had come up again that same year.[319] However, a takeover in 50 years was considered too long and too insecure for many of the most ardent supporters of nationalization, who instead motioned for the government to buy the Lapland companies outright.[320] Facing considerable objections from conservatives, liberals as well as the socialists, both chambers of the Riksdag accepted the State Committee's verdict.[321]

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[313] Aftonbladet 13.02.1903, Dagens Nyheter 12.02.1903, Svenska Dagbladet 15.02.1903
[314] According to Meinander, the whole deal would cost TGO £1,865,000 (SEK 33,837,000). Meinander, *Gränges*, p. 95.
[315] Gasslander, *Bank och industriellt genombrott I*, I, p. 116.
[316] Meinander, *Gränges*, p. 95; Jonsson, *Staten och malmfälten*, p. 258.
[317] Statsutskottets utlåtande, nr. 96. Saml. 4. Afd. 1. 1903
[318] Meinander, *Gränges*, p. 113.
[319] Bevilgningsutskottets Betänkande No. 61. Bihäng til Riksdagens Protokoll. 5 Saml. 1. Afd. 1903
[320] See Motioner i Andra Kammaren Nr. 203. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1903
[321] Första Kammarens Protokoll, No. 56, 1903, Andra Kammarens Protokoll, No. 66, 1903.

Despite the Riksdag rejecting the deal with the Swedish state, TGO decided to go ahead with the acquisition on their own. The day before TGO had reached the decision, the Riksdag had narrowly rejected a motion to initiate a parliamentary investigation into the possibility of introducing export duties on unprocessed iron ore.[322] Despite the heavy costs, and the risks involved, the importance of controlling the Swedish export of phosphorus iron ore outweighed the other concerns. The £1,100,000 was instead obtained by issuing bonds, of which over half was issued through German financial institutions. The key institution was Deutsche Bank, which had close ties to the August Thyssen, one of Germanys leading steel magnates.[323] The remaining capital was secured by issuing new shares worth £580,000,[324] raising the share capital by roughly 1/3.[325]

The TGO acquisition once again showed that the possibility of government interference had shaped the outcome of the ownership of the rich Lapland mines. Faced with widespread economic nationalism in Sweden, German steel producers shirked from integrating backwards up the production chain.[326] The Swedish political climate had thus opened a path where a single company, TGO, could obtain a near total monopoly over iron ore exports.[327] While they still held some power over the ore exporting companies through being one of its sources of capital, as well as its chief customers, the German steel producers did not hold direct control over the mines. While the deal with the state did not pass the Riksdag, TGO kept the changes in its company charter that prevented new foreign ownership, seemingly locking it a current level. Thus, Grängesbergsbolaget had transformed itself into the image a sort of secure *national champion*. The fact that the mines were now owned by a Swedish owned company and not German owned likely make a crucial difference to the power relationship between the Swedish state and the mining companies in the coming conflict over export duties and an increase of the export cap over the Ofoten-Railway.

The call for more state control over the Lapland iron mines did not die with the TGO takeover. Instead, the idea that the Lapland mines was so rich and so important to the Swedish economy, that it warranted some sort of direct state control had become entrenched within much of Swedish public opinion and on both sides of the political spectrum. Indeed, as we have seen in the preceding sections, this idea had been carried forward into public discourse by prominent business

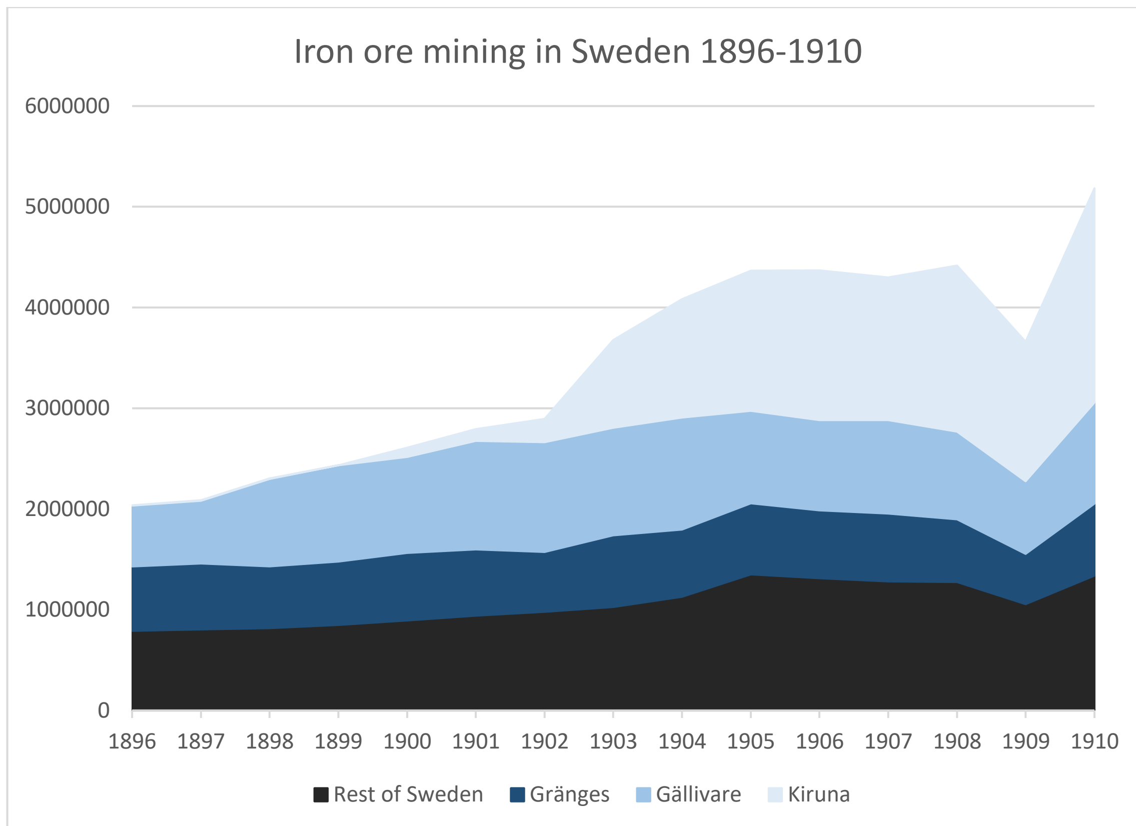
[322] The Second Chamber had narrowly voted in favour, while the First Chamber had voted 26 againt 20 to reject the motion. Första Kammarens Protokoll, No. 57, 1903, Andra Kammarens Protokoll, No. 68, 1903.
[323] Yvonne Maria Werner, *Svensk-tyska förbindelser kring sekelskiftet 1900* (Lund: Lund University Press, 1989), p. 146.
[324] SEK 10,500,000
[325] Jonsson, *Staten och malmfälten*, pp. 275-76; Gasslander, *Bank och industriellt genombrott I*, I, p. 133.
[326] Their desire to obtain influence over the ore producers is also underlined in Fritz, *Svensk järnmalmsexport 1883-1913*, p. 56.
[327] Grängesbergsbolaget controlled roughly 90% of all Swedish iron ore exports. See *Svensk järnmalmsexport 1883-1913*, p. 43, Diagram 4.

interests, hoping to mobilize the state as a tool for their personal gain. This was exemplified earlier, when Knut Agathon Wallenberg, hoping to see a return on his investments in AGM and LKAB, had told *Dagens Nyheter* that the ore was so rich and important that only the state can own it.[328] Now, these ideas were taking on a life of their own, devoid of the clear links with specific interest groups. This was also in part the case for the iron works interests dream of increased iron and steel production in Sweden. Indeed, there were still an influential group closely connected to the ironworks industry who advocated this, but the group's power and coherence had waned. However, calls for increased limits to ore exports and increased iron and steel production in Sweden was now taken up by ambitious neo-mercantilist nationalists, often referred to as 'the young Right' (unghögern), who argued for efforts to increase domestic smelting from a Listean protectionist perspective.[329]

These two new developments were to influence the public debates over export duties on iron ore between 1903 and 1906.[330] Compared to the last time the topic had been discussed in 1896,[331] the debate in 1903 revealed an increased desire among large segments of the Riksdag to at least contemplate introducing an export duty, both to encourage possible future domestic smelting and as a way for the state to claim some share of the wealth. These calls for export duties intensified over the following years, as the value of the TGO share grew dramatically, following the acquisition of the Lapland mines. From a valuation of SEK 1,450 per share in 1902, the TGO share increased to 4,950 by 1907.[332] As production in Kiruna began to pick up, TGO controlled nearly ¾ of total iron ore output in Sweden already in 1904.[333] In 1905, two motions calling for export duties were presented the Second Chamber of the Riksdag, authored by nationalist and protectionist oriented farmers.[334] Both motions based their argument on a combination of using the duties for increasing revenue for the state and as Listian infant industry protection for iron smelting – citing the protectionist powerhouses Germany and the United States as positive examples.

[328] Dagens Nyheter 9.2.1902
[329] Angell, *Den svenske modellen og det norske systemet*, pp. 274-76; Sörlin, *Framtidslandet*, pp.196-200.
[330] See Första Kammarens Protokoll, No. 57, 1903, Andra Kammarens Protokoll, No. 68, 1903, Första Kammarens Protokoll, No. 43, 1905, Andra Kammarens Protokoll, No. 55, 1905.
[331] See p.11
[332] Jonsson, *Staten och malmfälten*, p. 281.
[333] See Figure 6
[334] Motioner i Andra Kammaren, No. 48 and No. 108. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1905

Figure 6: TGO and ore mining in Sweden 1896-1910[335]



For the protectionists, the urgency of the matter increased because of the non-renewable nature of the resource. The natural wealth of the Lapland iron mines was a one off opportunity, and if the wealth were squandered through cheap exports, the advantage would be gone forever. Unlike the forests of Norrland, the ore would not grow back. As it had been during the height of the protectionist "disaster theory", much of the argument between those in favour and those against export tariffs would be about the long-term availability of iron ore, both nationally and internationally. If the world was facing a Malthusian scenario where iron ore was becoming increasingly scarce, a prudent policy would be to limit exports as its value and rents would increase over time. On the other hand, if iron ore were abundant enough to feed the continuously increasing demand, not exporting the Swedish ore would simply be denying the country a much-needed source of income. Here, expert opinions differed, both on the amount of ore available in Lapland and in the rest of the world.[336] Proponents of export duties were keen to refer to the British example, where

[335] *Bidrag till Sveriges officiella statistik. C, Bergshandteringen, 1896-1910*, Stockholm 1897-1911.
[336] Bo Stråth, *1830-1920*, ed. Dick Harrison, Sveriges Historia (Stockholm: Norstedts, 2012), pp. 353-54.

diminishing iron ore reserves had forced its country to look abroad. Opponents of export tariffs were keen to point out that Germany had vast amounts of low-grade ore in Lothringen that it could switch to, if price and technical advances made it profitable. However, in contrast to the motions for export duties in the late 1880s, the MPs did not call for duties that in practice entailed an export ban. Instead, they suggested more bearable duties of SEK 0.50 and SEK 1.00 per ton respectively. After a lively debate, a majority in the Second Chamber voted to introduce the highest tariff, but the proposal was defeated in a joint vote with First Chamber.[337]

The strong support for export tariffs in the Riksdag caused outrage among German steel producers and in the German press.[338] The German steel producers assumed that the Swedish mining companies were likely to pass export tariffs onto them. This would again mean reduced profitability and competitiveness for the German steel works who depended on Swedish ore, who appealed to the German state for countermeasures.[339] Moreover, as the two countries were just about to enter into new trade negotiations, the German Empire had one very powerful weapon it could wield against the Swedish state. This made the situation radically different from what had been the case in the confrontation between Britain and Sweden over the bankruptcy of The Swedish-Norwegian Railway Company. As British free trade was unilateral, Britain lacked a crucial instrument in a trade war, even if it had wanted to act. Without a new trade agreement with Germany, with a renewal of its position as a most-favoured-nation, new German import tariffs would severely harm Swedish wood, stone and engineering industry.[340] During the negotiations, the German government expressed its "principle opposition to export duties" and considered any such attempt to prevent free exchange of raw materials as a return to "medieval conditions" which it would fight with all available means.[341] The Swedish negotiators tried to reserve the right to impose a small export tariff as an internal taxation measure, but the Germans would not budge.

The trade negotiations between Sweden and Germany reveal a curious differentiation in the perception of raw materials and finish goods in the first global economy. By 1905, nearly all European countries had introduced tariffs on industrial goods for protectionist purposes.[342] This gave all industry in large countries a natural advantage, as their home markets were larger. This had in many ways become an accepted part of international trade policy. However, for resource rich

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[337] Första Kammarens Protokoll, No. 56, 1905, Andra Kammarens Protokoll, No. 66, 1903.
[338] Werner, *Svensk-tyska förbindelser*, pp. 146-48.
[339] See for instance 'Exporttull – en tull I förshastande' Dagens Nyheter 14.05.1905, and 'Mot exporttullen' Aftonbladet 15.05.1905
[340] Montgomery, "Svensk tullpolitik," pp. 199-208.
[341] Count von Posadowsky-Wehner, quoted in: Jonsson, *Staten och malmfälten*, p. 311.
[342] Bairoch, "European Trade Policy 1815-1914."

countries to counter with their natural advantages by putting protectionist export tariffs on their own natural resources was something quite different.[343] If all input factors had been equal between the Swedish and German steel industry (which they were not, particularly in terms of access to coal), Swedish Thomas-process steel industry would still be at a serious disadvantage in the early 20th century trade system. As the world shifted towards protectionism, size mattered.

Unperturbed, the pro-export tariff right and left wings of the Riksdag mobilized for a renewed effort in 1906. Over the course of January, no less than eight motions were presented to the Riksdag, calling for export duties between SEK 0.20 and SEK 3.00 per ton.[344]

The uncertainty over the export tariffs was a leading reason why both Grängesbergsbolaget and the Swedish government began negotiation a wide-ranging arrangement in early 1906. For TGO, the important thing was to obtain a guarantee against export tariffs as well as other targeted taxation measures. Also, the company's exports over the Ofoten-railway to the Norwegian coast was still capped at 1.2 million tons a year. For the left-liberal government of PM Karl Staaff, which had taken charge in November 1905, the important thing was to find a solution that gave the state some control over the long term development, some share of the wealth or preferably part or full nationalization. Unlike the previous Boström government, Prime Minister Staaff did not share the belief that the state should stay clear of direct ownership. However, buying the Lapland ore mines themselves was quickly ruled out as too expensive.

Instead, Staaff presented a radical solution. The company should transfer title of the ore mines to the state, in return for a 50-year free lease, where the company would be allowed to extract 150 million tons from Kiruna (form. Kiirunavaara)[345] and 37.5 million tons from Gällivare, without export, duties or transport restrictions. The only exception was the small amounts of low phosphor ore, which the company should only sell to Swedish iron industry. Overall, entailed more than a doubling of the yearly cap on ore transferred to the Norwegian coast, but left a considerable amount of ore for the future, as the government's own figures indicated that there was 793 million tons of ore in Kiruna.[346] The only further demand the state would put on the company, was a series of regulations that would improve the living conditions of the company's workers, which had been much criticized. Transferring ownership to the government immediately was unacceptable to Grängesbergsbolaget. However, in return for further guarantees, as well as a set freight rate, the

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[343] See for instance the conflict between Canada and the United States over export duties on sawlogs and pulpwood in Chapter 1.

[344] Motioner i Första Kammaren, No. 9, Andra Kammaren, No. 6, No. 18, No. 38, No. 44, No. 47, No. 88 and No. 121. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1906

[345] The name of the new mining town had been shortened to Kiruna, for simplicity, in 1900.

[346] Proposition No. 158, Bihäng til Riksdagens Protokoll. 1 Saml. 1. Afd. 1906, p. 12

company was willing to relinquish ownership of the mines after 50 years without remuneration, or agree to sell the mines to the state after 20 years against compensation for the remaining ore.[347] In short, Staaff and TGO were trading stable and secure short-term profits, for long-term state ownership.

The deal marks how far the idea that Lapland ore was a special had permeated the norms of Swedish economic policy. In previous attempts to make a deal, the government had brought in capital. Now, just the promise of non-interference was valuable enough for TGO to relinquish ownership of vast amounts of iron ore in the long term.

The deal was radical compared to the liberal orthodoxy of the mid-19th century, and went both too far and not far enough for the Riksdag. Quite expectedly, the deal was attacked from both the right and the left pro-export tariff wings, who wanted a deal where the state took immediate ownership over the mines.[348] However, the Riksdag legislative committee also rejected the proposition, on the grounds that it did not have adequate time to make a proper statement on a complicated agreement that bound the country for 50 years.[349] In addition, a large group in the First Chamber had serious misgivings about the precedent of (directly or indirectly) using threats of taxation as leverage to force a company to relinquish ownership to its property.[350] On the other hand, even those in favour of state ownership repudiated the deal, as they thought it gave too much for too little. Ruling out export tariffs for 50 years seemed too great a concession. It especially irked those (particularly on the right) who dreamed of great ironworks based on phosphorous ore.[351] Even moderate conservatives – like Arvid Lindman – thought the state had relinquished too much, in particular by locking the freight rates for 50 years.[352] In the end, the deal was voted down by a significant margin in the First Chamber and by the slimmest of margins in the Second.[353]

A few days later, those who had favoured using export tariffs as the leading tool in the iron ore policy, were dealt a severe blow. Under pressure to secure favourable access to an increasingly important trading partner, the Riksdag reluctantly accepted the new German-Swedish trade agreement, which forbad the Swedes to impose export duties on iron ore.[354] With this deal, one of

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[347] Proposition No. 158, Bihäng til Riksdagens Protokoll. 1 Saml. 1. Afd. 1906, Meinander, *Gränges*, pp. 114-15; Jonsson, *Staten och malmfälten*, pp. 305-14.
[348] Motioner i Andra Kammaren, No. 167 and No. 168. Bihang till Riksdagens Protokoll. 1 Saml. 2. Afd. 1906
[349] Statsutskottets Utlåtande, No. 162. Bihang till Riksdagens Protokoll. 4 Saml. 2. Afd. 1906
[350] See for instance statements by Edvard Fränckel, John Rettig, Pehr Lithander and J.F. Nyström, Första Kammarens Protokoll, No. 51, 1906
[351] See for instance statements by Rudolf Kjellén, Andra Kammarens Protokoll, No. 63, pp. 53-58
[352] Första Kammarens Protokoll, No. 51, 1906, pp. 57-65
[353] 86 vs. 44 in the First, 106 vs. 103 in the Second.
[354] Montgomery, "Svensk tullpolitik," pp. 207-08.

threats the Riksdag held over the Swedish mining giant was gone, at least until it would be up for review in 1910.

Even without the threat of export duties, Arvid Lindman – who succeeded Staaff as Prime Minister in the summer of 1906 – was adamant that he could arrange a deal with the company that was more favourable to the state's interests. Even without export duties, the transportation cap on the Ofoten-railway still prevented TGO from fully capitalizing on the wealth of the Kiruna mine. Lindman – who had at one point been the director of LKAB – had spoken out against export tariffs, and eschewed ideas of trying to force domestic production based on the phosphorous ore. However, he also considered that the state had a legitimate claim to seeing to its interest in the rich Lapland mine, and was ultimately in favour of nationalization. However, he soon found – as Staaff before him – that this option would be simply too expensive, especially as TGO demanded that any nationalization would have to include the middle-Sweden Grängesberg mine as well. In addition, TGO was no longer willing to consider a deal where the company handed over its property without remuneration.[355]

Over the course of 1906, Lindman and TGO hammered out a deal which in many ways resembled the arrangement from the year before, but also had some crucial differences. The main difference was that Lindman had changed Staaff's proposal of nationalization without remuneration after 50 years, to an arrangement that gave the state a stake in the mining company immediately. TGO would reorganize the Lapland mines to all belong to LKAB. TGO would then give the state 50% share ownership by issuing new preference shares. These shares would carry no voting power and would pay a set royalty for the ore exported. Between 1908 and 1927, the rate would be SEK 1.00 per ton exported from Kiruna, and 0.50 per ton exported from the Gulf of Bothnia. This rate would then increase by 50% for the following five years, and then double.[356] As the extraction cap would be the same as the previous Staaff agreement, the Swedish state could receive as much as SEK 3,375,000 (£ 186,000) in royalty per annum. After 25 years, the state would be allowed to buy the remaining 50% of the shares for 12.5 times the company's average yearly profit.[357] The freight rate on the state's railways was also set slightly higher, to ensure that the ore was not transported at a loss. In return, the transportation cap would be raised, and the company would secure guarantees against export duties or other forms of taxation specifically targeting the company, similar to the Staaff deal of the previous year.

[355] Meinander, *Gränges*, p. 120.
[356] Proposition No. 107. Bihang till Riksdagens Protokoll. Saml 1. Afd. 1. 1907. pp. 120-121
[357] Proposition No. 107. Bihang till Riksdagens Protokoll. Saml 1. Afd. 1. 1907. pp. 106-107

It could be argued that Lindman's deal was less favourable to the Swedish state, than the deal of the previous year. However, there were also arguments in its favour, which made it easier to swallow for the Riksdag. First of all, there was little to indicate that the governments bargaining position would improve any time in the immediate future. Looking back to all the deals between the government and the mining company proposed since 1902, it was clear that the deals were getting progressively less favourable to the government – which Lindman himself was keen to point out.[358] The 50% state ownership arrangement was more in line with a return to the land ownership right, whose existence was an established legal principle, rather than a wholly new foray into the realm of government confiscation. Also, as the trade agreement with Germany had ruled out export duties on iron ore, Lindman's arrangement opened a way to tax the wealthy iron industry. Lindman's deal was essentially a way of guaranteeing national ownership of the mines, as well as ensuring that some of the rich resource rents were captured by the government. Moreover, it was a pragmatic compromise between the many issues that had been raised, which also regulated the pace of extraction and guaranteed some supply of low phosphor ore to the Swedish iron industry. Even though the left wing of the Riksdag[359] wanted to include a clause that limited the future price of the company to no more than £ 7,700,000,[360] the main losers were those on the right who hoped to reserve the phosphorus ore for iron ore production. In the end, both chambers voted solidly in favour of arrangement.[361]

The Swedish government's use of its freight monopoly to put pressure on the mining company did not go unnoticed in Germany. While the negotiations between the Lindman government and TGO was still ongoing, the conservative press in Germany attacked the Swedish policy as a breach of the 1906 trade agreement, and the issue was discussed in the German Reichstag. The German government had however not wanted to declare the existence of the 1.2 million ton export gap as a direct breach of the agreement, and in part defended the Swedish argument that the cap was mostly a technical matter of capacity.[362] However, when the new arrangement between TGO and the Swedish state was approved, no such pretence was possible. To the German government, the new royalty was seen as veiled export tariffs. The German government issued a formal protest to its Swedish counterpart, but balked at further action. Without a readily effective countermeasure, short of tearing up the treaty, the German government reluctantly let the

[358] Andra Kammarens Protokoll No. 48, 1907. pp. 37-51
[359] See for instance statements by Lindhagen and Branting, Andra Kammarens Protokoll No. 49, 1907. pp. 13-16. Andra Kammarens Protokoll No. 48, 1907. pp. 56-63
[360] SEK 140,000,000
[361] 112 vs. 10 in the First Chamber, 134 v. 80 in the Second Chamber.
[362] 'Den svensk malmexporten inför tyska riksdagen' Aftonbladet 08.12.1906, 'Tyska malmdebatten' Dagens Nyheter 12.12.1906

matter pass.[363] Sweden had bent the rules, but got away with it. For German interests, the most important matter was to secure an ample and steady supply of Swedish ore and the new deal between TGO and the Swedish state more than doubled the export from Kiruna. It is possible that the German government reckoned that strong-arming the Swedish government on the royalty issue could risk jeopardizing this increase, or at least delay it. Thus, the Swedish policy of national control and rent-capture from the Lapland mines would be allowed to remain.

VI. A radical panic? The introduction of the temporary concession laws in Norway 1906

As in Sweden, the Norwegian debate on natural resource ownership hardened towards the middle of the first decade of the 20th century. In both countries, these questions both broadened in scope over time, from national security, to supply security, issues of private market power and moral national ownership to resource rents, with the eventual outcome being an increased role of state intervention and regulation. However, the form of state involvement would take markedly different forms. Whereas the attempts to regulate foreign joint stock ownership in Sweden had been put on ice, the Norwegian parliament would go down the route that the Swedish government had shied away from and introduced a blanket concession law regulating all joint stock company's acquisitions of key natural resources.

Despite the warnings from the Norwegian mining industry, the decision to include mining into the laws on foreign ownership in 1903 did not noticeably dampen the appetite for Norwegian natural resources among international investors. High copper prices and an increasing demand for sulphur for the chemical industries, combined with new concentration techniques, made Norwegian pyrite deposits look like a good opportunity. The continuous high annual profits shown by Sulitjelma, seemed to offer living proof of this. A widespread exploration activity followed in its wake, both into

[363] Werner, *Svensk-tyska förbindelser*, pp. 308-09; Anders Lindberg, *Småstat mot stormakt: Beslutssystemet vid tillkomsten av 1911 års handels- och sjöfartstraktat* (Lund: Gleerup, 1983), pp. 90-110.

virtually unexplored areas, as well as into the possibilities of reviving long dormant copper mines, most prominently Løkken Verk.[364]

The mining boom was not restricted to copper and sulphur. Norwegian iron mining had died out in the 1800s, but the country's hills and mountains contained vast deposits of low-grade iron ore. The iron content had previously been too low to be exploited economically, but as with copper and sulphur, high demand and new technology seemed to offer a solution. In 1899, the Swedish mining magnate and founder of Sulitjelma, Nils Persson, managed to attract the interest of Thomas Alva Edison to a large iron ore find near Mo in Northern Norway, resulting in the foundation of *Dunderland Iron Ore Company Ltd*. With Edison's new patent for magnetic ore separation and large amounts of British capital, the company hoped to export 750,000 tons of iron ore annually, mainly to the British market.[365]

This development was aided by the way the 1903-law was implemented. Otto Blehr's liberal government fell shortly after the law was passed, and had thus little time to make their mark upon mineral policy. This instead fell to the subsequent centre-right coalition government led by Francis Hagerup, in power from October 1903 to March 1905, where Hagerup besides the premiership also took charge of the Ministry of Justice, the department responsible for enacting the regulations on foreign acquisitions. Hagerup had been one of the staunchest defenders of the limited 'political' interpretation of the restrictions on foreign ownership, and implemented a consistently liberal policy. The majority of all applications for mineral rights were approved, and foreigners and foreign companies were frequently allowed to stake mineral claims at will, albeit sometimes in smaller areas than they had applied for.[366]

Norwegian reactions to this development was markedly mixed. Inward direct investments into mining created new jobs in the areas where opportunities where few and emigration was high, and left sizable sums in the pockets of enterprising Norwegians who managed to act as facilitators or middlemen. Yet, the foreign owned success stories also brought considerable resentment and alarm within the host population. Some of this antagonism was fuelled by the chaotic and highly speculative world of mineral prospecting. As Norwegian mineral laws followed a finders-keepers system, prospectors could potentially reap large rewards by staking rich mineral claims on any land.

[364] Elsa Reiersen, *Fenomenet Thams*, 2nd ed. (Oslo: Aschehoug, 2006), pp. 255-73. Brytningstider.
[365] Hilde Gunn Slottemo, *Malm, makt og mennesker: Ranas historie 1890 - 2005* (Mo i Rana: Rana historielag, 2007), pp. 46-52.
[366] A summary of mining concessions can be found in "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913". Appendix to St. Prp. Nr. 1, Hovedpost VII, kap. 2. 1914. See the concessions to Konsul N. Persson granted 30.06.1904 (pp. 7-9) and Sjangli Norske Aktieselskap granted 17.09.1904 (pp.15-17) for examples of restrictions to staking rights.

However, prospectors without the means to develop their claims themselves would have to bring in investors or sell off their claims in order to profit from their exploits. In order to maintain these claims, prospectors had to pay considerable renewal fees. These limited both the numbers of claims and the length claims could be maintained according to the size of the prospectors' wallets. Less wealthy prospectors were thus inherently vulnerable to competitors who could make contesting claims or pen in existing claims. Thus, while prospecting brought riches to some Norwegians, others lost out as they were unable to defend their claims against rival interest. Those who felt wronged often did not shrink from publicly decrying their opponents' ruthless and monopolistic actions, who more often than not eventually sold their claims to foreign investors, or were foreigners themselves. As the leading investor in Norwegian mineral exploration, consolidation and extraction, Nils Persson was a frequent target of accusations of foul play.[367]

Accusations of abuse of power by foreign industrialists, combined with stories of rich pickings falling on foreign hands, led more and more to question the soundness of the liberal mineral policy. Besides disgruntled prospectors, the most vocal criticism came from the progressive wing of the liberal party. However, unease over the future consequences of foreign domination was not restricted to these circles. By the summer of 1905, the Norwegian government itself had begun contemplating a change in direction.

The political agenda of 1905 was dominated by the ongoing rows over the dissolution Swedish-Norwegian union, which culminated over the summer and autumn. This led to the fall of the union-friendly Hagerup, to be replaced by another broad centre coalition government led by Christian Michelsen. However, the political debate over natural resource ownership was not completely drowned out by the union crisis. In the tense weeks following Prime Minister Michelsen's unilateral dissolution of the union on June the 7th, the Norwegian parliament did its first summary inspection of all natural resource concessions granted under the 1888 and 1903-law passed in the preceding years. With Hagerup's liberal implementation clear for all to see, influential radical voices of the Liberal party, such as the outspoken nationalist Wollert Konow (H) and nationalist and progressive Johan Castberg, attacked the former governments for allowing foreign companies to hoard mineral claims as speculative assets, and furthermore warned of the grave future consequences of increased foreign domination over the Norwegian mining industry. Hagerup for his part stubbornly defended his policy as being simply implemented according to the question of "whether foreign acquisition of such rights could in any way lead to complications with foreign

[367] See for instance «Hemnæsberget» Ranens Tidende 16.03.1905.

powers",[368] which according to his interpretation of the law were "the only concerned one is justified in taking [into account]".[369] The parliamentary committee charged with reviewing the concession policy also largely supported Hagerup's interpretation of the law as only existing for 'political' concerns.[370] Moreover, Hagerup stressed that restrictions on foreign ownership went contrary to "impartial European opinion" and that a stricter practice could lead to "extraordinarily worryingly consequences".[371]

When finance minister Gunnar Knudsen was called to speak for the Michelsen-government, he took a markedly different tone, and did not unequivocally reiterate support for Hagerup's limited interpretation of the law. Instead, Knudsen acknowledged the concerns over increasing foreign ownership, and that there indeed had been discussions within the government on how to address it.[372] While acknowledging that these were only at a preliminary stage, Knudsen nevertheless opened the possibility for a radical shift in policy towards state intervention. Pointing to the ongoing developments in Swedish iron policy, Knudsen also subscribed the idea of 'peak iron' in Europe, where Scandinavia would soon be the only remaining viable source. In such a scenario, this key strategic resource would in his mind provide "greater security than any alliance"[373] as it would be in the "interest of the nations consuming iron, that the countries, which have ore, are small and harmless, yet simultaneously free and independent states."[374] In order to achieve this, it would be necessary to preserve some of the countries iron ore for posterity, which could require government intervention. As a counter argument to Hagerup's worries of displeasing "European opinion", Knudsen's idea (although not stated expressly) contended that government control over strategic resources would preserve, rather than endanger Norway's international security. In Knudsen's view, only active regulation could guarantee that the country did not fall into the orbit of one great power or another simply as a consequence of unchecked market forces.

Minerals was not the only Norwegian natural resource where both international demand and domestic controversy was steadily increasing. Competition over dwindling Norwegian forests

[368] No. "[…]hvorvidt udlendigers erhvervelse a fen saadan rettighed kan antages at ville medføre paa nogen made forviklinger med andre stater." Stortingstidene 1904-1905, p. 532
[369] No. "[…]det eneste hensyn, som man her er berettiget til at tage» Stortingstidene 1904-1905, p. 532
[370] The protocol committee members in charge of reviewing the concession policy was conservative MP Axel Thallaug and liberal MP Anton J. Rønneberg. In their view the law purpose was "giving the Norwegian state the opportunity to in advance be able to prevent acquisitions of property which might be feared could create complications with a foreign power or in other ways harm Norwegian interests". Indst. O. IV 1904-1905, p. 12
[371] "[…]overordentlige betænkelige konsekvenser" Stortingstidene 1904-1905, p. 533
[372] Stortingstidene 1904-1905, p. 532
[373] «[…]større betryggelse end nogen alliance». Stortingstidene 1904-1905, p. 534
[374] […]i de jernforbrugende landes interesse, at de lande, der sitter inde med malmen, er smaa uskadelige, men samtidigt frie og uafhengige stater».

was hardening year by year, and consuming companies gradually began to buy their own forests to secure their own supply. The most prominent among these were undoubtedly Kellner-Partington. Unfazed by the governments' rejection in 1894,[375] the company had expanded its Norwegian operation with sizable returns, paying an annual dividend of 15-20% between 1900 and 1913.[376] In 1902, the company made its first large forest purchase, when it bought the company *Gravbergskogene*, with more forestland added to it over the following years.[377] For the company, backward integration was not just an insurance mechanism against supply deficits. In the words of the company director, it would enable the company "to deal with the Pulpwood sellers to better advantage by way of controlling the prices".[378] In 1905, Kellner-Partington also obtained *Hafslund Sulfitfabrik*, in order to limit the competition for pulpwood floated down the *Glomma* – Norway's longest river.[379]

Figure 7: The Glomma River and its catchment area

Kellner-Partington's backward integration and near monopoly position, caused alarm among the forest owners in *Hedemark* county.[380] Kellner-Partington had reserved support from some forest owners organisations in 1893-94, when the Norwegian sawmill companies pressured the

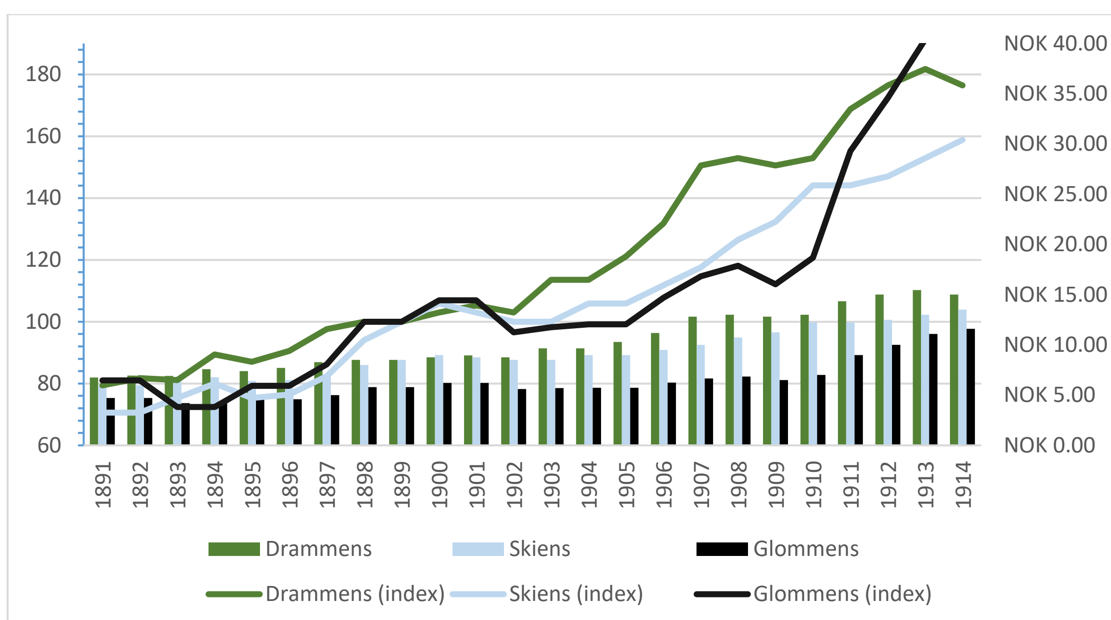
[375] See Chapter 2: III
[376] Bergh and Lange, *Foredlet virke*, p. 41.
[377] Paul Tage Halberg, *I skogens favn: Gravbergskogen - Borregaard Skoger i 100 år 1902-2002* (Borregaard Skoger A/S, 2002), pp. 25-28.
[378] Quoted in Bergh and Lange, *Foredlet virke*, p.39.
[379] Halberg, *Bjelker i bygde-Norge*, p. 125; Bergh and Lange, *Foredlet virke*, p. 40.
[380] Hedemark county is a large county with large forests, through which Glomma runs.

government to block Kellner-Partington's expansion. As previously noted, Kellner-Partington was a lucrative newcomer for forest owners, as they generally paid a higher price for pulpwood. However, the attitude of forest owners changed over the following decade. As the growth in timber prices from the 1890s ended, combined with Kellner-Partington's aggressive backward integration, and Norwegian forest owners along the Glomma began to organize to present a common front against what they saw as the British company's unhealthy market power.[381] In the years following Kellner-Partington's purchase of Gravbergskogene, pulpwood prices in the Glommen-watercourse stagnated compared to the rest of the country (see Figure 8, p. 94). Foreign owned pulp producers were not only making themselves unpopular among their suppliers, but they also faced opposition from Norwegian competitors. *Den Norske Træmasseforening*, the Norwegian pulp producers association begun advocating a full stop to new foreign owned pulp producers. Other Norwegian pulp producers went even further and wanted foreign owned companies to be banned from buying forests.[382]

Having been on the receiving end of local interest groups before, Kellner-Partington took steps to prevent a repetition government rejection in 1894 by carefully circumventing the 1888/1903-law. Hafslund Sulfitfabrik was the same pulp-factory the company had been previously prevented from acquiring. Although the riparian rights to half of *Sarpfossen* waterfall had been separated into an electric power company controlled by Siemens Shuckert, the management of Kellner-Partington took no chances. When the owners of Hafslund Sulfitfabrik once more put it up for sale, Kellner-Partinton sidestepped the uncertainty of applying for the government to approve the acquisition. Rather than outright merging the Norwegian company Hafslund Sulfitfabrik into the British company, Kellner-Partington bought a controlling 2/3 stake in the company.[383] As the 1888-law did not take into account share ownership nationality, Hafslund Sulfitfabrik would still count as a Norwegian company. In a somewhat similar fashion, most of Kellner-Partington's forest purchases was not carried out by the British parent company, but rather to a Norwegian subsidiary, *AS Gravbergskogene*.[384]

[381] Halberg, *Bjelker i bygde-Norge*, pp. 108-11; *I skogens favn*, pp.28-31.
[382] Frantz F. Melhuus, "Den norske træmasseforening gjennem 25 aar (1890-1914)," in *Den Norske Træmasseforening 1890-1915* (Kristiania: 1916), p. 50; Thilesen Georg August, "Træmasseindustrien og træmasseforeningen," in *Den Norske Træmasseforening 1890-1915* (Kristiania: 1916 (1905)), pp. 4-5. See also statements by Francis Hagerup, *Stortingstidene 1905-1906*, p. 909
[383] A/S Borregaard, *Borregaard 1918-1968* (Oslo Grøndahl, 1968), p. 10.
[384] Halberg, *I skogens favn*, pp. 25-28.

Figure 8: Pulpwood prices in major watercourses. 1899=100[385]



Whether Kellner-Partington's would have been prevented from expanding if it had applied to the government for a licence in accordance with the 1888-law is not easy to say. While Hagerup had been part of the government that blocked the first Hafslund purchase in 1894, he later went a long way to express doubt over the decision and indicate that the government had bowed to heavy local pressure.[386]

The new Michelsen government on the other hand, soon decided to show that it did not only mince words when it considered a more restrictive line on foreign ownership of natural resources. Applying for staking rights in a substantial area in north of Tromsø county in May 1905, Nils Persson was met by a reluctant government, which eventually denied his request after nearly two years of political wrangling (see chapter 3). Policy on forest acquisitions turned even more restrictive. When the British newsprint producer Albert E. Reed offered to buy the Norwegian mechanical pulp factory *Follum Bruk*, he decided to complete the transaction in accordance with the 1888-law, on the advice of his Norwegian legal counsel, submitting his application on July 14th 1905. The Norwegian shareholders however, were worried the deal might be scuppered by the government. To make sure they would still be able to sell their stake, they successfully pressed to include a clause in the sales contract, which stated that if a government permission had not been given by the end of 1905, Reed would instead obtain the company through share purchases.[387] After

[385] N.W. Rogstad, *Norges træmasse-, cellulose- og papirindustri* (Kristiania1914).
[386] *Stortingstidene 1905-1906*, p. 943
[387] Kristofer Anker Olsen, *Follum gjennom 75 år: et bidrag til norsk treforedlingsindustris historie* (Oslo: E. Moestue A.s., 1948), Texte imprimé, pp. 93ff.

a lengthy deliberation, lasting over half year, the application was turned down the on 27th of February.[388] Both the municipal government and the state were in full agreement; the forests belonging to Follum Bruk must remain in Norwegian hands.[389]

The explanation given at the time show that the Michelsen-government had decided to embrace a substantially wider interpretation of the 1888/1903-law. Rather than only denying foreign acquisitions when there was danger of foreign entanglements, or wide negative economic consequences, the Michelsen government turned the argument on its head. Instead, it expressed general reluctance to allow foreign ownership of forests, stating "Permission thereto is difficult to grant, if not singular Reasons recommends it", [390] which in Reeds case it did not. In other words, foreign ownership of forests needed specific reasons to be granted, rather than specific reasons to be denied. By this time however, this decision was of little consequence as Reed had already obtained the shares in accordance with his agreement with the shareholders.

Even though the government's decision could not prevent the acquisition, Albert Reed himself took the decision as a personal insult, and immediately demanded to see the Norwegian foreign minister, to whom he laid out in no uncertain terms how unfairly treated he felt. Reed however kept his new Norwegian operation going until 1909, when he sold it, mainly due to its low profitability.[391] For the government the experience with the Follum Bruk was an even greater watershed. While Borregaard and others had circumvented the 1888/1903-law, in the case of Follum Bruk the shareholders had apparently blatantly ignored the government's decision. Even though the deal had actually been completed before the final decision, it proved to both the Norwegian government and the nationalist press that the 1888/1903-law, meant to regulate foreign ownership, was in practice impotent. This had repercussions that reached beyond just Norwegian forest policy, as it played into an ongoing controversy over who had the right to own an almost entirely 'new' natural resource, namely hydropower.

Birth of the electrochemical industry

Norwegian topography gave the country near perfect conditions for hydropower. Heavy rainfall from the Atlantic, combined with numerous lakes on a high wide mountain plateau, provided Norway with the highest hydropower potential per capita of any country. As techniques to harness,

[388] NRA, Statsrådssekretariatet, Ac, vol 2. Kgl. Res. No. 410, 1906
[389] "Negtet approbation" Stavanger Aftenblad 28.02.1906, «Skogsalg til udlandet» Fredrikstad Tilskuer 01.03.1906
[390] No. «Tilladelse hertil synes vanskelig at burde meddeles, hvor ikke serlige Grunde taler derfor»
[391] Olsen, *Follum*.

distribute and utilize hydroelectricity were developed and improved, it gradually became clear to both Norwegian politicians and the population at large that in its rivers and waterfalls lay an energy source that could displace coal for motive power, as well as heating and lighting. This was particularly promising, as Norway had no significant domestic supplies of coal. Norwegian domestic consumption of hydroelectricity had also attracted some interest from abroad prior to 1905. Through the parts of Hafslund not bought by Kellner-Partington, Siemens Shuckert had formed a full hydroelectric utilities company, which looked to provide electricity to both Oslo and to future nearby energy intensive industrial consumers.[392]

The attractiveness of Norwegian hydropower was further enhanced by their legal framework. In contrast to many other western countries, Norwegian law recognized streams and rivers as private property, beholden to the landowners of the riverbanks, and also had liberal provisions for damming and diverting water flow into turbines.[393] This principle was in large part due to the fact that few Norwegian rivers were navigable, and there had thus not been the same need to have the state guarantee and regulate the free flow of rivers. In a similar vein, some European countries, like France, recognized private ownership over smaller, unnavigable rivers and streams.[394]

The recognition of riparian rights as private property had also fuelled a speculative trade in these rights. Farsighted individuals who recognized that their value would rise spectacularly as both electric transmission and the demand for electricity would improve in the future began to accumulate riparian rights, often bought at little expense from unsuspecting farmers.[395] These "*waterfall-speculators*",[396] as they would eventually be known as, usually had no means or plans for exploiting these riparian rights, other than selling them for a profit.[397] Thus, riparian rights often passed through numerous hands before eventually ending up in the hands of someone with a clearer idea of actually developing them. Even then, there were few Norwegians willing or indeed able to put up the kinds of sums necessary to develop them, and instead looked to sell them on to foreign companies engaged in new energy intensive industries.

Hydroelectricity did not only offer the potential of a cheap and domestic energy source, but it was also the key 'raw material' for electrochemical industries. The first great electrochemical

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[392] Just, *Aktieselskabet Hafslund: 1898-1948*.
[393] This was undeniably affirmed in the Norwegian Watercourse Law of 1887, which nevertheless built on older common practice. For more information on the Watercourse Law of 1887, see Thue, *For egen kraft : kraftkommunene og det norske kraftregimet 1887-2003*, pp. 22-33.
[394] Einar Einarsen, "Fossespørgsmaalet I," *Samtiden* 18, no. 3 (1907): p. 157.
[395] Johan Vogt, *Elektrisitetslandet Norge* (Oslo: Universitetsforlaget, 1971), pp. 44-54; Vidkunn Hveding, *Vannkraft i Norge* (Trondheim: Norges tekniske høgskole, Institutt for vassbygging, 1992), p. 21.
[396] No. *fossespekulanter*
[397] Vogt, *Elektrisitetslandet Norge*, pp. 44-54.

staple to hit Norway was *calcium carbide*, with the first dedicated factory opening in Hafslund in 1898.[398] Made by a mixing lime and coke at high temperatures in an electric furnace, calcium carbide was a highly sought after source for acetylene gas, which was used mainly for mining and train lanterns and welding. Cheap electricity was also the crucial factor for smelting aluminium through the *Hall–Héroult process* developed in 1888, and the first Norwegian aluminium smelter was opened in 1906 by the *British Aluminium Company* (Baco).[399] However, by this time, the calcium carbide market was showing signs of overproduction, and aluminium was still a young product yet to see widespread consumption. Instead, it was another product that looked to provide an enormous boom in the electrochemical industry.

By the turn of the 20th century, nitrates had become a critical input for the production of high explosives, and as a fertilizer. Yet, besides ammonium sulphate – a by-product of coke ovens – the only source for industrial amounts of nitrate were the great sodium nitrate deposits of northern Chile. This source was both expensive, and ultimately finite. As European agriculture grew more and more dependent on artificial fertilizer, pessimists began to imagine doomsday scenarios if no new process for fixing nitrogen could be developed. In 1905, British chemist and physicist Sir William Crooks once again repeated his warning that:

> The fixation of nitrogen is vital to the progress of civilized humanity, and unless we can class it among the certainties to come, the great Caucasian race will cease to be foremost in the world, and will be squeezed out of existence by races to whom wheaten bread is not the staff of life.[400]

By that time however, the industrial fixation of nitrogen was quickly becoming a reality through the energy intensive electrochemical industry. In 1898, Adolph Frank and Nikodem Caro, two German engineers, developed a method to have nitrogen react with calcium carbide at high temperatures to produce calcium cyanamide. Cyanamide could then be used as a fertilizer, or used to produce ammonia through a reaction with hydrogen.[401] However, the first full scale industrial plant to use this process was not built until 1905.

That same year, a competing *electric arc* process was being finalized in Norway. The work on this process was carried out by Norway's leading expert on electromagnetism, Kristian Birkeland, who had been set in motion by Sam Eyde, a Norwegian engineer who speculated in riparian rights. This process sought to fix nitrogen directly from the air, by using the well-known fact that nitrogen

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398 Haber, *The chemical industry*, p. 83.
399 Storli, "Out of Norway falls aluminium," pp. 46-52.
400 Quoted in Leigh, *The world's greatest fix : a history of nitrogen and agriculture*, p. 121.
401 *The world's greatest fix : a history of nitrogen and agriculture*, pp. 128-29.

and oxygen in the air would form nitrous oxide at very high temperatures (about 2,000-3,000°). This unstable molecule could then be absorbed into more stable nitric acid through a reaction with oxygen and water.[402] While the process was built on a well-known theory, creating a stable electric arc and a workable absorption system was no easy matter. Earlier attempts to make this work, carried out by Charles S. Bradley and D. R. Lovejoy at Niagara Falls in 1902, had failed precisely for these reasons.[403] The process was enormously energy intensive, but looked promising when based on cheap and abundant hydropower. On 2nd December 1905, *Norsk Hydro-Elektrisk Kvælstofaktieselskab*[404] *(Norsk Hydro)* was founded, and soon grew to be Norway's most highly capitalized industrial company.

While the foundation of Hydro caused a sensation in the newly independent Norway, not least because of the success of Norwegian made technology, there was also an important backside. While the company was founded and led by Sam Eyde, the company was not owned by Norwegians. Early in the process, Sam Eyde had used his business connections to attract the interest of the Wallenberg brothers, who largely bankrolled the venture in its initial stages. For the Wallenbergs, Norsk Hydro was not just a promising business opportunity in itself, but also offered an outlet for electro technical equipment produced by *Allmänna Svenska Elektriska AB* (ASEA), which the Wallenbergs had recently helped reconstruct.[405] The Wallenbergs, however, were neither able nor willing to put up the hefty amounts of capital required to construct the hydroelectric dams, and instead invited in French investments through their contacts in *Banque de Paris et des Pays-Bas* (Paribas).[406] Moreover, Hydro's leadership had also begun tentative discussions to form some form of cooperation with the German chemical giant *Badische Anilin und Sodium Fabrik* (BASF), which was developing a similar Arc-process on its own.[407] Negotiations were eventually broken off, and formal cooperation between the two companies would not commence until the latter half of 1906. However, while it was not referred to specifically in Norwegian newspapers, the possibility certainly helped to fuel rumours of a large foreign combine with designs on Norwegian hydropower.

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[402] Haber, *The chemical industry*, p. 85; Leigh, *The world's greatest fix : a history of nitrogen and agriculture*, p. 122.
[403] Gary Maxwell, *Synthetic Nitrogen Products: A Practical Guide to the Products and Processes* (New York: Springer Science & Business Media, 2006), p. 21.
[404] Eng. *Norwegian Hydro-electric Nitrogen Company Ltd*.
[405] Gasslander, *Bank och industriellt genombrott II*, II, pp. 149-62.
[406] Andersen, *Hydro 1905-1945*, pp. 72-77.
[407] Werner Abelshauser et al., *German Industry and Global Enterprise. BASF: The History of A Company* (Cambridge: Cambridge University Press, 2004), pp. 126-27.BASF's characteriztion as a giant compared to the Norwegian economy is not just colourful language. In 1906, BASF's had an equity capital of roughly £ 13.5 million – a sum equivalent to 52% of the total assets managed by Norway's 83 commercial banks. See Kristofer Anker Olsen, *Norsk Hydro gjennom 50 år: 1905-1955* (Oslo: Norsk hydro-elektrisk kvælstofaktieselskab, 1955), p. 16, 166.

The ‘Panic Law’

As the success of the Arc-process seemed to irrevocably demonstrate the enormous economic potential for hydroelectricity, the rapid accumulation of riparian rights on foreign hands happened largely outside government control. Even though the potential for hydroelectricity had often been discussed known since the late 19th century, the full effect of this was slow to dawn on both the political classes as well as most common Norwegians. A notable exception to this was the aforementioned liberal politician Gunnar Knudsen. His small hydroelectric generator in his wood pulp factory is reported to be the first of its kind in Norway, and in 1892 Knudsen had urged the Storting to take an active role in securing riparian rights for the Norwegian state.[408] From 1894 the Storting eventually set aside annual sums of up to NOK 184,000 (approx. £ 10,100) in order to secure power for a possible future electrification of the railroad, with the first waterfall was bought in 1895.[409] Yet, as Norsk Hydro was born, even these meagre funds had yet to be spent in full. Moreover, as the case of Reed’s purchase of Follum Bruk had incontrovertibly proven, the 1888/1903-law was no longer adequate to regulate foreign ownership.

The prospect that foreign owned companies would come to completely dominate the valuable ‘new’ resource caused considerable alarm, particularly on the political left. On March the 23rd 1906, the Liberal oriented *Verdens Gang* reported that riparian rights for 550,000 horsepowers (hp) were on foreign hand, out of an estimated total Norwegian hydropower potential of 1,250,000.[410] As with the other natural resource debates in both Sweden and Norway, the argument to regulate foreign ownership was a composite of a number of subpoints. Partly, it was resentment over economic advantages of Norwegian resources mainly benefiting foreigners, leaving Norwegians lagging behind.[411] Norwegians critical of widespread foreign acquisitions perceived that the price foreign investors paid for riparian rights was too low, even when bought from Norwegian hydro-speculators.[412] Yet, there was not only a worry that foreign capitalists might reap the lion’s share of the rewards from developing them, but critics also speculated whether foreign acquisitions were also made to prevent them from being developed – either to prevent competition and increase the

[408] Lars Thue, *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, 2 ed. (Oslo: Universitetsforlaget, 2006), pp. 44ff.
[409] *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, pp.54-59.
[410] ‘Vore Vandfald – Et Coup de main – Kanaldirektøren’ *Verdens Gang*, 21.03.1906.
[411] See for instance ‘Norges vandkraft’ *Verdens Gang* 09.03.1906
[412] As an illustration, the riparian rights of Svelgfoss – the first waterfall developed by Norsk Hydro for nitrate production – was originally bought for NOK 7,000 (≈ £ 386), and eventually sold to Eyde and the Wallenbergs for NOK 240,000 (≈ £ 13 200), a price Marcus Wallenberg considered “dirt cheap”. The original price is mentioned in Indst. O. XII 1905/1906, p. 6. For Wallenbergs price, see: Gasslander, *Bank och industriellt genombrott II*, II, pp. 190-91.

value of their existing hydropower generation, or simply to hold them until they could be sold on to an even higher price.[413] Thus, fear of foreign ownership of hydropower was also partly driven by the fear that it might restrict Norwegian businesses and consumers' access to the resource.

There was also the ever-present underlying fear of foreign political domination and possible future loss of sovereignty. While there was no clear popular conspiratorial narrative of hydropower acquisitions being directly tied to aggressive ambitions of a hostile power, as in Swedish fears of Russian designs against Norrbotten, there was a notion that foreign powers potentially be drawn in as a result of a future political conflict between foreign business' and the Norwegian government. Hydroelectricity was not only an electrochemical 'raw material', but also potentially a universally consumed energy source. There was thus an even higher potential for conflict between public and private interests than for other raw materials such as timber and minerals. This point was further exacerbated by the fact that high voltage transmission technology was still at an early stage, which made long-range transmission ineffective and expensive. Consequently, power generation could quickly become a natural monopoly locally, even if the generator company did not own the power grid.

Popular outrage against hydropower acquisitions by foreigners reached new heights in March 1906, when *Verdens Gang* revealed that Gunnar Sætren, the state Director of Canals (*Kanaldirektør*) had himself engaged in waterfall speculation, and played a key role in securing the riparian rights for Rjukanfoss for the Norsk Hydro combine, pocketing a handsome reward.[414] While Sætren himself claimed his private affairs did not conflict with his role as a civil servant, this was highly dubious as Sætren was the main authority set to advice the government on which waterfalls to obtain – a role in which he had long been criticised for pursuing too passively.[415] Two days after the scandal was revealed, the radical MP Johan Castberg challenged the governments passive stance in the hydropower question in parliament. Castberg followed this a few days later with a proposal to reshape the 1888-law, co-signed by a number of other prominent members of the radical wing. The proposal suggested that only joint stock companies with an exclusively Norwegian board of directors would count as 'Norwegian' and thus be exempt from requiring government approval.

By this time, it had become clear to the Michelsen government that something had to be done. On Thursday 3 April, the government called a closed session in the Storting, where it sprung its

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[413] See for instance 'Norges Fossefald og Fremtidens Norge' *Verdens Gang* 17.03.1906

[414] 'Vore Vandfald – Et Coup de main – Kanaldirektøren' *Verdens Gang*, 21.03.1906. 'Kanaldirektøren' *Verdens Gang* 23.03.1906

[415] 'Fra kanaldirektøren' *Verdens Gang* 22.03.1906. Thue, *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, pp. 59-61.

altogether much more far-reaching proposals. These were divided into three parts. First, the government presented an altogether uncontroversial amendment to the 1888/1903-law to remove the Swedish nationals from the exceptions previously granted to them, reflecting the fact that the two countries were no longer in a personal union, and that the similar exceptions for Norwegians in Sweden were likely to be revoked.[416] Second, the government had prepared a proposal for a concession law for hydropower, minerals and forests, which was significantly more radical than Castberg's proposals. Companies with than less 2/3rds Norwegian nationals on their board, and more than 50% foreign capital would not be eligible to obtain any natural resource concessions. Moreover, concessions could be given on specific terms, including a time limit with subsequent nationalization. Furthermore, the law proposal also vaguely signalled that the new law would embrace a wider scope than the '1888-law', which in contrast to the current proposal "was primarily built upon political concerns, while economic concerns were not widely discussed *back then*".[417]

The third proposal was, if not the most radical, the one that would have the most immediate significance. The government proposed a temporary concession law that covered all joint stock companies' acquisition of hydropower, regardless of capital or board composition, due to take effect immediately. With a temporary concession law, there government could rule out the possibility that foreign investors used the interim period to aggressively lay their hands on as much riparian rights as possible.

Much of the historiography on what has later come to be known as the 'Panic Law' paints a picture where the Michelsen-governments and parliament in general were more or less being caught up in the events following press scares and attacks from the left in 1906.[418] Indeed, it is probably right to say that the press campaigns combined with wide uncertainty of how advanced foreign designs on acquiring Norwegian hydropower made it hard for much of the Norwegian parliament to resist passing a temporary concession law on hydropower. Furthermore, there was undoubtedly a heightened sense of nationalist afterglow following the break-up of the Swedish-Norwegian union. On the latter point however, it should be mentioned that the fears of foreign ownership rarely had a particularly slant against Swedish investors. In the cases where such fears were made specific, they were more often directed against investors from the three leading capital exporters of Europe, the

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[416] Ot. Prp. Nr. 17 1905/1906

[417] No. "[…] væsentlig bygget paa politiske hensyn, medens de økonomiske grunde *dengang* ikke særlig kom under drøftelse.» (My italics). Ot. Prp. Nr. 19 1905/1906, p. 3

[418] Alf Kaartvedt, *Drømmen om borgerlig samling 1884-1918*, ed. Francis Sejersted, 4 vols., vol. 1, Høyres Historie (Oslo: J.W. Cappelens Forlag, 1984), pp. 277-78; Vogt, *Elektrisitetslandet Norge*, pp. 78-82; Thue, *For egen kraft : kraftkommunene og det norske kraftregimet 1887-2003*, pp. 55-56.

United Kingdom, France and Germany.[419] As to the government itself, it is also likely that that the criticism from the left made dealing with the issue the more urgent, in order not to let the radicals take the initiative. Yet, the actions of the government on forests and minerals shortly after it took power seems to show that the Michelsen government from the very beginning had in mind to introduce a more restrictive policy on foreign ownership of natural resources. The suggestion made by Michelsen-biographer Thomas Wyller that there is "no indication that the prime minister had given the question [of hydropower ownership] much attention"[420] before Castberg's interpellations is certainly not valid for the government as a whole.[421] Viewed in context of the government's wider policy, there is every reason to believe the Minister of Public Works' reassurances to Castberg and the radicals that the question had indeed been under consideration for some time, but that they had to find ways that could not be circumvented, yet still did not rule out foreign capital completely.[422]

Yet, the introduction of a 'panicked' temporary concession law was in many ways a necessity if the Michelsen-government wanted to make a genuine attempt at regulating foreign acquisitions of hydropower resources. To the government it was obvious that a permanent legislation would need a lot of preparation, and undoubtedly be politically controversial. While the government did not refer to it specifically, the long Swedish debate on how to regulate foreign ownership that had dragged on for years was an obvious example most likely known to the ministers. As soon as it became clear that the government was working on a new law to regulate acquisition of natural resources, there was every reason to expect that there might be an increase by investors to secure as much riparian rights as possible before the legislation came into force. With a temporary law in place, the government would have the ability to regulate if a large-scale acquisition wave was really about to take place.

While the temporary acquisition law on hydropower in many could ways be justified as a necessary precaution, it nevertheless set a radical principle. With a temporary law, the government would have the power to block any sale of riparian rights to joint stock companies – even Norwegian ones, a dramatic overnight increase in the government's power to meddle in private transactions. Representatives of the Michelsen-government emphasised that these new powers would not be

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[419] See for instance a caricature in Korsaren, 1906, which shows different resource industries dominating the country, under a British, French and German flag. Roald Berg, *Norge på egen hånd : 1905-1920*, Norsk utenrikspolitikks historie (Oslo: Universitetsforlaget, 1995), p. 106.. In a similar fashion, another caricature shows a humble peasant inviting John Bull, Marianne and a stereotypical hooknosed "money-jew" to Norway, which is marked "for sale". Furre, *Norsk historie 1905-1940* p. 33.

[420] Thomas Chr. Wyller, *Christian Michelsen : politikeren* (Oslo: Dreyer, 1975), p. 155.

[421] Kristian Anker Olsen also writes that the preparation for a new law on riparian rights had been under consideration within the civil service, and that the "panic" was deliberately exaggerated. However, he does not cite any specific sources for this claim. Olsen, *Norsk Hydro*, p. 153.

[422] *Stortingstidene 1905/06*, p. 1289

used to block foreign appropriations completely, and would take local concerns into consideration when implementing the law. However, the government would not be bound by any absolute principles, and would enact the powers at its own discretion, with no up-front guarantees that it would approve specific hydropower transactions.[423] These assurances did not bring any great comfort to those who had invested in riparian rights for resale, often with borrowed money. Hydro-speculation was not just restricted to a handful of people, but also included MPs and even the Norwegian counties, and it was those with either personal or regional interests who formed the most vocal critics of the first temporary law.[424] Even if handled liberally, there was a distinct possibility that the new law would lead to a fall in prices. To this point, the Michelsen-government was less sympathetic, and indeed countered that getting the speculative boom under control was indeed one of the main arguments for the temporary law.[425] With a permanent law still pending, this statement once again underlines the point that the Michelsen-government had embraced a wider ambition for the regulation of foreign ownership of natural resources, rather ultimately re-imposing the (albeit contested) Hagerup-line of primarily preventing political entanglements.

Far more remarkable than those who actively opposed the temporary law due to self-interest or regional preferences, is the fact that few were willing to argue against the temporary law on principle. While the proposed permanent concession law was criticized as both being too rigid with its 50% Norwegian capital demand, and yet too hard to implement, the overwhelming majority voted for the temporary concession law. Even Francis Hagerup, who would later be one of the most principled opponents of the concession law, was willing to accept the temporary law as a necessary precaution before a permanent solution could be found.[426] In the end, the temporary law was passed into force against only six votes.

With the temporary law in place, decision on the permanent law was postponed until the end of the parliamentary session, in June 1906. Even with the two more months of deliberation, neither the Norwegian government nor the parliamentary legislative committee had found convincing solution to the problem that had scuttled or postponed the Swedish attempts at

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[423] See statements by Minister of Justice Harald Bother *Stortingstidene 1905/1906* pp. 519-520, 525 and
[424] While it is not possible to map who among the MPs had personal interests in hydropower in 1906, one of the most vocal defenders of the rights of hydro-speculators was Liberal MP Thorvald Heistein, who himself owned considerable riparian rights. See Vogt, *Elektrisitetslandet Norge*, p. 79.. However, one should not rule out that proponents of the temporary law also held private interests in riparian rights. As the importance of reginal interests, it's worthy to note that Liberal MP Gjermund Grivi who represented Bratsberg was sharply critical of the temporary law, while he would later become a leading voice of a more radical interpretation of the later concession law, not least in his position as member of the Waterfall Commission. See Chapter 3
[425] See statements made by Bothner, *Stortingstidende* 1905/1906, p. 520
[426] See statements made by Hagerup, *Stortingstidene 1905/1906,* pp. 515-516

regulating foreign ownership of joint stock companies.[427] How could the State regulate acquisitions made by foreign owned joint stock companies without either leaving big loopholes or applying much of the same regulations to companies owned by Norwegians?

On this question, the parliament's legislative committee split along the middle. One conservative faction, led by Francis Hagerup, suggested it was better to abandon the attempt to regulate acquisitions of foreign owned companies, as it was in any case hard to implement and was likely to hurt Norwegian owned companies. The other, led by Wollert Konow (H), argued that protection from foreign monopolization had to take precedence over the freedom of Norwegian companies. Foreign owned companies were so dominant in hydropower development, that including Norwegian owned companies under the law did make much difference, as there was practically no domestic owned companies operating on that scale. Furthermore, the Konow-faction argued that even a private Norwegian monopolization of generating capacity would also be negative and warrant some regulation, even though they conceded that it was by far preferable to a foreign one.[428]

The division was replicated in the rest of the Storting, with neither side managing to secure the necessary majority to pass a new permanent law. Instead, there were once again calls to postpone the decision, for further examination and preparation. The question then quickly turned to whether a postponement would mean a renewal of the temporary law, which the radicals favoured, or whether government and parliament had to continue their deliberation without the protection of the extraordinary enabling act, which was the favoured option of the Hagerup-faction. As the permanent law was intended to include minerals and forests as well as hydropower, the government would not consider a renewal of a temporary law unless it also included these two resources.[429]

High levels of uncertainty more broadly were a marked characteristic of the whole debate. As in the Swedish debates over the Norrbotten ore fields, the different sides had widely different interpretations on the size of the resource in question. While hydropower unlike minerals are located over ground and are clear for all to see, general hydrological studies were still being compiled and re-evaluated. Verdens Gang had originally estimated the total Norwegian hydropower potential to 1,250,000 hp (0.92 GW). The Konow-faction followed an estimate made by the Director of Canals which assumed that Norway had a potential capacity of about 3,000,000 hp. (2.2 GW), which still made the estimate of between 700-800,000 hp already on foreign hands seem very

[427] See pp. 37-39
[428] Indst. O. XII, 1905/1906
[429] See statements by Minister of Justice Bothner. *Stortingstidende* 1905/1906, pp.

dramatic.[430] Opponents of the concession laws disputed this claim, claiming a truer figure lay between four and five million, and furthermore estimated that the total electricity demand for all household and transport needs for the next 75 years would not add up to more than 450,000 hp.[431] The future would soon prove both these estimates for household consumption and hydropower potential far below the mark.

There was also wide disagreement as to the international legal precedence of introducing a concession law. The proponents of the concession law keenly stressed the fact that Norwegian hydropower legislation was uniquely liberal in accepting private ownership of watercourses. Thus, the concession law was not a departure from widely accepted notions of private ownership, but rather realigning Norwegian laws with continental norms. Proponents also pointed to the increasingly active state policy on natural resources in Sweden, and also took special interest in the ongoing debate on hydropower regulation in Switzerland, where a georgist[432] *Freiland* movement was actively pushing for more public control and remuneration for private hydropower developments.[433] The opposition, with Hagerup once again leading the argument, highlighted the fact that it was precisely the fact that the law **did** recognize private ownership that made the concession law confiscatory, and that it might constitute a breach of the Norwegian constitution.[434] Moreover, concession laws in foreign countries did not entail a differentiation between foreign and domestic ownership.

Yet, none of the opponents of the concession laws argued that the law might prompt any form of reprisal from foreign governments. The law was not decried for damaging political relations with its trading partners, but rather that it would lead to less ingoing foreign direct investments. Part of this might stem from the fact that the concession law was arguably only confiscatory for owners who planned to sell their rights on – who were more likely to be Norwegian. Those who had already bought riparian rights with the intention of developing them – mainly foreign owned companies – would not be prevented from using their property by the concession law. The foreign political repercussions of the law lay – according to Hagerup – mainly in the dangers of arbitrary

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[430] Indst. O. XII 1905/1906, p. 4. The estimate of foreign ownership is made by Castberg, see *Stortingstidende 1905/1906*, p. 925

[431] Both estimates are made by conservative MP Peter Collet Solberg, see Stortingstidende 1905/1906, pp. 522, 911

[432] A term denoting those following the principles of the American economist Henry George, who argued famously argued that 'land rent' should be public property

[433] Aarum, Thv. «Til belysning af spørgsmaalet om vandkraftens udnyttelse i Schweiz» Dokument nr. 66. 1905/1906. See also: David Gugerli, *Redeströme: Zur Elekrifizierung der Schweiz 1880-1914* (Zürich: Chronos Verlag, 1996).

[434] *Stortingstidene 1905/1906*, pp. 941-946

implementation of the law, which risked treating investors of foreign powers differently.[435] Thus, in terms of foreign political entanglements, Hagerup drew precisely the opposite conclusion from Gunnar Knudsen. For Hagerup, a concession law politicised foreign direct investments, making the government responsible vis-à-vis foreign governments and thus undermine its neutrality, while for Knudsen, only genuine control over natural resource acquisitions would give the Norwegian the power it needed to credibly enforce its own sovereignty and neutrality.

There were also some attempts by economic interest groups to make some concerted efforts to oppose stricter regulations of foreign capital. Besides hydro-speculators, the organized interest group with the most direct connection to the burgeoning hydropower based industry was the engineers. In a statement to the Norwegian parliament, they conceded that the government should have some technical supervision over hydroelectric developments, but deplored any measures that might deter or frighten investors.[436] Yet, as had to some extent been the case for the mining engineers' arguments over 1903, the proponents of increased government regulation dismissed the opposition as a minority voice, too tightly tied to foreign capitalists, unable to appreciate the wider national interest.[437]

Instead, a different economic interest group in favour of stricter regulations of foreign ownership had far more success in the summer of 1906. As the proposal of a permanent concession law regulating joint stock companies' acquisitions of natural resources became public, the two largest forest owners' associations along the Glomma River, *Hedemarkens Amtskogsforening* and *Glommens Skogeierforening*, saw an opportunity to counter the increased domination of Kellner-Partington. The effort was headed by Olav Nergård, who was not only the founder of Amtskogsforeningen and a board member of Glommens, but was also a Liberal MP for Hedemark County. In both letters and parliament, Nergård cast the vast unchecked forest purchases by foreign investors as a threat both to the independence of Norwegian forest owners and to standards of good rational forest maintenance.[438] Moreover, he argued that unlike for minerals and hydropower, forestry "[…] needs no great capital for its exploitation that we do not ourselves possess",[439] an argument, which was already mirrored by the Michelsen-governments policy on foreign, forest

[435] *Stortingstidene 1905/1906*, pp. 941-943
[436] See statements made by *Den norske ingeniør- og arkitektforening* in «Forestillinger vedørende ot. prp. nr. 16 og 19». *Tillæg til dokument nr. 67*. 1905/1906
[437] Prime Minister Christian Michelsen was particularly contemptuous of the protests, dismissing them as made by a group of people who voiced the same opinion in various organizations in order to as "Potemkins soldiers" – appear as more numerous than was really the case. Stortingstidende 1905/1906, pp. 915-196
[438] *Stortingstidende 1905/1906*, pp. 960-961
[439] No. «[…]trænger man til udnyttelsen ingen store kapitaler som vi ikke elv er i besiddelse af». 'Forestilling angaaende de fremsatte forslag om regulering af udlændingers adgang til at erhverve fast eiendom inden riget', Dokument nr. 67. 1906/1906, p. 2

acquisitions. While Amtskogforeningen also advocated a ban on all joint stock acquisitions of forests, and tighter regulations to prevent forest ownership of non-municipal residents in the vein of the recently passed Swedish Norrland-law,[440] the boards of both organisations were unanimously united in their stance that the Storting should:

> […] introduce regulations to the effect that Foreigners, Foreign Companies, Private Men representing foreign Capital and Companies, where foreign Capital is interested, can not acquire Property Rights over Forests.[441]

Unlike those engaged in hydro-speculating and mineral prospecting, the forest owners did not base their efforts on at some point selling their property rights to the natural resource to a capital-intensive – possibly foreign – company. Instead, they were satisfied with selling their timber to wood processing companies, and as long as they had the ability to set the prices, they would enjoy the gradual increase in resource rent stemming from an ever-increasing demand for timber. Thus, their economic interest aligned well with a role as champions of national ownership.

In the end, parliament voted in favour of the extending and expanding the temporary law, albeit with a less unanimous support than what had been the case earlier that year. Now the motion was carried with 66 for and 19 against.[442] Despite spirited opposition from economic liberalists in the Conservative party, a number of conservatives ended up voting for the extension of the temporary law despite voting against the Konow-factions proposed permanent law. An amendment to exempt minerals from the permanent law garnered more support, but was also ultimately defeated by 50 votes against 31.[443] In all likelihood, the pre-existence of the temporary law from April gave those who favoured a wider concession law a clear advantage. As the concession law for hydropower was already a *fait accompli*, the radicals could appear to be arguing for a continuation of the status quo rather than staking out a radical new course, while the conservatives favoured reduced government control seemed to hold unknown consequences. With no government control, Norwegian natural resources would be left to the mercy of foreign investors eager to get in before a new restrictive regulatory framework came into place. This was ultimately unacceptable to a wide majority of Norway's elected representatives.

This impasse left the Norwegian natural resource policy in a curious limbo. While there was a majority in favour of government regulation of joint stock acquisitions of natural resources, there was no agreement as to which criteria would determine whether concessions should be granted or

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[440] See p. 38
[441] Quoted from: Halberg, *Bjelker i bygde-Norge*, p. 128.
[442] Stortingstidende 1905/1906, pp. 983-984
[443] Stortingstidende 1905/1906, p. 998

denied, and on what terms – if any were to be set at all. Thus, a situation presented itself where the government had been given a wide enabling act to regulate all joint stock acquisitions of natural resources for what would most likely be a year, completely according to its own understanding and preferences. The Michelsen-government had already demonstrated in the Follum Bruk case, as well as its dealings with the Swedish mining magnate Nils Persson, that it intended to introduce a more restrictive policy. Yet, the only guiding point the government had outlined in the debates was that the law would not completely rule out further acquisitions by foreign owned companies, but that it would be regulated and not a free-for-all. Any further principles would be made as the implementation of the law made it necessary.

No Swedish solution

Faced by the imminent possibility of a sharp change in hydropower policy, Sam Eyde made a quick attempt to insulate Norsk Hydro from its possible consequences by cutting a deal with the Norwegian government resembling what had had been attempted in Sweden.[444] When negotiations with the Michelsen government began in April 1906, the Norwegian entrepreneur aimed to kill two birds with one stone, both securing his company against future government interference and to improve the company's financial standing. Most of Norsk Hydro's riparian rights had been fully obtained before the temporary law was passed, but Eyde wanted to rule out the possibility that future resource nationalist legislation would not be used to tax the company or hamper its freedom of operations. This was not only crucial for the company's long-term prospects, but also to lower the perceived risk for possible investors. Paribas was still apprehensive as to investing fully in Norsk Hydro expansive plans, which was estimated to cost a total of £ 4,720,000.[445] To alleviate the company's capital shortage further, Eyde proposed that the Norwegian government would stand as guarantor for a £ 990,000 bond issue. Along with this, Eyde wanted the government to guarantee the necessary concessions for rail and power lines, and refrain from extraordinary taxation for the duration of the deal years and guarantee that foreign owned companies would be allowed to lease power from Hydro for 25 years. In return, the Norwegian state would be given the right to buy the company's power plants after 80-90 years for £ 1,700,000,[446] and be paid an annual fee that would

[444] Wilhelm Keilhau claims Eyde was inspired by reading about the Swedish-TGO deal in the newspaper, but Eyde had already made a first draft on April 23rd 1906, more than two weeks before the TGO-deal was made public. However, the proposal does bears strong resemblance with the aborted TGO-deal of 1903 (see p. 45).
[445] NOK 85,724,000. The figures are taken from the negotiations between the Wallenbergs and Paribas in the summer of 1905, outlining a long-term plan based on four watercourses. See Gasslander, *Bank och industriellt genombrott II*, II, p. 197..
[446] NOK 31,000,000

in the same period total up to £ 2,640,000.[447] Moreover, the state would be given the opportunity to rent 5% of the company's power output to a set low price. As in the TGO-deals, the idea was to trade medium term stability and profitability for long-term government ownership over natural resources.

Yet, there would in the end be no "Swedish solution" to the Norwegian hydropower drama. The government was initially very positive to the deal. Yet, parts of the radical liberal press voiced grave concerns of "Greeks bearing gifts",[448] which was also reflected in the parliamentary committee charged with preparing the deal for the Storting. Led by Gunnar Knudsen (who had resigned from the Michelsen-government in 1905), the committee was critical of the long duration and the risks of either hydropower and/or the Arc-process becoming obsolete, and had both principal and practical unease to tying future governments' hands in terms of taxation and regulation of foreign ownership to such a large, foreign owned company. Instead, Knudsen and the other committee members put their faith in future legislation on river regulations (damming) and hydropower taxation to extend the sphere of government regulation and rent-capture over companies with riparian rights predating the temporary concession law of 1906.[449] Yet, the committee was still interested in obtaining a deal, if terms were more favourable to the Norwegian state. Possibly believing to negotiate from a position of strength, Knudsen and the committee decided to ignore the deadline set by the original agreement to December 20th, 1906, and continued negotiating with representatives from Norsk Hydro. On the same day however, Norsk Hydro had finalized and a joint venture agreement with BASF which secured the necessary capital for a full-scale development of Hydro's industrial plans. Hydro consequently lost interest in accommodating what Eyde later derided as "systematic [attempts] to increase the states benefits" and "vexatious rules of state control",[450] and broke off negotiations.[451]

Despite the many similarities between the Swedish and Norwegian debates, in the course of 1906 and 1907 there is a clear divergence in the two countries policy responses to the issue of regulating foreign ownership of natural resources which would play a very significant role in natural resource policy for decades to come. How did the two countries end up choosing such different approaches? One possible explanation lies in the different strengths of political alignments between the Swedish and Norwegian parliaments when crucial decisions were made– particularly of the

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[447] NOK 48,000,000. See Gasslander, *Bank och industriellt genombrott II*, II, p. 215.
[448] Vogt, *Elektrisitetslandet Norge*, p. 82.
[449] See Indst. S. XXXXV 1906/1907, pp. 1-13
[450] No. «[…]systematisk å øke de fordeler staten skulde ha[…]», «helt sjikanøse bestemmelser om statskontroll». Sam Eyde, *Mitt liv og mitt livsverk*, 2nd ed. (Oslo: S. Eide, 1956), p. 286.
[451] Andersen, *Hydro 1905-1945*, pp. 88-91; Annaniassen, "Rettsgrunnlag og konsesjonspraksis."; Eyde, *Mitt liv og mitt livsverk*; Gasslander, *Bank och industriellt genombrott II*, II, pp. 214-17.

social reformist left, which again partially stems from the fact that by 1898 Norway had universal male suffrage, while in Sweden this was not introduced until 1909.[452] Furthermore, the liberalist conservatives in Norway had partially lost favour due to their reluctant role in the dissolution of the union with Sweden.

Part of the explanation can also be sought in the problems of regulating the different natural resources in question. Much of the Swedish natural resource debate was very point specific, as so much related to a small number of very large iron deposits, located close to one another and largely controlled by the same people. This made a limited arrangement between the state and a private company a possible solution. When the resources were more spread out, like Swedish forests, the Riksdag had ultimately chosen an even more restrictive solution, but limited to a specific area. In Norway, this was less the case. Some mineral deposits in Norway were indeed vastly richer or superior to others, and some waterfalls were particularly well situated. However, a deal between the Norwegian government and Norsk Hydro, or one of the largest mining companies would not have a decisive impact on the natural resource question overall. There were many waterfalls with a high hydroelectric potential, and many mineral claims, which could prove valuable. Moreover, the dual nature of hydroelectricity as a raw material and a potential common utility not only gave the issue an added importance for a wide part of the population, but there was also a greater precedence for regulating utilities.

VII. Summary and conclusions

As we have seen in this chapter, the two Scandinavian countries gradually moved away from liberal economic ideals, and towards a more interventionist natural resource policy. This was for the most part a cautious process, both because there was strong domestic forces who favoured a liberal policy, but also because policy makers were mindful of not overtly breaking with accepted notions of economic policy or 'the rules of the game'. The latter was done in part to maintain relations or prevent sanctions from their larger trading partners, but also to maintain their own countries as targets for much needed foreign investments. Thus, the pattern of resource nationalist interventions

[452] Sejersted, *Sosialdemokratiets tidsalder*, pp. 75-78.

in the two countries show a striking contrast with the *obsolescing bargain model* introduced by Raymond Vernon (1971). Vernon suggests that the risk of nationalization rises as the foreign investor sinks more immovable investments into the host country. Instead, the resource nationalist interventions implemented in this chapter instead strove *precede* large foreign direct investments.

The most decisive confrontations over the 'rules of the game' came over the Swedish Lapland iron ore. Both in the case of the demise of the Swedish Norwegian Railway Company, and the compromise with TGO in 1907, the Swedish government was playing towards the edge of what could be considered acceptable notions of government behaviour in a liberal economic order. However, in the first instance, the government was successful in brokering a deal with the creditors of the railway company who accepted a partial compensation. In the second instance, the German government eventually backed down, as a large and steady supply of iron ore for the steel industry took precedence over taxation of its export. In short, both confrontations were 'won', by the Swedish government who both secured domestic ownership, government remuneration and partial government control. This was to a large part possible because German steel industry refrained a confrontational strategy against the Swedish government. Instead of obtaining direct ownership over the mines when they were offered, and banking on assistance from Germany, the German steel interests instead assisted the creation of a Swedish owned export monopoly to put the mining companies on more stable footing.

In the Norwegian case, the introduction of laws regulating foreign ownership and concession laws for natural resources did not bring the country into direct confrontation against foreign governments. As Norway had recognized private ownership of rivers and waterfalls, the concession laws could be considered as a form of confiscation. However, the Norwegian laws on watercourse ownership preceding the concession laws were remarkably liberal, and in many respects, the new concession law brought the country's hydropower policy more in line with what was common in the rest of Europe. While there might have been some potential foreign investors who reconsidered putting their money in Norway after the introduction of the concession laws, the overall picture is that foreign investors largely accepted the new status quo.

Overall, the Swedish and Norwegian move towards a more interventionist resource policy was pushed by a number of motives. One, which was apparent early on, was *national-security*. This came in two ways. Firstly, in the idea that foreign direct investments could be covert precursors to a territorial challenge. Secondly, in the idea that foreign economic dominance could lead to foreign intervention, if the government clashed with the foreign private interests. The latter was to a large

extent based on the understanding that the 'rules of the game' legitimized sanctions and even possibly even military intervention to protect the rights and the property of citizens abroad.

Parallel to the concerns over national security came economic interests. In both countries, the concerns of domestic industry helped push forward and legitimize government policy against foreign resource ownership, partially by ulterior national-security arguments, and partially by openly touting their own economic interests. But there was also a political preference for domestic ownership that went beyond the direct demand of established business interests, especially in Norway. Apart from national-security concerns, these were also motivated *rent-capture*, i.e. that the wealth produced by the natural resources should remain in the country. This could theoretically also be achieved through taxation and spending, or by forcing downstream production to take place within the country. However, neither country engaged much in the latter, preferring instead to allow continued exports of raw materials as long as a significant share was retained within the country through the two former means.

Sometimes the political will to regulate natural resources went directly counter to the domestic business interests of the relevant sector. This was especially the case for the Norwegian mining and hydropower concession laws. Here the domestic interests were largely dependent on cooperation with foreign business, and there were practically no domestic alternatives. But also in Sweden, the interests of yeoman forest ownership had to take precedence over domestic owned sawmill and wood pulp producers desire for backward integration and long term stability for timber supplies. Moreover, even though TGO was Swedish owned, there was a political majority in favour of forcing through a deal that gave the state a larger share of the profits. In part, these regulations were introduced because they were seen as addressing immediate problems. Yet they were also an expression of a growing understanding of natural resources as a common national good, and therefore something that warranted more political regulation and taxation than other economic activities.

Chapter 3: The Norwegian concession law and foreign direct investments (1906-1913)

With the parliamentary decision in the summer of 1906 to extend and expand the temporary concession law to the year after, the Norwegian government now had wide and unprecedented powers to regulate companies' acquisitions of natural resources. Yet, with this great power came great responsibility. Moreover, while a clear majority of the Storting had supported the extension, there had been no shortage of predictions of grave consequences of such concentration of power within the executive.

First, the lack of any clear guidelines as to when concessions should be granted, and when they should be denied, the concession laws opened the possibility of arbitrary implementation.[453] Even if there were few who assumed that the Michelsen-government would use these new powers to favour their friends and relations, the possibility remained that local agitation, press campaigns or other political concerns might tempt the government to make exceptions on a case-by-case basis. Moreover, the new-won government powers also opened the possibility that domestic interest groups might try to steer the government into policies aligned with their own sectorial interests. In a worst-case scenario, all this might prompt acquisitions of favouritism – or indeed disfavouritism – from Great Powers, complicating the Norwegian stated policy of neutrality in international affairs.

Furthermore, there would always be the old question of how to strike a balance between allowing foreign investments to foster economic growth and retaining some form of national control over development. A too relaxed implementation would in practice mean that the door for foreign economic domination remained as open as it ever was. On the other hand, too tight regulation could halt economic growth. There was at the time few Norwegians with the means or the willingness to put up the large amounts of capital necessary to compete in the capital-intensive raw material based industries. In addition, even though there were Norwegian companies willing to invest, how would it be possible to ensure that concessions granted to Norwegian companies would remain in Norwegian hands? Even if the concession laws were implemented in a liberal fashion, their very creation could potentially reduce investor confidence.

Loss of investor confidence lay at the heart of the warnings issued from abroad in response to the Norwegians' departure from a liberal policy. Sir Arthur Herbert, the British envoy to Norway,

[453] This was in particular highlighted by Hagerup, see p. 97 of this thesis.

warned foreign minister Løvland in September 1906 that many British capitalists who had considered investing in Norway had begun to re-evaluate, as "they preferred to wait to see whether legislation would adopt the reactionary tone which has been predicted".[454] As a cautionary note, Herbert warned that "Capital, as is well known, is a very shy thing, sometimes it will come to a country and if rebuffed will never come back again".[455]

In an effort to strike a middle way through all these concerns, the successive Norwegian governments between 1906 and 1913 developed what I have dubbed a 'harnessing'-strategy for inward foreign direct investments. This strategy was never expressly laid out, but by studying the concession policy of this period a pattern emerges where the government as a rule allowed new inward foreign direct investments into mining and hydropower, but only on terms with which it intended to counter the perceived drawbacks both in the short and long term. In other words, foreign direct investments should be 'harnessed' by terms and regulations which made them safe and more economically and politically beneficial. However, exactly where the line between necessary regulations without frightening foreign investors lay was a hotly contested political issue, second only to the issue of to what extent these regulations should also cover Norwegian owned companies. This chapter will show how this harnessing strategy was first established, and how it evolved over time.

I. The birth of the 'harnessing'-strategy (1906-1908)

Hydropower and the Right of Reversion

Anticipating many of these challenges outlined above, particularly in striking a hard line between denying some concession while approving others, the Michelsen-government had made sure that the concession laws gave them the right to set specific terms to concessions. Yet, it is also clear that the government had no clear plan of what terms they should introduce, and how this would help overcome some of the problems of a binary concession policy. Nor did it have much time to contemplate the matter before having to use their new-won power.

The first hydropower concession the Michelsen-government passed was to the newly founded power company A/S Tyssefaldene. This venture was owned by many of the same faces that had initially funded Norsk Hydro, including Sam Eyde, Knut Tilberg and the Wallenberg-brothers. Yet,

[454] Herbert to Løvland, dated 06.09.1906. NRA, Utenriksdepartementet, Dd, box 772, folder BI
[455] Herbert to Løvland, dated 06.09.1906. NRA, Utenriksdepartementet, Dd, box 772, folder BI

it was not directly tied to Norsk Hydro and nitrate production, but was set up primarily to provide power to a British owned carbide company, later renamed Alby United Carbide Company.[456] When the concession was granted on May 10th, the government set no other terms besides ensuring that all the board members were Norwegian citizens. Instead of following the governments initially proposed line of a maximum of 50% foreign capital – which in any case had been rejected in the Storting as being too strict – the Tyssefaldene concession followed the line suggested in Castberg's proposal, where a foreign owned company would be automatically granted a concession if all board members were Norwegian citizens.

The idea was to somehow divorce control over a foreign owned company from its home country. Swedish policy in Kiruna had created the situation where the mines to a large extent would still be developed by German capital, but through bonds rather than direct ownership by German steel companies.[457] If foreign capital was seen as necessary to develop Norwegian natural resources, a Norwegian leadership might be more inclined towards national concerns. In a somewhat similar line, the temporary concession law had introduced the added provision that only companies founded and seated in Norway could obtain concessions. In other words, foreign investors would have to conduct their operations in Norway through Norwegian registered companies. This made taxation easier, and also more clearly submitted the foreign owned operations to Norwegian law.

Nevertheless, a Norwegian board was a highly dubious way of ensuring Norwegian control over the company. Even if one would accept the notion that nationals indeed would act more according to national interests, real control over the company could fairly easily be wrested from the board by appointing strawmen and forming a supervisory board or similar body wielding the real power.[458] Moreover, the company would still be directly owned by foreigners, and would thus not really alter the possibility that a foreign government could be drawn into a hypothetical future conflict between the government and the company in question. These problems were frequently pointed to by both those who supported stricter regulations, and those who argued that regulations of foreign ownership was futile. Indeed, working through a Norwegian subsidiary with a primarily Norwegian board was precisely how some foreign owned companies were already operating, in order to avoid the 1888/1903-law.

Introducing Norwegian control over the companies also did not solve the perceived economic drawbacks of foreign ownership of natural resources brought up during the concession

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[456] Gasslander, *Bank och industriellt genombrott II*, II, pp. 333-35.
[457] See p. 47 of this thesis.
[458] Norsk Hydro was one example of a company with such a dual board structure, where the company board was governed by an 'Ausichtsrat'. Andersen, *Hydro 1905-1945*, pp. 100-01.

law debates. As long as shares remained on foreign hands, possible high dividends from valuable resource industries would flow out of the country.[459] Nor did a Norwegian board give any guarantee that a power-company would not use its local monopoly over hydropower resources to drive up electricity prices for households and small industry. Furthermore, if foreign owned companies used only foreign expertise and foreign made machines, it might be less likely that the country could obtain the necessary know-how to build its own domestic industry in the future.

Thus, the Michelsen-government soon set upon a more extensive use of concession terms. When a majority foreign owned power company, *Norsk Elektrokemisk Aktieselskab,* applied for a concession to appropriate a 4,000 hp waterfall in southern Norway, the government sent the permanent secretaries of the Ministries of Justice and of Public Works to negotiate a more comprehensive deal with the new company.[460] Besides a fully Norwegian board, the company would in return for a concession commit itself to "use solely Norwegian functionaries and workers" and "preferably use Norwegian materiel". In order limit the possibility of foreign investors obtaining concessions as a speculative asset, without intending to develop it, the government demanded that construction had to be finished by 10 years. Furthermore, the concession would also be limited to 75 years, whereupon the State would have the right to redeem the power plant for no more than NOK 150 (£ 8.30) per hp.[461] A concession along similar lines was also granted to British Aluminium Company's small power plant at Stangfjorden.[462]

The real milestone for this new policy however came with the concession to *A/S Kinservik* in January 1907. Kinservik was the second major power concession after A/S Tyssefaldene, with an estimated capacity of at least 50,000 hp.[463] Exactly who owned A/S Kinservik is not clear. In its application the company presented itself as being owned by an unspecified Swiss consortium, but was clearly either co-operating, or secretly owned by BASF.[464] Given the political anxiety towards large foreign combines, it is easy to see why the German chemical giant might have sought to hide its involvement, particularly as the company had recently signed a joint venture agreement with

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[459] «Indstilling fra den af justitiedepartementet under 15de september nedsatte komite til behandling af spørgsaalet om adgang til erhvervelse af skog, bergverk eller vandfald» *(Bredal Committee), p. 40*. Appendix to Ot. Prp. Nr. 11. 1908

[460] *Meddelte vassdragskonsesjoner 1906-1909*, p. 8

[461] Ibid. p. 9

[462] Ibid. p. 20-26

[463] The Director of Channals' estimates put the real potential to as much as 75,000. See "Kinsaadalen i Hardanger" *Hedemarkens Amtstidende* 18.01.1907. By comparison, Norsk Hydro's first power plant, Svælgfos, completed in 1906, was had Europe's highest installed capacity of 30,000 hp.

[464] Gasslander, *Bank och industriellt genombrott II*, II, p. 223; Annaniassen, "Rettsgrunnlag og konsesjonspraksis," pp. 63-66.

Norsk Hydro, the country's largest hydropower owner.[465] In any case, the Michelsen-government would not prevent the company from investing, but heightened the terms significantly. Here the government for the first time introduced the demand that the company set aside a certain amount of power (2,000 hp in this case) to the local municipality. In order to ensure a "fair price", the rate would be set by the government, if no agreement could be reached between the municipality and the company. The company's Norwegian lawyer had initially proposed a 90 years' time-limit, and a price of NOK 100 per hp. for a subsequent redemption, along with terms similar in form to the ones set to previous concessions to foreign owned companies. The Ministry of Trade, under Sophus Arctander, was largely willing to accept this offer, but after secret negotiations between representatives of the Ministry of Justice and the company, the Minister of Justice, Harald Bothner, managed to push the company into accepting a concession time of 75 years. More importantly however, the state would not have to pay, but would receive

> […]all waterfalls with dams, power stations with associated machinery and other accessories and power cables including the for the construction and power plant acquired plots and easement rights, encompassed in the present concession to the state, **without remuneration.**[466]

This was a substantial increase in the governments take, and would leave the state with a power plant at the time estimated to be worth between 5 and 11.25 million NOK (£ 275,000 – 620,000).

With the Kinservik-concession, the principle of *Hjemfallsrett* – Right of Reversion – had been introduced to Norwegian concession policy, and would in the years to come become its corner stone. The case documents of the Kinservik concession do not reveal the precise reasoning behind the introduction of non-remunerated redemption. However, a report given by a committee set down by the ministry of justice in September 1906 to advice on a future permanent concession law (subsequently known as the Bredal-committee) gives a thorough discussion on the intentions and justification underpinning the principle. An uncompensated redemption of the hydropower plant would after such a long time be of little economic consequence to the economic viability of the company, as the hydropower company would have a such a long time to see a return on its capital. According to the committee's calculations, if the construction of a Norwegian hydropower plant could be redeemed for NOK 100 per hp., a Right of Reversion after 70 years would represent no more than a one-time tax of NOK 6.42 per hp., if based on an average interest rate of 4 %. Thus, such

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[465] However, the company had not masked its involvement when it obtained a concessions to rent power for a test factory a month before. Meddelte vassdragskonsesjoner 1906-1909 pp. 32-36

[466] Meddelte vassdragskonsesjoner 1906-1909, pp. 44-45

a clause was far less demanding on the company than an annual duty on hydropower output, were NOK 0.50 per hp. annually would be the same as a Right of Reversion after 55 years.[467]

Such a calculation of course only compared a compensated redemption with an uncompensated one, and did not take into account that the value of a hydroelectric facilities might in fact increase over time, particularly as hydroelectricity is a renewable energy source that requires very little maintenance.[468] However, at the time there were considerable doubts whether hydropower would in fact be a competitive energy source several generations into the future.[469] Yet, this uncertainty was in fact part of the logic behind the Right of Reversion. As the company who invested in a hydropower plant was highly unlikely to take into consideration what the investment might be worth half a century later, a Right of Reversion did not place an immediate burden on the investor. However, if hydropower would still be a highly valuable resource in the future, the right of redemption would ensure that they would come on Norwegian hands.

While an uncompensated state redemption could be construed as confiscation, the principle was not without precedent. Besides the obvious similarities with the (then unresolved) core aspects of deal with Norsk Hydro and the proposed agreement between TGO and the Swedish state in 1906, the Right of Reversion had also been used on the European continent. While a compensated redemption was more common where concessions were given with time limits, the Swiss cantons of Zürich and Wallis had both introduced legislation that made hydroelectric plants canton property upon expiry of the concession. The German Grand Duchy of Baden had also set such terms in two hydropower concessions, even if its hydropower legislation did not specifically mandate the use of an uncompensated reversion.[470] The great difference between these cases and Norway was of course that riparian resources was *not* public property, but private owned. Thus, the Right of Reversion was in fact somewhat of a misnomer, as the hydropower plant did not revert to its original owner, but was rather nationalized by the state. Yet, while the Right of Reversion would later become highly controversial in Norway, the foreign investors behind Kinsarvik did not challenge the Norwegian government's right to set such a term. Despite energetic efforts from Norsk Hydro warning BASF against accepting such a dangerous precedence,[471] the German chemical giant not

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[467] Bredal Committee 1907, p. 38
[468] In fact, the price of Norwegian electricity today is comparable to the average price in 1906. In the 4th quarter of 2015, the Norwegian energy-intensive industry paid an average of NOK 30 per hp/year, measured in 1906-kroner. https://www.ssb.no/energi-og-industri/statistikker/elkraftpris/kvartal/2016-02-25
[469] See for instance the debate on deal between Norsk Hydro and the Norwegian state, p. 67. Later, Waldemar Brøgger – one of Norway's leading geologists and conservative MP – considered it possible that the recently discovered radioactivity might make older energy forms obsolete. *Odelstingsforhandlingene* 1909, p. 787
[470] Bredal Committee 1907, pp. 20-26
[471] Per Rygh (Norsk Hydro lawyer) to BASF, dated 08.01.1907. Quoted in Gasslander, *Bank och industriellt genombrott II*, II, pp. 330-31, footnote 4.

only acquiesced to the government's demands, but also applied for two further large hydropower concessions later in 1907.[472]

Simultaneously, the Michelsen-government sought to create a way to differentiate between Norwegian owned and foreign owned companies, where only foreign owned companies would have to submit to terms. While no Norwegian owned companies attempted to operate on the scale foreign investors usually did, there were a number of Norwegian companies applying for smaller hydropower concessions. However, in order to make sure a Norwegian company remained Norwegian, the government demanded that the applicant company had to subject to a clause which prohibited a certain share of the company's stock from being on foreign hands. Such a term was first formulated in the summer of 1906 to A/S Fostvedt Træsliberi – a Norwegian owned wood pulp company – where the government demanded that in addition to a fully Norwegian board, they also had to accept a clause stating that at least half of the share capital should at any given moment be on Norwegian hands.[473] When first presented with this clause, the company refused to accept it. However, when the government then turned down the concession application, the company reconsidered and accepted the capital control regulation. This concession would set the precedence as to how the Michelsen-government would handle subsequent concessions to Norwegian owned companies, although the standard limit of shares on Norwegian hands was adjusted upwards in early 1907, from one half to two third. This was done to align the share-limit with the recommendations of the Bredal-committee.

This two pronged approach, where foreign companies would be given concessions on terms which Norwegian companies would be exempt from (except for capital controls), would come to define the hydro concession policy of the centrist governments of Michelsen and later Løvland (from October 1907). However, within those two categories, the government allowed some flexibility on a case-by-case basis. When Norsk Hydro applied for a concession to some additional riparian rights to its large hydropower project in Rjukan, the government would forgo an impractical Right of Reversion-clause in exchange for a fixed annual fee on the additional power.[474] Furthermore, on two occasions, the government agreed to reduce the capital control limit for two majority owned Norwegian companies to 50% Norwegian share ownership, and retract its insistence on a fully Norwegian board.[475] The companies in question, *A/S Fossumfos* and *A/S Vadheim Elektrokemiske,*

[472] See pp. 99-101
[473] Meddelte vassdragskonsesjoner 1906-1909, pp. 13-14
[474] Meddelte vassdragskonsesjoner 1906-1909, pp. 83-99
[475] In the Fossumfos-case, the concession was limited to 99 years, with a compensated redemption. This clause could however be removed, if the company would become completely Norwegian owned within 20 years.

were joint ventures with foreign investors, but the two companies were also the largest operations with Norwegian majority ownership, and both sought to obtain resources that had previously been foreign owned. Thus, as long as the applicants agreed to the ground principles in the concession policy, the law was otherwise implemented in a liberal fashion. Besides the first concession to A/S Fostvedt Træsliberi, no concession applications were turned down. Nor did any company withdraw from negotiations with the government due to disagreement over terms. On the face of it, the Michelsen-government had devised a system that allowed continued high foreign direct investments in hydropower, but had harnessed it to better serve Norwegian interests.

Mineral concessions and the Persson debacle

The government also followed a similar policy for mineral concessions.[476] Foreign owned companies would still be allowed to develop mines in Norway, provided they agreed to some basic terms intended to make the operations more agreeable to wider Norwegian interests. As for hydropower concessions, mining companies had to be a Norwegian subsidiary, with a certain proportion of Norwegian board members. This was usually set to at least half, but was also in some cases allowed to be lowered to one third. Furthermore, foreign owned mining companies had to give preference to Norwegian materiel, and to use only Norwegian workers and engineers. However, to the latter point, the Norwegian government was willing to give temporary dispensation for skilled workers when the applicant company requested it.[477] As with hydropower, mining operations also had to be undertaken, and begin regular extraction within a certain amount of time.

Unlike hydropower concessions, mineral concessions were initially given in perpetuity. Instead, mining companies had to pay a fee, either as a one-time tax, or as an annual duty based on production. This clause was first brought into the debate by Anton Sophus Bachke, the mining inspector of the Tromsø district, and was meant to provide funds to a Norwegian mining institution,

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Meddelte vassdragskonsesjoner 1906-1909, pp. 57-64, 70-76. Annaniassen, "Rettsgrunnlag og konsesjonspraksis," pp. 51-56.

[476] For a full list of mining concessions, see Appendix X

[477] For instance, the German owned *Salangens Bergværksaktieselskap* was given a 7 years dispensation to hire foreign mining engineers. "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913," ed. Handel Departementet for Sociale Saker, Industri og Fiskeri (Oslo1914), pp. 46-63. The Norwegian governments seem to have applied this regulation fairly liberally. The Ministry of Public Works reported in 1910 that it had not denied any request for exceptions to this rule, and foreign workes (particularly Swedish) continued to constitute a considerable part of the labour force in these industries. Minsitry of Public Works (Ihlen) to Ministry of Foreign Affairs, dated 25.01.1910. NRA, Utenriksdepartementet, De, box 1265

modelled on the Swedish "Iron Office".[478] This institution would then fund training for Norwegian mining engineers, particularly foreign travels to leading mining and smelting operations around the world. Thus, as foreign direct investments into hydropower would be tempered by Norwegian ownership in the future, foreign direct investments into mining would provide the funds to create "a Team of practical Engineers, that can measure up to [those of] other countries."[479]

As with hydropower the Michelsen-government created a concession system for minerals intended to harness and control foreign direct investments, favouring the development of Norwegian ownership in the long run. As long as foreign capitalists agreed to these terms, foreign investments was welcomed. Despite much unease over market-power wielded by the Norsk Hydro/BASF combine, the government never actively used the concession law to prevent it from expanding. Indeed, for hydropower, the government never went so far as to deny a foreign hydropower concession. This was however not to be the case for mineral concessions.

The exception from the practice of granting concessions under terms came with a long political controversy regarding the dominant figure in the Norwegian mineral industry, the Swedish "Ore King", Nils Persson. Prospecting by wealthy foreigners remained controversial, particularly as they often clashed with smaller Norwegian prospectors.[480] As the leading player in Norwegian mining, Persson had attracted particular notoriety, with numerous accusations of using unfair means of wresting mineral claims from other prospectors. While the 1903-law had ended the possibility of free staking for foreigners, Persson's operations in Norway had continued, both as a result of a Hagerup's liberal concession policy and by cleverly circumventing the law, by having some of his agents change their citizenship to Norwegian. There was however a growing opinion, particularly on the political left who wanted to break with Hagerup's liberal practice, and clip the wings of Swedish mining magnate. Hostility towards Persson's dominant position was not just restricted to the nationalist Liberal party oriented press. Persson had even attracted opponents within the mining bureaucracy, which was usually sympathetic to the concerns of big foreign investors. The assisting

[478] Bergmesteren i Tromsø Distrikt to Handelsdepartementet, dated 23.12.1905 and 09.04.1906. NRA, Handels- og industridepartementet, Sosialkontoret D, Box 80, Folder: *N. Persson Søknad om å erverve ertsforekomster i Dyrø Herred*

[479] «[…]en Stab av praktiske Ingeniører, som kan maale sig med Udlandets.» Bergmesteren i Tromsø Distrikt to Handelsdepartementet, dated 09.04.1906. NRA, Handels- og industridepartementet, Sosialkontoret D, Box 80, Folder: *Persson, Dyrø*

[480] See p. 53

mining inspector in Tromsø went so far as to decry Persson for abusing his power and creating a destructive monopoly, which "could be likened to the Hanseatic".[481]

When Persson applied to the Michelsen-government for concessions to increase his operations even further, the clash over Persson's domination of the Norwegian mining industry reached its boiling point. The conflict was related to two separate concessions. First, Persson had contacted the Norwegian government in May 1905, to apply for a large expansion of his staking rights near Salangen, north of Narvik, which he had previously been granted under the Hagerup-government. Later, in January 1906, Persson submitted a further application to acquire a number of pyrite claims in Røstvangen, located high up in a mountain valley, south of Trondheim.

While both concessions were controversial, the Røstvangen-case was further complicated when a group of local entrepreneurs decided to stake competing claims to the pyrite deposits in question. They argued that claims had been staked by Persson's agents acting as straw men, making them invalid.[482] This assertion was aided, or perhaps even instigated, by one of Persson's former agents, who revealed a number of embarrassing letters to the public, in which Persson outlined how they would try to circumvent the law restricting the free right to stake mineral claims to Norwegian citizens.

Sensing the weight of public opinion shifting against him, the Swedish ore magnate fought back with a multipronged (if not always internally consistent) response. First, he tried to discredit his critics, blaming foreign competitors and his disgruntled former employee for manipulating the Norwegian press to turn against him. At the same time, Persson wanted to reshape his image into a preferable Scandinavian alternative to what he outlined as an even greater and even more alien copper monopolist, German *Metallgesellschaft AG*. According to Persson, Metallgesellschaft AG, besides owning vast pyrite claims in Spain, also secretly controlled both the recently concessioned copper mining companies, *A/S Meraker Gruber* and *The Foldal Copper & Sulphur Co. ltd.*[483] However, in 1906, Persson sold his existing claims in Salangen, as well as his iron concentration patents to another large German mining consortium.[484] In a further attempt to forge an alliance between his operations and Norwegian resource nationalism, he both promised to construct a new pyrite

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[481] The Hanseatic League was often blamed as an important factor leading to the loss of Norwegian political independence in the late middle ages. Gottfried Puntervold to Bergmesteren i Tromsø, dated 29.11.1905. NRA, Handels- og industridepartementet, Sosialkontoret D, Box 80, Folder: *Persson, Dyrø.*

[482] Kgl. Res. 256, 1906. «Justitiedepartementets foredrag angaaende andragende fra svensk statsborger konsul N. Persson», pp. 18-22. NRA, Justisdepartementet, Kommunalkontorene, Referatprotokoll K.

[483] Kgl. Res. 256, 1906. NRA, Justisdepartementet, Kommunalkontorene, Referatprotokoll K.

[484] *Salangens Berværksaktieselskap* was a joint venture subsidiary, owned by *Oberschlesische Eisenbahn-Bedarfs-Aktien-Gesellschaft zu Friedenshütte* and *Donnersmarkhütte Oberschlessische Eisen-und Kohlenwerke Aktien-Gesellschaft zu Zabrze in Preussisch Schlessien*

roasting plant in Norway and to open up parts of the capital to Norwegian share subscribers. For Persson, making a second pyrite-processing factory in Norway also had the added benefit of increasing his leverage over his workers in Helsingborg, who was on strike when Persson made the offer.[485]

The Persson-case drove a split through the Michelsen government, as desire for investments came head to head with economic nationalist ambitions. Sofus Arctander, the Minister of Trade saw Persson as a proven and skilled facilitator, who had brought together some of the most valuable mining operations in the country and created jobs in otherwise hapless and emigration-prone parts of the country.[486] Minister of Justice, Harald Bothner, on the other hand agreed with Persson's critics, and saw both the size of his operations as well as his methods as highly questionable. This breach was also amplified by widely divergent accounts of how promising the ore fields, and the technology needed to exploit them, actually were. In the Røstvangen case, two of Norway's leading academic geologist[487] clashed, forming the expert opinion underpinning the opposing sides. On the one side stood W.C. Brøgger, also a personal friend of Arctander,[488] who concluded that the ore body was less promising than anticipated, and supported a development by Persson.[489] Johan Vogt on the other hand argued in favour of reserving the ore for a Norwegian capital, were its riches could serve as a foundation stone for a new domestic pyrite processing industry. Such a processing plant, Vogt argued could serve both as an important source of sulphur for the Norwegian pulp and paper industry, and perhaps form the basis of a future ironwork.[490]

In the end, Bothner, the minister in charge of resource concessions, won the argument, and both concessions were rejected. Arctander issued a formal dissent in cabinet, backed by Aarrestad (Minister of Agriculture) and Løvland (Minister of Foreign Affairs), but Bothner had the support of Prime Minister Michelsen, who swayed the rest of the cabinet to his side.[491] In the rejection of the Rustvangen concession of December 12th, 1906, Bothner based his decision upon the fact that a court decision on the competing claims was still pending, and given Persson's already powerful position, and strong indication that he had intentionally circumvented the 1903 law, it was not

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[485] «Hele fabriken til Norge?» Stavanger Aftenblad 30.08.1906. «Helsingborg Kobberverk». Trondhjems Adresseavis 30.08.1906

[486] Handelsdep. to Justitiedep., dated 17.02.1906 and 12.06.06. Kgl. Res. 256, 1906. NRA, Justisdepartementet, Kommunalkontorene, Referatprotokoll K.

[487] These were two of the three geologists who had advised the government during the creation of the 1903 law. See p. 35

[488] Geir Hestmark, *Vitenskap og nasjon : Waldemar Christopher Brøgger 1851-1905* (Oslo: Aschehoug, 1999), p. 172.

[489] Kgl. Res. 256, 1906. pp. 8-11. NRA, Justisdepartementet, Kommunalkontorene, Referatprotokoll K.

[490] Kgl. Res. 256, 1906. NRA, Justisdepartementet, Kommunalkontorene, Referatprotokoll K.

[491] «Konsul N. Perssons Koncessionsandragende: Dissensen i Statsraadet» Trondhjems Adresseavis 21.12.1906

possible to grant a concession. Moreover, Bothner also underlined his agreement with Vogt's view, that it could be better to delay exploitation of the resources until Norwegian capitalists were ready to make the effort, as "one should not place sole emphasis on the apparent advantage of the moment, but to a greater extent take aim at the best interest for the country's future".[492]

This list of reasons for denying the Rustvangen concession did not specify precisely which factor was decisive for the government's rejection. Thus, it was not clear what policy precedent the decision set for future cases – if any at all. There was for instance, no clear indication whether a Persson could have received a concession if there was no dispute over the mining claims. Bothner's stated willingness to reserve mineral resources for Norwegian investors could be the creation of a new policy line. Yet, this seems at odds with the fact that Bothner was willing to grant a concession to German *A/S Salangen Bergselskap* just a few weeks later. While there was indeed a few Norwegians who contested the claims, it was far from certain at that point whether their title to them would hold up in court, and if it did, whether they would find any willing domestic investors. This somewhat muddled premise could potentially open the government to accusations of arbitrary implementation. This was not only a problem insofar as it created uncertainty among investors, but could also be interpreted in Sweden as particular discrimination towards Swedish capitalists, a point underlined by Brøgger.[493]

In the rejection of the staking rights concession near Salangen on January 17, Bothner expressed a clearer policy principle. According to his interpretation of the 1903-law, the option of foreigners to apply for a staking permit was only included to aid existing foreign owned mining operations. And while this had come to be implemented in such a fashion that foreigners who bought mining claims could also be granted staking rights to protect their operation, "the law intended to reserve speculations in claims for the country's citizens".[494] In other words, as Persson's application for staking rights was not tied to an existing or planned mining project, it was not eligible for a concession. Foreigner investors could provide capital to develop mines, but they should not be allowed to prospect in order to sell them on to other operators, as Persson had so often done. Even though mineral exploration could be an expensive affair, Bothner seems to have concluded that this was within the capabilities of Norwegian citizens, and that the added value of prospecting should

[492] «[...]ikke lægge ensidig vegt paa den tilsynelatende fordel i oieblikket, men mere tage sigte paa landets bedste i fremtiden». Kgl. Res. 256, 1906. p. 43. NRA, Justisdepartementet, Kommunalkontorene, Referatprotokoll K

[493] Kgl. Res. 256, 1906. p. 16. NRA, Justisdepartementet, Kommunalkontorene, Referatprotokoll K

[494] Kgl. Res. 13, 1907. p. 36. NRA, Handels- og industridepartementet, Sosialkontoret D, Box 80, Folder: *Persson, Dyrø*

therefore be reserved for Norwegians. This again reflects back on the Rustvangen-case, as it was this principle Persson had defied when he had circumvented the law.

Nils Persson was however not ready to concede defeat, and pressed for a rematch. On 31st of January, Persson reapplied for a concession to obtain a lower number of mineral claims in Rustvangen than his original concession.[495] As a further accommodation to critics of his dominant positon, Persson offered to relinquish a collection of 993 claims spread around the country to the state. Even with a concession for a smaller area, Persson assumed it would be very difficult for the government not grant him a concession for the rest of the area at a later stage. Such a decision was likely to set the Norwegian government in a bad light for suffocating the investments of foreign citizens, and increase uncertainty within the mining industry.

As making his case and discrediting his opponents to the government had not worked, Persson decided instead to take the fight to the public arena. Two days after his second concession had been rejected Persson penned a long letter to *Aftenposten*, a leading conservative Norwegian newspaper. Here he outlined his version of events, stressing his role in creating new jobs and facilitating mining operations in Norway, with only varying economic returns to its owners, and decried the government for its unfair treatment of his applications.[496] This appeal sparked a heated exchange of accusations and counter-accusations between the two interested parties in the Røstvangen field, backed by their supporting outlets on both sides of the political divide.[497]

Persson did not restrict himself to appeal to the sympathy of the readers, but also warned that a discriminatory concession policy might have broader foreign political consequences. As a heavy-handed finale the account of his woes in *Aftenposten,* Persson ominously cautioned that "the present Generation, both in Sweden and in Norway, will come to bear the Responsibility, if there will not be peaceful Cooperation on the Peninsula".[498] While it is unlikely that the Norwegian government took Persson's bluster at face value, it did acknowledge that the Persson-case might have negative consequences to Norway's reputation as a place to invest. In particular, the

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[495] "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913," pp. 92ff.
[496] "Min Virksomhed i Norge" Aftenposten 19.01.1907
[497] Perssons approach was often somewhat heavy-handed, and not always well suited to sway the Norwegian opinion. While he ardently tried to maintain that those who were accused of being his strawmen were in fact independent prospectors, he later reported his former employee to the district attorney in Trondhjem for breach of trust, embezzlement and fraud, who had the unfaithful mining engineer arrested.[497] His opponents lampooned this as a self-incriminating act, and proceeded to releasing the incriminating letters from Persson, earlier shared with the government, to the press. "Norrmans arrestation".Trondhjems Adresseavis 15.05.1907. "Stort Grubebedrageri mod Konsul Persson" *Indhereds-posten* 17.05.1907. "Norrmans arrestation".Trondhjems Adresseavis 21.05.1907. «Skandaløst» Hedemarkens Amtstidende 31.05.1907
[498] «[…]den nulevende Generation baade i Sverige og Norge kommer til at bære Ansvaret, om der ikke bliver fredeligt Samarbeide paa Halvøen».

government was concerned that Persson might be spreading unfavourable news stories about Norwegian concession policy in the continental press.[499]

Persson also had another strong card on his hand. Even though the group that contested his claims were from one of the municipalities connected to Rustvangen, the municipal councils had all been in favour of Persson's venture. When his concession was denied, Persson halted all further exploration and development, causing unemployment and local outcry.[500] As the municipal councils urged him to continue, Persson, according to his lawyer, found that "he should make a new attempt at obtaining the necessary permits for mining" in "consideration of both the local population, and to the [fact that] he had already employed a rather significant amount of capital to exploration in these areas".[501]

For a combination of all these reasons, the majority of the cabinet began to sway towards Arctander's view that Persson should be granted a concession on the Røstvangen field. Moreover, Vogt, who had previously provided much of the arguments underpinning Bothner's position, also changed his mind, arguing that the problem of Persson's dominance would be adequately solved by handing over so many claims to the state.[502] Bothner on the other hand, was not impressed. Dismissing the claims being given up as most likely worthless, there was in his mind little in the new concession application that would fundamentally alter Persson's dominant position, both in the mineral industry and as a supplier of sulphur for the Norwegian pulp and paper industry. Nor did it change his view that the claims had originally been obtained by circumventing the 1903-law.

Furthermore, the Norwegian counter-claim group had managed to attract enough Norwegian investors to fund a small joint stock company, which submitted its own concession application shortly after.[503] The investor group was neither made up by Norwegians with pre-existing ties to the mining industry, nor by a strong collection of sulphur consumers. Instead, it was a collection of mainly Kristiania-based shipping and sawmill owners and traders, including Gunnar Knudsen, with only one directly linked to sulphite pulp production.[504] Thus, the Norwegian challengers had yet to attract wide support from the industry Bothner's domestic processing ambitions were supposed to favour. Their share capital of NOK 300,000 (£ 16.500) was about a tenth

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[499] Undated draft, signed Løvland. NRA, Utenriksdepartementet, Dd, box 772, folder BI

[500] "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913," pp. 92-102.

[501] «Av hensyn baade til befolkningen og til, at han allerede har anvendt et meget betraktelig beløp til undersøkelse i disse trakter[…]». "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913," p. 94.

[502] "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913," p. 103. See also «Røstvangen» Morgenbladet 02.02.1907.

[503] "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913," pp. 164ff.

[504] Information on the different investors is largely obtained from Chr. Brinchmann, Anders Daae, and K.V. Hammer, *Hvem er hvem? : haandbok over samtidige norske mænd og kvinder* (Kristiania: Aschehoug, 1912).

of the necessary amount to the fully exploit the mines. Nevertheless, Bothner was optimistic that the group could eventually develop the claim in a fully "rational" manner. This would both alleviate local concerns, but also made it all the more important to reserve the ore for the Norwegians. As to the likelihood of any economic countermeasures from Sweden, Bothner concluded, "in any case, […] our considerations for Sweden should never cause us to disregard the breach of Norwegian laws by a Swedish citizen".[505]

Yet, this time Bothner could not convince the rest of the cabinet. When Bothner presented his decision to reject the new application, Arctander again formulated a dissenting opinion in cabinet, where Persson would receive a concession on the outlined set of terms. Prime Minister Michelsen supported his Minister of Justice, but now the rest of the cabinet turned against him and with Arctander. The Persson case was one of the last act carried out by Michelsen, the national hero of Norway's independence from Sweden in 1905. He resigned on October 23, 1907, reportedly for health reasons. Michelsen had generally lent to the left on concession issues, but had not been able to convince the moderates of the Liberal party to support him. Now, he was also being abandoned by his right flank. Michelsen was succeeded by his foreign minister, Jørgen Løvland, who took the opportunity to replace a few of his cabinet ministers. Among them was Harald Bothner.

The Persson case shows the how controversial it remained to implement a policy which blocked concessions to foreigners. Blocking certain investments in the capital-intensive mining and hydropower industries could easily lead to accusations of arbitrary implementation from abroad, and a decline in investor confidence. Foreign direct investments should be harnessed by setting concession terms, but should otherwise be welcomed. Even when in direct, if unequal, competition with a Norwegian company, the government was not willing to reserve the minerals for the Norwegian company. Nor was the government willing to wait until the outcome of the court case regarding the claims. A guaranteed foreign investment in the hand was worth more than ambitious, but risky nationally owned industry in the bush.

Yet, Bothner left one important policy precedent. His rejection of Persson's application for staking rights near Salangen marked the end of allowing foreign prospectors to act as middlemen between Norwegian mineral resources and other mining investors. Foreign owned companies would still be granted the right to stake claims, but subsequently only in areas connected to an ongoing mining operation by the same company.

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[505] "[…] I ethvert fald (mener jeg), at hensyn til Sverige aldrig bør føre til, at man ser gjennom finger med, at en svensk statsborger overtræder norske love." Meddelte bergverkskonsesjoner 1903-1913, p. 113

Norwegian forests for Norwegians

In the last of the three resources covered by the temporary concession law, forests, the Michelsen-government took an altogether different approach. Denying Albert E. Reed the right to buy Follum Bruk in February, marked the definitive end for any indication of the Michelsen-governments policy towards further foreign forest acquisitions. Whether told so in confidence by the government itself, or simply acknowledging that a precedence had been set by the Follum-case, the large foreign owned pulp and paper companies could clearly read the writing on the wall, and did not even bother to submit any further applications to obtain more forested land. Consequently, while no large forest concessions were granted to foreign owned companies, no applications had to be denied outright either.[506] Michelsen publicly clarified this policy to the Storting on April 13th 1907, stating, "as a rule, foreigners or foreign forest companies have not been granted forest concessions".[507] Exceptions were made in cases were the forests were of only very minor value. Norwegian owned companies who sought to obtain forests had to accept similar kinds of capital controls as those who invested in mines or hydropower.

The foreign pulp and paper companies chose to deal with this new political situation in different ways. As mentioned in the previous chapter Albert E. Reed eventually divested from his Follum operation after a few years, choosing instead to set up a new plant in Newfoundland.[508] When one of Norway's largest wood processing factory, British owned *Bøhnsdalen Mills Ltd.,* burned down in October 1908, the owners did not think it worth the effort to rebuild it under the present conditions, and instead sold it to a Norwegian investor.[509] They both publicly blamed the Norwegian concession policy, yet the Bøhnsdalen's shareholder reports following the fire instead emphasised the high timber prices and a general overproduction of pulp.[510] While the timber prices did indeed stem from a higher demand for Norwegian timber (see Figure 9), the concession policy made this worse for the foreign owned processing companies by preventing them from integrating backwards

[506] "Udlændingers erhvervelse af fast eiendom i Norge samt tilladelse til at erhverve skog, bergverk eller vandfald" Indst. O. IV, 1906/1907, pp. 19-26; Indst. O. IV, 1908, pp. 26-36.
[507] "[…]har udlændinger eller udenlandske selskaber som regel ikke faaet koncession paa skoge". Stortingsforhandlingene 1906/1907, p. 2794
[508] "Hvorledes norsk koncessionspolitik fordriver vældige engelske Kapitaler fra Norge" Aftenposten 16.02.1910
[509] Whitney (Bøhnsdalen Mills ltd.) to The Share & Loan Department, Stock Exchange, dated 25.04.1910. Guildhall Library, Annual Reports, box 1080. See also Even Lange, *Treforedlingens epoke : 1895-1970*, Fra Linderud til Eidsvold Værk (Oslo: Dreyer, 1985), p. 13.
[510] "Bøhnsdalen Mills, Ltd; Report to be presented to the Proprietors […] 26th April 1909" Guildhall Library, Annual Reports, box 1033

to secure their own supplies. This was precisely what the Norwegian timber owners intended, as this meant that they would reap a handsome profit when the scarcity of timber became more acute.

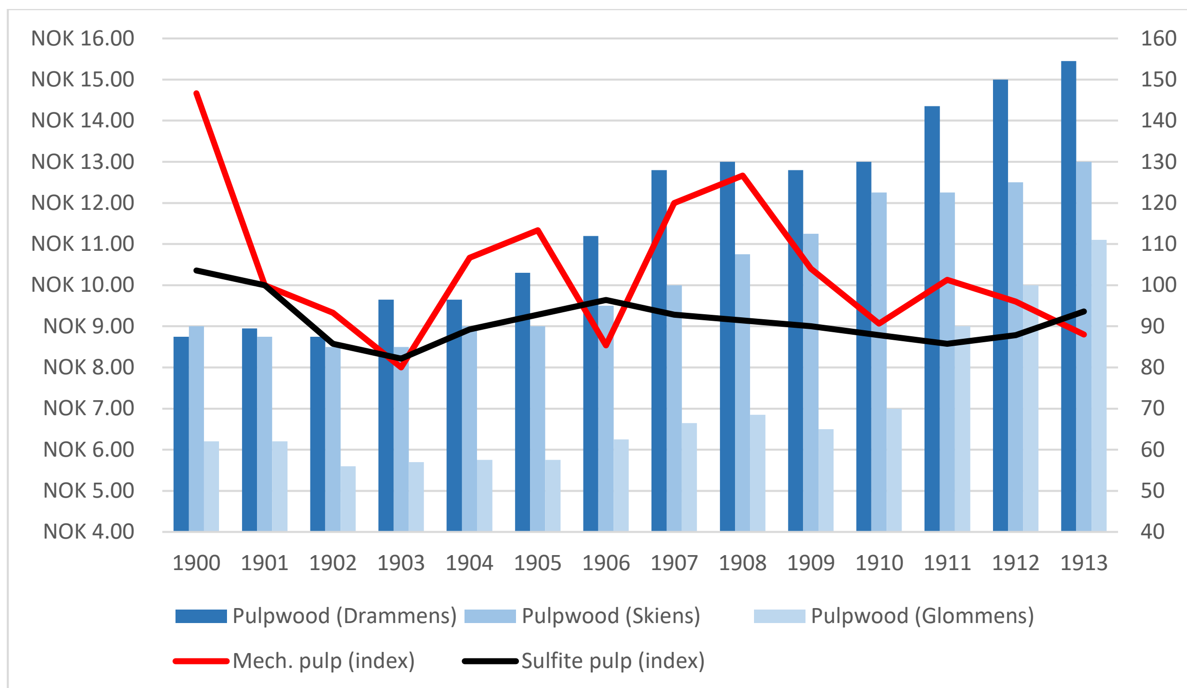
There was not however a complete exodus of foreign pulp and paper interests. *Edward Lloyd ltd*., which owned *Hønefos Brug* and *Vittingfos Brug*, had secured significant forests shortly before the change in policy, and continued to operate in Norway until 1918.[511] The largest pulp and paper company of them all, Kellner-Partington, did not divest either. However, unable to secure its timber supplies within Norway, the company instead went on to acquire large tracts of forests in Värmland in neighbouring Sweden.[512]

Overall, for the Norwegian timber processing industry, the British envoy's predictions that the concession laws would lead to divestments proved true. However, as we have seen already during the introduction of the concession laws, this was a policy and a development that was strongly supported by large segments of the population, including the much of the Norwegian pulp and paper industry. When the British companies pulled out, there were Norwegian investors willing to take over. Besides complaining to the British ambassador, the British pulp and paper manufacturers do not seem to have made a wider effort to have the laws changed. In any case, the British government did not press the Norwegian government to change its mind.

[511] Hønefos Brug was bought by the local municipality in 1918. Per Kveseth, *Ambolt og robot : historien om dem som forandret Norge* (Hønefoss: Hønefoss verktøifabrik, 2000), p. 30. Vittingfos was sold in 1916. Ingolf Kittilsen, *Vittingfossen i industriens tjeneste, 1647-1947 : En historisk fremstilling* (Oslo: Fabritius, 1947), pp. 54-91.

[512] Bergh and Lange, *Foredlet virke*, p. 40.

Figure 9: Pulp and pulpwood prices on key Norwegian watercourses (1901 = 100)[513]



II. Bredal's proposal and its detractors (1907-1908)

The principle of harnessing foreign direct investments into natural resources with terms would also form the foundation stone of the Løvland-governments proposal for a permanent concession law. As a replacement for Harald Bothner, Løvland picked the non-aligned lawyer Johan Bredal, who had headed the special law committee set to advice on a permanent concession law. The choice did not only provide a candidate with thorough foreknowledge and an air of impartiality to the important concession question. Bredal was also a minister who could provide a continuation of the policy favoured by the majority of the government.

The special committee report, delivered in May 1907, presented a law proposal largely in line with what had been developed under the Michelsen-government. Foreign investments in hydropower and mining would only be given on terms, while joint stock companies with at least two thirds Norwegian ownership would be exempted from terms beyond measures to control that shares were in fact held by Norwegians.[514] The terms outlined were more or less identical to those set to concessions during the Michelsen-government. This included a Right of Reversion for hydropower plants after 60 to 80 years, with the possibility of setting it as high as 99 years for

[513] Rogstad, *Norges træmasse-, cellulose- og papirindustri*, pp. 14-15, 21.

[514] 'Norwegians' here denoted Norwegian citizens, Norwegian municipalities and the Norwegian states. Shares held by other Norwegian companies were **not** counted as Norwegian owned. *Bredal committee,* p. 76. Appendix to Ot. Prp. Nr. 11. 1908

concessions "where singular circumstances are present".[515] For minerals, there would be no time limit, but instead a yearly duty, set at between 1% and 3% of net output.[516] The Michelsen-government had largely set an up-front duty to its concessions, largely as an attempt to provide initial capital to a mining engineer institution.

As had generally been the practice of the Michelsen government, the law-committee outlined a view in favour of a fairly welcoming stance to foreign direct investments within the confines of the concession law. This was particularly the case for hydropower. While the law-committee agreed that if "the majority of our country's waterfalls, mines and forests should come on foreign hands forever, [it] would by all have to be recognized as very unfortunate"[517] as it would "create an economic power position for foreign interests, which of national concerns would be connected with great misgivings, especially for a small state".[518] This would be the case, even if foreign owned companies were run in a "fully reputable fashion without abuse by monopolisation".[519] There was thus an upper limit to the level of foreign ownership, beyond which inward foreign direct investments stopped being beneficial and would instead be harmful, even if it was difficult to set exactly where that limit should be. However, the committee did not think that the country had reached such a level yet. Thus, there was still room for high growth in hydropower development based on foreign direct investments. Potential drawbacks to such a course would be countered by the acquisitions being made subject to "certain terms and with certain limitations, whereupon the dangers and disadvantages of the foreign exploitations of our waterfalls is diminished as much as possible".[520]

The committee recognized however that the level of acceptable foreign ownership was also influenced by technological uncertainty. The development of magnetic separation techniques and electric smelting could radically change the prospects of both Norwegian iron mining and steel production. Thus, while the committee generally saw foreign investments in mining as a benefit, it also opened the possibility that the government should consider waiting to see how this technology

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[515] "[…]hvor særlige omstændigheter er tilstede[…]". Ot. Prp. Nr. 11,1908, p. 30
[516] Net output was set as the value of ore extracted from the mine, prior to processing and transport, with subtractions for production costs, but not cost of administration and interest payments.
[517] […]de fleste af virt lands,vandfald, bjergverker og skoge for bestandig kom over paa udenlandske hænder, vil vel af alle maate medgives at ville være saare uheldigt"
[518] […]skabes en økonomisk magtstilling for udenlandske interesser, der af nationale hensyn vilde være forbunded med store betænkeligheder navnlig for en liden state". *Bredal committee,* p. 33. Appendix to Ot. Prp. Nr. 11. 1908
[519] «[…]fuldt du anerkjendelsesværdig maade uden misbrug ved monopolisering[…]»". *Bredal committee,* p. 33. Appendix to Ot. Prp. Nr. 11. 1908
[520] "[…]visse betingelser betingelser og med visse kanteler, hvoved farene og ulempertne ved den udenlandske udnuttelse af vore vandfald reducers mest mulig". *Bredal committee,* p. 35. Appendix to Ot. Prp. Nr. 11. 1908

developed before awarding more iron mining concessions to foreigners.[521] In somewhat the same vein, the committee had also held that future development might make it prudent to reserve some pyrite fields for domestic capital. For hydropower, there were arguments in the opposite direction. The recently appointed Watercourse Director, Ingvar Kristiansen, argued that a rapid hydroelectric development was necessary, as hydropower turbines was a more mature technology compared to steam turbines, and the advantage enjoyed by hydroelectricity was likely to decrease over time.[522] Thus, it would be better to allow foreign investors to develop Norwegian watercourses, so that Norway could reap greater energy independence in the end.

Yet, when Bredal presented his proposal for a permanent law on February 15th, there were no suggestions of reserving minerals for Norwegian mining ventures. Restricting foreign direct investments into minerals was near uniformly dismissed as counterproductive by both the mining bureaucracy, the government appointed mining commission, as well as the Minister of Trade, Sofus Arctander.[523] Moreover, similar criticism over levying taxes on mining led Bredal to remove the part of the duty calculated from the size of the claim, and reducing the lowest tax level from 1% to 0.5%. [524]

The overall strategy of harnessing foreign direct investments becomes even clearer when the concession policy for forests are taken into account. Here the law-committee saw no need for foreign direct investments, and would thus restrict future acquisitions to Norwegian owned companies. On this point, the law committee was in full agreement with both the forest owners associations, as well as domestic owned downstream producers. This was also in line with the principle established by the Michelsen government since the Follum-case in early 1906.

However, the committee also went further, and proposed to limit separation of forests from farmland and sale of forests to non-local citizens. As in Sweden, the criticism that had been levelled at foreign owned producers was soon to be seen as also applicable for Norwegian owned sawmill and pulp companies. This 'social' forest policy was intended to prevent downstream producers from squeezing smaller forest owners through backward integration, uphold the economic viability combining forestry and farming and prevent taxes from timber cutting – a vital part of municipal income – to flow out of the local area.[525] On this point, the committee was undoubtedly influenced by Olav Nergård, who had been appointed to the committee as a representative for the forest

[521] *Bredal committee,* p. 49. Appendix to Ot. Prp. Nr. 11. 1908
[522] Vasdragsdirektøren to Abeidsdep. Dated 13.08.1907. Appendix 4 to Ot. Prp. Nr. 11. 1908
[523] Handels- og Industridepartementet to Justitiedepartementet, dated 11.12.1907. Appendix 5 to Ot. Prp. Nr. 11. 1908
[524] Puntervold to Handselsdep. Dated 13.07.1907. Appendix 14 to Ot. Prp. Nr. 11. 1908
[525] Bredal Committee 1907, pp. 56-64

industry. However, Nergård was also the head of Hedmarkens Amtskogsforening, an interest group dominated by small forest owners. Nevertheless, while Nergård helped to draw the policy towards his own group's interests, the regulations also enjoyed wider support, particularly among the rural electorate. Thus, the committee's proposal was transferred essentially unchanged to the final law proposal.[526]

Based on the reactions from abroad, the harnessing policy seemed to have largely worked well for the Michelsen/Løvland governments. The switch to resource nationalist concession law system had provoked no apparent repercussions from abroad. The Norwegian consulates abroad could initially only report a few negative press reactions.[527] Norwegian policy was sometimes referred to, but rarely in anything other than a matter-of-factly way. In general, the Norwegian chargé d'affaires in Berlin reported in March 1908, Norwegian resource nationalism was met with "more bemusement than anger".[528] Yet, contrary to the predictions of capital flight, new applications for mining and hydropower kept coming. Furthermore, the terms that governments set to the concessions were accepted almost without exception. Where foreign expansion halted, namely in wood based industries, there were Norwegian investors ready to take over.

While the centrist government's concession policy had drawn little criticism from abroad, at home it was a different story. Parts of the liberalist right continued to oppose the concession laws, and were especially incensed by the confiscatory Right of Reversion. However, the fiercest criticism came from those on the left who saw the government's policy as too timid and complacent towards foreign capitalists. Severe attacks on the government's concession policy began almost immediately following the passing of the first temporary concession law, before the government itself had worked out its own policy principles.

One of the most severe attacks against the government's concession policy came over water regulation permits. At the same time as the Michelsen-government had prepared the first "panic-law" of spring 1906, the government also presented suggestions for changing the Watercourse Law, which regulated damming and manipulation of water flow in rivers.[529] The Norwegian Watercourse Law, passed in 1887, granted wide powers to riparian owners to dam and regulate water flow and

[526] Ot. Prp. nr. 11 1908, pp. 34-36
[527] Herman Schanche to Utenrikdep. Dated 2.02.1907. W. Christophersen to Utenriksdep. Dated 31.01.1907. Ths. M. Conradi to Utenriksdep. Dated 31.01.1907. W. Ditten to Utenriksdep. Dated 02.02.1907. Chr. Morgenstierne to Utenrikdep. Dated 03.02.1907. J.W. Formoe to Utenrikdep. Dated 02.02.1907. Salvesen to Utenrikdep. Dated 02.02.1907. F. Nansen to Utenrikdep. Dated 26.02.1907. Johan G. Andresen to Utenrikdep. Dated 19.02.1907. P. Ottesen to Utenriksdep. 22.03.1907. Dated 02.02.1907. NRA, Utenriksdepartementet, Dd, box 772, folder BI
[528] W. Ditten to Utenriksdep. Dated 10.03.1908. NRA, Utenriksdepartementet, Dd, box 772, folder BI
[529] Ot. Prp. Nr. 16. 1905/1906

even in some circumstances expropriate properties necessary to carry it out. A government permit was only necessary if riparian owners needed to expropriate property. This left the state without technical oversight over large potential damming works. Moreover, the proposal also opened the possibility of setting a time limit to regulation permits. This would enable the state to eventually nationalize water regulation works and prevent long-term domination of private – particularly foreign – developers. However, the Storting decided to postpone the issue until further assessment could be made, with no provisions for temporarily expanding the government's power.[530]

This issue became suddenly more acute when a group of riparian owners along the Glomma River sought to dam *Mjøsa* – Norway's largest lake. By damming the lake, it would be possible to even out the wide difference in discharge between the spring floods and the rest of the year. This would improve the median flow, which again could increase the average output of all hydropower potential of the Glomma River to about 110,000 hp.[531] However, this required some expropriations, which again required a government approval. The regulation had been approved by the Watercourse Director in March, and without any change in the 1887 Watercourse Law, the government decided to issue a permit along the pre-existing policy line. This meant that the regulation was given in perpetuity and with only technical control and compensation to the effected property owners.

Water regulations were within the purview of the government, but the approval was still challenged in the Storting because it would submerge a pre-existing state owned dam – which made it a parliamentary concern. However, the case soon moved beyond just question of whether or not the Storting or the government had the right to make a decision. As the majority of interested riparian owners in this hydro regulation were foreigners, this decision seemed to fly in the face of the policies established with the temporary concession law. It thus became a question as to whether or not water regulations should be treated in the same way as riparian acquisitions. Moreover, there was the issue of whether compensation for the property owners was enough, or whether water regulations also warranted a further levy to atone for the damages brought by damming and regulating.[532]

The whole case was a humiliating affair for the government. When the case was finally put to a vote in July 1907, a compromise offer from the hydropower owners was just barely accepted with a 63-60 vote, even after the Michelsen-government threatened to resign over the issue.

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[530] Indst. O. XI 1905/1906. Odelstingsforhandlingne 1905/1906, pp. 999-1013
[531] Just, *Aktieselskabet Hafslund: 1898-1948*, p. 98.
[532] "Angaaende Mjøsens regulering" Dokument nr. 12 1906/1907, Indst. S. XXXXII 1906/1907. Stortingsforhandlingene 1906/1907, pp. 409-531, 3760-3992

However, the issue had provided a further split in the Liberal party, where opponents of the government began to consolidate around Gunnar Knudsen, a leading moderate-progressive, following the case. These would soon be known as the 'consolidated liberals', forming the basis for a reorganized Liberal Party. The government loyalists would in time for the most part either join the new National Liberal Party or drift back to the new Liberal Party.[533]

The Mjøsa-case also led to the creation of a change in the Watercourse Law, which specified a wider possibility of setting terms to water regulation permits. There were however several problems of applying the principles of the temporary concession laws to water regulation. The regulation of Mjøsa would be made by an organisation, formed by representatives of the interested parties in the watercourse. Thus, devising whether or not to set terms to concessions on the basis of capital ownership was thus not very helpful. Besides, damages from regulations did not depend on who owned the hydroelectric plants benefiting from it. Submerging arable land played into a larger unease of big industry in general, particularly among the agrarian representatives. Thus, the new regulation law would instead apply to all regulations over a certain size,[534] even if no expropriations were necessary. Moreover, the changed Watercourse Law did not only open for terms set to protect against issues of foreign ownership, but also "on such terms, which he [the King/government] sets according to the state and the public's best interest".[535]

The changed law proved a further humiliation of the government, as the law had been passed against the wishes of the government.[536] The government was not wholly against the changed law, but objected to allowing terms, such as special duties or Right of Reversion, to be set on regulations made entirely on private property. The government split on whether or not to sanction it, but Michelsen and a majority of the cabinet decided to acquiesce. Although one should not put the opposition to the governments concession policy as purely political opportunism, attacking the government as deferential to foreign big business had proved effective, expanding split within the government, and casting the left wing of the Liberal party as the defenders of the nation.

Embarrassing the Michelsen government was not the only consequence. With the new Watercourse Law, the left wing of the liberal party had managed to expand the reach of the concession law system considerably. It no longer applied only to new acquisitions of riparian rights,

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[533] Trond Nordby, *Venstre og samlingspolitikken 1906-1908: En studie i partioppløsning og gjenreisning* (Oslo: Novus Forlag, 1983), pp. 82-89.
[534] The law did not set a specific limit, but the parliamentary committee had suggested a limit of only 500-1000 hp. This was a reduction of the limit originally suggested by the government in 1906 of 3000 hp.
[535] «[…] paa saadane vilkaar, som han antager stemmende med statens almenhedens tarv". Indst. O. XV 1906/1907
[536] See the debate in *Odeltingsforhandlingene* 1906/1907, pp. 1000-1044

but also to those who wanted to use their riparian rights to regulate the waterflow of rivers. In effect, this was a further step away from the system of riparian rights as private property, and instead moving towards the continental norm.

Such a challenge to an established form of property rights was hugely controversial within Norway. As the decision was being made, the Storting was nearly bombarded by letters and telegrams from companies, municipalities, as well as the two largest interest group organisations for pulp and paper manufacturers.[537] Yet, despite speaking on behalf of Norway's second greatest export industry, *Norsk celluloseforening* and *Den Norske Træmasseforening* were unable to sway the majority of parliament from placing river regulations under state control. Their views had been taken into account when they desired to prevent foreign competition for Norwegian timber. However, when their views went against the resource nationalist agenda of the Liberal party's left wing, they were dismissed as overdramatizing the whole issue. Extending the concession system to water regulations did not mean that the government in any way prevented future water regulations, but rather ensured that national and public interest were adequately accounted for.[538]

While there was wide opposition within Norway, there was no sign of any concerted challenge from foreign riparian rights owners. There is more than one reason for this. The largest foreign riparian owners, Hafslund, Tyssefaldene and Norsk Hydro, had already obtained the necessary regulation permits and were thus left largely unaffected – at least for the immediate future.[539] Those who were on their way in, such as BASF, were already affected by the concession law on acquisitions, and thus the new regulation did not make a substantial difference. Moreover, the new concession law system did largely resemble the norm in the alpine countries, which was the main alternative source for cheap hydroelectricity within the European continent. While it is impossible to assess the opinion of all who could be interested in investing in Norwegian hydropower, cheap electricity still held enough allure to attract significant investments from abroad.

The tangle over the Mjøsa regulation had another institutional aftereffect, which would prove to be very important in the years to come. As part of the attacks against the government's allegedly complacent policy, Liberal party candidates had suggested that the government cease all future water regulation permits until a new Watercourse Law could be formulated. This proposal

[537] The letter and telegrams are listed in Stortingsforhandlingene 1906/1907, pp. 4150-4157

[538] See statements by Gunnar Knudsen and Johan Castberg: Stortingsforhandlingene 1906/1907, pp. 4157-4158

[539] Norsk Hydro did indeed need an additional regulation permit for their power plants in Rjukan adding 12,500 hp. This was however a rather insignificant amount compared to the enormous hydroelectric potential of the Rjukan falls – around 300,000 hp. The additional regulation permit was granted under the Knudsen government for a one-time tax of NOK 6,000.

was voted into force in July 1907, even as the Watercourse Law was expanded to allow wider terms.[540] Thus, The Storting had to be consulted for all larger watercourse regulation permits in expectation of a larger reassessment in the future. As most larger riparian acquisitions also required some form of water regulation before it could effectively power a hydroelectric plant, this effectively meant that all concessions for hydropower would have to be decided in The Storting rather than the government in power.

For the progressive left, the idea behind this proposal (besides embarrassing the government) was to prevent the government from granting "cheap" hydropower concessions before a final – and likely more radical – concession law had been enacted. In the heated and uncertain atmosphere, it was hard to deny that some sort of parliamentary legitimacy for the evolving temporary concession practice might prove necessary. This was indeed part of the reason why the Michelsen-government chose to remain overall neutral to the parliamentary consultation proposal. Moreover, wider parliamentary oversight of concession could, in theory, also forge a wider political consensus on future application of resource policy and prevent a minister or a government of enacting the law in an arbitrary fashion in favour of some companies over others. However, as we shall see, such wide democratic control also came with its own price, as it would help perpetuate the politicization of natural resource policy.

The progressive wing of the Liberal party did not restrict its criticism to hydropower concession. The radicals were especially disparaging the lack of rent-capture mechanisms in mineral concessions. Dismissing the one-time duty as mere "gratuity",[541] Gunnar Knudsen and Wollert Konow (H) urged the introduction of a state royalty, as well as Right of Reversion after as little as 30 years. They argued that without such measures, the wealth of the country's mountains would not contribute to Norwegian capital accumulation, and instead fall on the hands of mineral speculators like Persson, who had secured a handsome royalty on the sale of his iron claims in Salangen. Consequently, when the Michelsen-government granted Persson a concession to the Rustvangen-field, it seemed to offer the progressives further proof that the government took too conciliatory an attitude to foreign investors. When the consolidated Liberal opposition moved to topple Løvland's minority government in a vote of no confidence in March 1908, it was precisely the government's

[540] The reworked §25 of the Watercourse Law has passed Odelstinget on July 10th and then Lagtinget on July 16th. The parliamentary consolation bill was passed in a united Storting on July 15th.
[541] No. «drikkeskilling». See: *Forslag fra repræsentanterne Konow, Gunnar Knudsen m. fl. Om visse regler for koncession til bergverksdrift i kraft af midlertidig lov af 12te juni 1906.* Dokument nr. 69, 1906/1907. p. 5

and Arctander's concession policy, and the Persson-case in particular, which formed a core argument justifying their move.[542]

This marked the end of the first phase of the establishment of the 'harnessing'-strategy. The Michelsen-government had established a wide system concession system that encompassed hydropower, mining and forests. In this system, new foreign direct investments into hydropower and mining would be largely welcomed, if the investors accepted terms set to enhance spillover effects to the Norwegian economy, and ensure Norwegian ownership over hydropower resources in the long run. Yet, while this system was a radical break with the policy that prevailed before 1905, it was soon attacked for not going far enough. Here the "reverse obsolescing bargaining" formed an important underlying conceptual paradigm. As concessions could not be retracted or renegotiated once given, "cheap" concessions, or concessions with loopholes could have potential important long term consequences for the Norwegian economy. At the same time, once the principle of concessions with negotiated terms was established, it was always possible for the opposition to "outbid" the government in charge of a concession negotiation. As the opposition was free from the responsibility for making sure the investment came through in the end, it could always criticise the government for not demanding stricter terms. Consequently, criticism of the *implementation* of the 'harnessing'-strategy was rife, even if it was not an ideological opposition to the strategy per se.

III. Castberg's new principle of equal treatment (1908-1909)

When the consolidated Liberal party came to power under Prime Minister Gunnar Knudsen, it at much to live up to, especially on natural resource policy. After building much of their political legitimacy on attacking the centrist government's lack of resource nationalist zeal, they now had to bear the responsibility of ending the uncertainty of the temporary law, and formulate a comprehensive permanent concession system.

According to the Knudsen-government, Bredal's proposal was inadequate in several ways.[543] First of all, the government wanted to introduce the Right of Reversion to mining concessions. To

[542] See statements by Gunnar Knudsen, Wollert Konow (H), Lars Abrahamsen, Johan Castberg in the debate following the throne speech of 1909. Stortingstidende 1908, pp. 706-710, 713-716, 718-724, 728-231, 739-747, 780-786, 840-845.
[543] Ot. Med. Nr. 5, 1908.

prevent overexploitation before the concession expired, the government would impose yearly limits to ore extraction. Furthermore, the government also argued that the state should impose some special duties on hydropower regulations for fiscal reasons.

Then there was the problem of enforcing the separation between foreign and domestic owned joint stock companies. The ensuring that only 1/3 of shares were on foreign hands was considered to be so difficult in practice, that foreign investors could still obtain ownership of Norwegian hydropower without terms by circumventing the law. This could for instance be done through Norwegian strawmen holding 17% or more of the shares, or creating a Norwegian subsidiary with little share capital, and then finance the company through loans with heavy strings attached, circumscribing the subsidiary's independence. This was further complicated by the fact that Norway did not have a company law that regulated joint stock companies. Moreover, some of the aspects the concession law intended to ward against foreign owned companies, like price fixing and (esp. local) monopolization, could easily be just as applicable to Norwegian owned companies.

The new Liberal party government also had a broader social reform agenda for workers' rights, which also very much applied to the new natural resource based industries. As both mining and energy-intensive industries were often located in isolated places with little or no other opportunities for employment, employers would often have an outsized power position vis-a-vis their employees. Labour unions in these places, particularly in Sulitjelma, had appealed many times to include a number of provisions to the concession set to inhibit some of the "worst excesses" of such "company towns".[544] These included rights for workers to buy plots and own their own house, construct communal buildings and the right to create their own cooperative markets, to prevent employers from overcharging through a local monopoly on food and goods. The previous government had already included some "social" conditions to concessions, by outlawing payment in kind and ensuring that profits from company owned shops would benefit the workers. However, these had so far only been applied in concessions to foreign owned companies.

All these reasons argued for also introducing further terms to concessions to Norwegian owned companies. However, when the new minister of Justice presented his reworked law proposal on October 17th 1908, the problem had been solved in perhaps the most radical way possible – by introducing a principle of equal treatment of all joint stock companies, regardless of ownership nationality.[545] This meant that even fully Norwegian owned mines and hydropower plants would be

[544] See for instance Sulitjelma Arbeiderorganisasjon to The Storting, dated 21.02.1908. Dokument nr. 65, 1908.
[545] Ot. Prp. Nr. 1. 1909

subject to the Right of Reversion, and become government property without compensation when the concession expired.

Equating foreign and domestic owned companies was naturally highly controversial, and has been described in later Norwegian historiography as a key turning point in the rise of the state as a dominant economic regulator. Several historians point to the decisive influence of the law's author, Minister of Justice Johan Castberg, in introducing this new principle.[546] Norwegian intellectual historian, Rune Slagstad, concludes that Castberg's law diverged significantly from the "national-capitalist" line of the previous government, and instead followed an "anti-capitalist" perspective.[547] Castberg was among other things, a follower of the American economist Henry George. In his enormously popular book, *Progress and Poverty* (1879) George had argued that all economic *rent* from land and natural resources should be captured (taxed) to benefit the wider public. Such a system, George envisioned, would reward production and labour instead of passive rent-seeking, thus creating greater social equality and a more meritocratic society. By establishing a system where all private ownership of hydroelectric resources and minerals would in the end become public property, the 1909 concession laws did indeed seem to have a strongly *georgist* foundation.

Despite Castberg's undoubtful influence, there are some indications that the principle of equal treatment was not necessarily Castberg's creation alone. Both biographies of Gunnar Knudsen conclude that it was the Prime Minister himself who had suggested the principle of equal treatment, based on his own statements in the election campaign of 1912.[548] Even though he was not contradicted on this point at the time, this could have been a way for Knudsen to shield the party from criticism of being seduced by an outlier radical like Castberg. By claiming that the idea had come from Knudsen, himself a businessman and industrialist, it might perhaps be possible to diminish the impression that the idea of equal treatment was motivated by general anti-industry and anti-capitalist sentiments. Later in life, Knudsen claimed that the idea had actually been suggested by Lars Abrahamsen, the Minister of Trade, in a cabinet meeting discussing the first draft in the autumn of 1908.[549] Regardless of who actually initiated the idea, the draft papers do seem to confirm that equal treatment and Right of Reversion for Norwegian owned companies was not there

[546] Rune Slagstad, *De nasjonale strateger* (Oslo: Pax Forlag, 2001), pp. 158-63; Trond Nordby, *Det moderne gjennombruddet i bondesamfunnet: Norge 1870-1920* (Oslo: Universitetsforlaget, 1991), p. 129; Thue, *For egen kraft : kraftkommunene og det norske kraftregimet 1887-2003*, pp. 69-71. Castberg had withdrawn from the Liberal Party prior to the general election of 1906, and founded his own non-socialist radical party, the Labour Democrats. However, Castberg remained in effect a central figure on the progressive wing of the Liberal party, and was consequently invited into Knudsens government.
[547] Slagstad, *De nasjonale strateger*, pp. 158-59.
[548] Per Fuglum, *Én skute - én skipper : Gunnar Knudsen som statsminister 1908-10 og 1913-20* (Trondheim: Tapir, 1989), pp.110-11; Bernt A. Nissen, *Gunnar Knudsen* (Oslo: H. Aschehoug & Co., 1957), p. 199.
[549] Quoted from the Johan Bredal's memoirs. Fuglum, *Én skute - én skipper*, p. 111.

from the start, but was in fact not introduced until after September 26th 1908.[550] In other words, there was certainly no unanimous agreement within the government on the *principle* of equal treatment of foreign and domestic business, but rather an eventual agreement on its *practice*.

More important than who came up with principle of equal treatment is the economic and political climate where such a radical idea could take root. Trond Nordby, one of the foremost historians of the Liberal party describes the development of the Liberal party's concession laws as an alliance between farmer's anti-industrialism, social reformism (led by Castberg) and some of the national bourgeoisies desire to reduce harmful side effects of industrialization, primarily monopolization.[551] By introducing a principle of equal treatment into the Castberg-proposal, Nordby concludes that Knudsen and the more industry-friendly group around him were eventually pushed over to abandon the "national line" by the farmers and social reformists.[552] In particular, Nordby emphasizes the role played by the agrarian interests in the whole concession-law movement, with the ultimate objective of controlling and slowing industrialization, stating, "It was in this social group the movement gained its weight".[553] In other words, in Nordby's view, Castberg's radical Georgism could flourish because Norwegian farmers wanted to control industry.

There is no doubt that social reformism and agrarian interests, in addition to anti-monopoly concerns, played a key role in the socio-economic alliance that underpinned Knudsen's Liberal Party, which was also reflected in the Castberg-law. Moreover, as we shall see, agrarian representatives would come to play a key role in defending the concession laws against attempts to turn back the 1909 Castberg-law and its principles once it was passed. Yet, this does not mean that they were necessarily the main factor behind radicalizing the Castberg-laws and introducing a principle of equal treatment. Nordby – like others before and after him – tend to overlook the key role resource nationalism held in legitimizing these concerns and bringing them to the political forefront. Moreover, by highlighting the differences between Bredal and Castberg's proposals as either "national-capitalist" and "anti-capitalist", historians sometimes forget that resource nationalism was still a key objective in the Castberg-law, uniting the at times disparate interests of its political creators.

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[550] Annaniassen, "Rettsgrunnlag og konsesjonspraksis," pp. 146-47.
[551] Nordby, *Det moderne gjennombruddet*, pp. 121-22.
[552] *Venstre og samlingspolitikken*, p. 387. Nordby's conclusion leans heavily on the unpublished memoirs of Johan Bredal, and his accounts of conversations between him and the former Prime Minister towards the end of his life. However, Bredal was hardly a disinterested chronicler in these matters. Given the widespread negative attitude to Knudsen and Castberg's concession laws in the inter-war era, portraying Gunnar Knudsen as partial to Bredal's position in hindsight seemed to suggest that things would have been better if Bredal's proposal had gone through rather than Castberg's
[553] *Venstre og samlingspolitikken*, pp. 412-13.

In general, there has been a tendency among Norwegian historians to overemphasize the political dividing lines within the country in the concession laws, unquestioningly treating the concession law question as a purely a domestic political matter. However, as emphasized earlier, resource nationalism by its very nature always has an important international dimension, as it is so closely tied to international trade. By downplaying the technical challenges of the Bredal-proposal and the possibilities of foreign political repercussions, it is easy to disregards the numerous reasons why a principle of equal treatment was beneficial from a resource nationalist objective.

While Castberg's concession laws introduced new principles, it was also in many ways a logical continuation of the already established policy of regulating foreign ownership of natural resources. As the law proposal underlined, introducing a doctrine of equal treatment held some key practical advantages when it came to regulating foreign investments, rather than separating them based on shareholder nationality.[554] Primarily, there would be no possibility of circumventing the law. In the later parliamentary debate, Prime Minister Knudsen underlined this point, stating that the government had concluded that: "the whole law would be unmanageable, if one should agree to the principle the previous government's proposal to differentiate between domestic and foreign companies".[555]

Moreover, treating foreigners and domestic investors equally would – at least in theory – move the concession laws out of the realm of outright protectionism. Instead, the Castberg-laws would instead be a complete transformation of the existing understanding of private ownership into a continental-inspired concession law system.[556] This could diminish the possibility that Norway's concession laws would be made subject to reprisals from other states, for instance in trade negotiations or against Norwegian shipping.[557]

At the time, both these reasons for strengthening the concession law as a form of regulation of foreign investments, were not a reaction against actual occurrences but instead largely based on

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[554] Ot. Prp. Nr. 1. 1909, pp. 47-48, 55-56

[555] […]hele loven vilde forkjertses, dersom man skulde gaa med paa den forrige regjerings proposition om at skjeldne mellem indenlandske og udenlandske selskaber[…]. Odelstingsforhandlingene 1909, p. 720

[556] It was indeed a stated objective of the Castberg-laws to replace the «outmoded» principle of private property rights over riparian resources. Ot. Prp. Nr. 1. 1909, pp. 46

[557] The law proposal specifically highlights that foreign countries might evoke existing treaties against royalties from mining only applicable to foreigners. Ot. Prp. Nr. 1. 1909 p. 56. Johan Mowinckel, a shipping company owner and Liberal party member, was particularly worried that Great Britain might take unkindly view of restrictions specifically aimed at foreign owned companies, and might take reprisals against Norwegian shipping. Odelstingsforhandlingene 1909, p. 731. The same point had been made by the "Norwegian Chamber of Commerce" an organization of Norwegian businessmen in London, and in a debate in the Norwegian Polytechnical Society, albeit with the intention that concession laws would be relaxed, rather than extended to Norwegians. Byrkjeland, "A/S Bjølvefossen 1905-1931," p. 140.

hypothetical scenarios. There had been no examples of such circumvention within the previous concession regime. Similarly, there had been no overt threats of economic reprisals from abroad. However, it would be rash to cast these concerns aside as mere excuses to increase regulations of domestic industry. For instance, circumvention of the law through Norwegian strawman share ownership did occur later, proving that it was certainly possible.[558] The concession laws were still fairly recent, and had up to that point only been temporary provisions. There was always the possibility that they might come under more pressure at a later stage. As a letter from the Norwegian *chargé d'affaires* in Berlin in 1907 testifies, there were those within the Norwegian business community who expected that the German Empire might with time use future trade negations to have the Norwegian government relinquish its discriminatory laws.[559]

Conversely, the possible damage of a principle of equal treatment to Norwegian entrepreneurship in the capital heavy resource industries was also more or less hypothetical at this stage. There had in fact been no Norwegian enterprise in either mining or large-scale hydroelectricity who had proved capable of operating and competing on the same scale as the foreign owned companies. The way Bredal had set up which shares would be counted as Norwegian created its own inhibitions to the foundation of Norwegian owned companies. Bredal's system only accepted shares owned by Norwegian citizens as Norwegian owned,[560] and not shares owned by other Norwegian companies. Without this, circumvention would have been very easy through shell companies. However, this also meant that it would be difficult to borrow money for a Norwegian company in Norwegian banks, as they could not accept Norwegian shares as collateral, without the risk that the company might turn into a "foreign" company upon a potential default. In addition, politicians with greater economic nationalist zeal regarded the Norwegians with the closest ties to the mining and hydroelectric industries with some apprehension, as they were seen to have a too friendly disposition towards foreign investment and ownership. Thus, leaving the door open to Norwegian owned companies did not necessarily mean there would be many Norwegian owned companies ready to take up the challenge in the immediate future. Yet, it did potentially leave the door open to large scale, permanent acquisitions by foreign investors willing and able to circumvent the law.

Here it is important to remember the centrality of the Right of Reversion to the whole compromise between continued foreign direct investment and national control. This principle had

[558] In the 1920s, the American Aluminium company Alcoa masked its controlling stake in Elektrokemisk A/S by using a Norwegian lawyer as a strawman, in order to circumvent the Concession Laws. See: Knut Sogner, *Skaperkraft: Elkem gjennom 100 år, 1904-2004* (Oslo: Messel forlag, 2003), p. 87.
[559] W. Ditten to Utenriksdep. Dated 02.02.1907. NRA, Utenriksdepartementet, Dd, box 772, folder BI
[560] The only exception being Norwegian municipalities and the Norwegian state

formed a bearing pillar of the Bredal-committee's law proposal. Even though concessions outlined a number of terms to reduce perceived harmful consequences of foreign owned resource industries, only through the Right of Reversion could the Norwegian state ensure that foreign acquisitions of what looked to become the coal-deprived country's central energy resource did not become permanent. This also remained true also for the Castberg-proposal.[561] Even if some other terms proved to be inadequate to fully guard against negative consequences, at least the Right of Reversion would put the resources under full national and democratic control at some point in the future. Moreover, a central point of the Right of Reversion, which was underlined by its proponents time and time again, was that it was a regulation with few immediate consequences, which should make little difference to whether a company decided to invest or not. If this was true for foreign owned companies, then adding the same regulation to Norwegian companies should not be a prohibitive burden for them either.

While there were some new ideological elements in the new proposal, the difference between the Bredal-proposals "national-capitalist" perspective and the Castberg's-proposal "anti-capitalism" perspective, should not be overemphasized. Instead, it is important to recognize the shared resource nationalist objective shared by both. The most fundamental difference between the two proposals was that the Castberg-proposal considered it more important to ensure a secure regulatory framework than providing good terms for Norwegian capitalists, while the Bredal-proposal did not.

Besides expanding the law to cover domestic owned companies, the Castberg-proposal also moved some aspects of the law in a more restrictive fashion. Despite the at times harsh criticism of the previous governments "relaxed" policy, the Castberg's law-proposal did not diverge widely from the Bredal's (see

[561] See for instance statements by Gunnar Knudsen and Johan Ludwig Mowinckel, Odelstingsforhandlingene 1909, pp. See also statements by Minister of Public Works, Nils Ihlen. "Koncessionspolitiken" Tromsø Stiftstidende 1909.08.25

Table 1, p. 146). The law did introduce a Right of Reversion clause to mining concessions, and also reduced the maximum and minimum time limits to 40 and 80. Yet, both the time limits were longer than Knudsen and others had clamoured for in 1907.[562] There was also a slight increase in the minimum taxation of minerals, as well as an introduction of preference for Norwegian insurance. Insofar as the new proposal gave new preferences to rural and agricultural concerns, it was limited to forest concessions. Bredal's proposal had already vastly extended the state's power to restrict private concentration of forest ownership, but Castberg's-proposal moved the limits even further, by introducing a right of first purchase for municipalities on all forest concessions, as well as the possibility of the Norwegian state granting municipalities the right to expropriate forests were ownership was particularly concentrated.

However, in forest concessions there was also an element of more straightforward resource nationalism. Here forest concessions to joint stock companies would be reserved for companies with more than 2/3 Norwegian ownership, in a similar fashion to Bredal's proposal. This is indeed remarkable, given that for mining and hydropower, the concession law argued for treating all joint stock companies equally, regardless of share ownership. However, unlike for hydropower and mining, there was a ready well-developed Norwegian owned timber industry, with both the capital and the technology to exploit the forests. Circumvention indeed remained a possibility; however, this was of less consequence for forest concessions than for hydropower and mining, precisely because there was less difference between the terms a Norwegian owned company had to submit. In particular, there was no Right of Reversion that could either apply or be permanently avoided through circumvention.

[562] See Dokument nr. 69 1906/1907

Table 1: Comparison of Bredal and Castberg's concession law proposals

Policy goals	*Bredal-proposal*	*Castberg-proposal*
Preventing foreign economic/political domination	• Right of Reversion • Only Norwegian companies (hydro, forests) • Norwegian board members • Capital control on Norwegian companies (hydro, mining)	• Right of Reversion • Only Norwegian companies (hydro, forests, mining) • Time-limits, • Norwegian board members • No share ownership distinctions to prevent circumvention (hydro, mining)
Rent-capture (hydropower)	• Right of Reversion (60-99ys) • Tax on non-concessioned power lease over 30ys (max NOK 2.00)	• Right of Reversion (40-80ys) (also machines, buildings and cables) • Tax on all non-concessioned power lease (max NOK 1.25)
Rent-capture (mining)	• Taxes 0.5%-3% of net output	• Taxes 1%-3% of net output • Time limit (40-80ys)
Increasing economic «spillover»	• Preference for domestic workers and materials	• Preference for domestic workers, materials and insurance
Preventing monopolization	• Anti-merger (hydro) • Restrict use of power to certain industries (Op) • Anti-price fixing (hydro) • Construction time limits (5-7) • 5% of power to municipality and state (cost+10%) • Optional right to nationalize (hydro 35ys, mining unsp.)	• Anti-merger (hydro) • Restrict use of power to certain industries • Anti-price fixing (hydro) • Construction time limits (5-7) • 5% of power to municipality and state (cost+10%)
Regulating social conditions	• No payment in kind • Profit from shops to workers • Production stop limits	• No payment in kind • Profit from shops to workers • Production stop limits • Provide plots to workers housing, communal buildings etc.
Public ownership preference	• No specified provisions	• No concession conditions • Right of first purchase to municipalities (forests) • Possibility of expropriation of forests to municipalities
Preference for Norwegian capital	• Demand possibility for N-participation (hydro, mining) (Op) • No terms for 67% N-shares (hydro, mining) • Forests only to 67% N-shares	• Demand possibility for N-participation (hydro, mining) (Op) • Forests only to 67% N-shares
Preference for rural/agrarian interests	• 5% of power to municipality (cost+10%) • Concession required for acquisitions of forests for Norwegian owned companies (100ha) and non-local residents' (500 ha)	• 5% of power to municipality (cost+10%) • Concession required for acquisitions of forests for Norwegian owned companies (100ha) and non-local residents' (300 ha) • Right of first purchase to municipalities (forests) • Possibility of expropriation of forests to municipalities

It would however be the principle of a Right of Reversion for Norwegian owned companies that would prove the proposal's most contentious point. A majority of the parliamentary legislative was

willing to agree to a number of regulatory terms to hydropower acquisitions, but did not accept the Right of Reversion, opting instead for a differentiation of share ownership along the lines proposed by Bredal.[563] This division would also form the main line of the parliamentary debate, which would last for more than 14 days. The opponents of the law saw the Right of Reversion as an unconstitutional, uncompensated expropriation of property, which was likely to harm any possibility of future Norwegian investments in these industries. The proponents on the other hand challenged this assertion on the ground that as the Right of Reversion had already been acceptable for foreign owned property it was not unconstitutional, stating that a strict separation of constitutionality on based on 2/3rds share ownership was arbitrary.[564] On this point, the government's position was actually supported by the most economically liberalist conservatives, who saw the Right of Reversion as illegal, regardless of whether it was set to foreigner or domestic owned companies.[565] Moreover, Castberg and the other proponents argued that a concession system for hydropower was the continental norm, and that history and technology had made the old understanding of private ownership of riparian rights an historical anomaly.[566]

Nevertheless, the force of the government's arguments alone was not enough to prevent even the governing Liberal party from splitting its vote on the issue. Even as the government threatened to resign if the law was not passed, the idea of rewriting a previously accepted form of private property without any sort of compensation to the owners incensed many farmers of the Liberal party. The reaction from the agrarian wing of the Liberal party to the Castberg-laws seem to counter Nordby's suggestion that the principle of equal treatment had primarily been brought into the law on its insistence. Such a law, created by a man with georgist sympathies, looked to establish a foreboding precedence for many farmers. Perhaps one day they would be used to expand such georgist principles to encompass what had indeed been Henry George's main concern, private land ownership. Even a formally leading radical in the concession law issue, Wollert Konow (H), challenged the law proposal as a breach with the fundamental idea that had underlined the rise of the concession law in the first place – restricting foreign ownership.[567] Aasulv Bryggesaa, a leading spokesperson for the Liberal party's agrarian wing,[568] proposed a compromise solution. Fully Norwegian owned hydropower plants below 10,000 hp would not be subject to the right of

[563] Indst. O. II 1909, pp. 6-8
[564] See Odelstingsforhandlingene 1909 pp. 943-1023, 1042-1101
[565] Instead, they supported a time-limit to foreigners, with the possibility of nationalization with remuneration. Ole Andreas Gjørv, "Stortingsdebatten om konsesjonsloven for fosser, bergverk og annen fast eiendom av 18. sept. 1909" (University of Oslo, 1959), pp. 51ff.
[566] Odelstingsforahndlingene 1909, pp. 703ff
[567] Odelstingsforhandlingene 1909, pp. 711-716
[568] See Leiv Mjeldheim, *Den gylne mellomvegen : tema frå Venstres historie 1905-1940* (Bergen: Vigmostad Bjørke, 2006), p. 95.

reversion. This the government reluctantly accepted, if the limit was reduced to 3,000 hp. This would exempt concessions to most private Norwegian owned developments, particularly those carried out by the timber processing industries.[569]

This compromise helped satisfy most of the agrarian wing of Knudsen's Liberal party, with only four representatives defecting on the vote over the Right of Reversion for Norwegian owned companies. Still, the law only passed with a narrow 48 to 43, with the seven socialist Labour party representatives deciding the outcome in favour of the government's proposal.[570] However, when it came to the subsequent vote for Bryggesaa's compromise amendment, the conservatives and centrists decided to stand on principle and voted against the amendment. They would not assent to the idea that the constitutional ban on uncompensated expropriations would only count for property under an arbitrary limit of 3,000 hp. In this, they were joined by the Labour party, which once again decided the outcome. Thus, with the support of the Labour party, the Right of Reversion would be passed in the form that Castberg had outlined.[571]

With the passing of the Castbergian concession laws, the drift away from private ownership of natural resources which began with the 1888-law was in many ways complete. The question whether allowing the government to prevent foreign ownership was a breach of the constitutional ban on uncompensated expropriation had been present already in 1888. At the time, it had been argued that even though it might reduce the value of some private property, regulating foreign ownership was in essence just an extension of the already established principle of regulating foreign trade. Then, in 1906, the government's power had been extended to encompass all joint stock companies to prevent circumvention of the 1888-law. Finally, its powers had been extended once again in 1909, to prevent circumvention of the 1906-law. With the wide-reaching power vested in the executive with the concession laws, it is not hard to agree that the Knudsen government had indeed *de facto* replaced property rights for all undeveloped natural resources with a *Code Civil*-inspired public ownership. Private initiative in these sectors could now only be carried out with an express permission of the government.

All protestations aside, established domestic pro-industry interest groups had been unable to defend private property rights to these natural resources. In a wider sense, it is possible to see the wide regulatory apparatus established with the concession laws as a response to a perceived *market failure*. As Norwegian capitalists had been unable and unwilling to take a leading role in the new

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[569] See statements by Nils Ihlen, Odelstingsforhandlingene 1909, p. 1048
[570] Odelstingsforhandlingene 1909, pp. 1080-1081
[571] The minimum time limit would however be adjusted upwards to 60 years.

capital intensive resource industries, it had not been possible for the Norwegian political establishment to fully unite the ambitions of economic growth from export oriented resource industries and national economic development within a largely free market economy. With no political consensus to let go of either, the solution was to grant the State increased regulatory responsibilities to mollify the 'damages' of the continued integration into international capitalism, a role described by the economic historian Francis Sejersted as a "mitigation State".[572] Yet, a considerable political faction considered that this role could only be carried out properly if all joint stock companies had to adhere to the same laws, regardless of ownership. Liberal concepts of property rights thus had to yield to the needs of a larger economic nationalist agenda.

IV. Implementing equal treatment (1908-1910)

While the new concession law laid down some clear guidelines as to what concession terms should be expected, there was still – intentionally – considerable opening for the government at the time to implement it according to its own judgement. In the list of concession terms listed in the concession law, the wording of the law distinguished between mandatory, recommended and optional terms (see Table 2). Even mandatory terms like the Right of Reversion offered some room for case-by-case discretion, within a minimum and maximum level. Moreover, there was also the ultimate possibility of denying concessions.

Knudsen's progressive faction had not only criticised Bredal's law proposal for being too weak against circumvention from foreigners and too forgiving to Norwegian owned companies, it had also repeatedly criticised the way the Michelsen/Løvland governments had implemented the concession law. Besides the Mjøsa case, the most vitriolic attacks had been over the government coming to terms with the Nils Persson – the foreign "Ore King" monopolist. As Knudsen had stated on the meeting that formalized the Liberal party split, "Foreigners have already taken too large a part of our natural wealth. Now we need to restrain"[573] Thus, even though Knudsen and Castberg had acknowledged that they would not completely rule out foreign capital, from the progressives rhetoric there was every reason to believe that they might take a firmer stance against foreign acquisitions once they came to power. This was also possible after the passing of the Castbergian

[572] «Avbøtingsstat». See Francis Sejersted, *Demokratisk kapitalisme* (Oslo: Pax Forlag A/S, 2002), p. 318.
[573] Mjeldheim, *Den gylne mellomvegen*, p. 98.

concession law. Even with the principle that all companies, regardless of ownership, should be subject to the same list of terms, there was still possible to implement a policy that differentiated based on ownership.

Implementing a stricter policy against foreigners was liable to reduce investment in the resource intensive industries. Such an effect would not be entirely unwelcome by some in the Liberal party. Nordby particularly emphasises the role of Norwegian farmers, who wished to slow down the shift from a predominantly agrarian economy, to an industrialized economy. Ole Andreas Gjørv goes even further, and claims that slowing industrialization in general was fundamental intention behind the Castberg-laws.[574]

Table 2: Types of terms in the 1909 concession law

*H = Only hydropower, M = Only mining, * = Companies could apply for exceptions*

Mandatory	Recommended	Optional
Use only Norwegian workers and functionaries.*	Company should provide reasonable housing and communal gathering places to workers.	A part of future share subscription should be made available to Norwegians
Start construction within 5 years. Begin production within another 7 years. No production stop longer than 5 years. (H)	Company should save a fund for municipal poor relief, as stipulated in the Mining Law of 1900.	Owner can not hold majority of shares in another company engaged in hydroelectric production or consumption.*
No payment in kind to workers, or demands to have workers provide their own tools		Power should not be used for certain types of industry.*
Company owned trade-posts should be non-profit.		Access for state to buy 5% of power produced at cost+20
No cartels or monopoly agreements to raise prices for consumers		Right of Reversion to include machinery
Access for municipality to buy 5% of power produced at cost+20%. (H)		Royalty up to 3% of net output. Set every 10 years (M)
Time-limit 60-80 years with Right of Reversion		
Mining to be carried out rationally, according to applicable law (M)		

However, even before the new concession law had been introduced, there were clear signs that the new government did not intend to divert much from their predecessors' policy on foreign direct investments. Just before the Knudsen-government came into office, the German chemical giant BASF applied to obtain and regulate two high-drop watercourses on the western Norwegian

[574] Gjørv, "Stortingsdebatten om konsesjonsloven 1909," p. 78.

coast, and to use the power generated from them to produce nitrates. Put together, the two waterfalls could yield nearly 120,000 hp, and the whole project (factories included) was estimated by BASF to cost almost £ 2,000,000.[575] After a four-day meeting with a representative from BASF and the new minister of public works, Nils Ihlen, the two parties managed to agree on terms. The terms however, were largely comparable to the ones given to A/S Kinservik the year before. The right of reversion was set to 75 years. Ihlen had however managed to secure one notable victory. BASF had agreed to a regulation fee of NOK 1.00 per extra horsepower obtained from regulating the watercourse. As low water flow was set 10,000 hp in both waterfalls, this would mean an annual income to the state of about £ 5,500 when both plants would reach full production.[576]

However, granting two further concessions to arguably the most powerful chemical company in the world, who was already in a partnership with Norsk Hydro in the huge facilities being constructed in Telemark, raised more than a few eyebrows. Given the size of the existing Norsk Hydro/BASF operations, granting these further concessions seemed at odds with the progressives' stated anti-monopoly policy, a point that was made by both the conservative and socialist opposition.[577] If there was ever a reason to fear the power of a foreign company, surely BASF must be about as dangerous as they come.

So what was the actual view of the Knudsen-government on the dangers of foreign monopolization? Was the anti-monopoly stance simply a rhetorical tool with little consequence for actual policy? Judging from the statements made by Ihlen at the time, it seems that the Minister of Public Works had been misled by BASF as to the extent of the cooperation between Norsk Hydro and BASF. BASF assured Ihlen that the extent of their cooperation was limited only to the joint venture in Rjukan. Thus, Ihlen later argued, that he was under the impression that the concession granted to BASF was given to a separate entity from the Norsk Hydro developments in Telemark, which were only united into the same operations following a subsequent agreement.[578] While it was true that the agreement between BASF and Norsk Hydro as to how the costs of different riparian rights should be split between the two parties had yet to be finalized, there was a clear understanding in both companies that the their riparian right would be pooled in a future joint venture.[579]

Whether duped or not, Ihlen did not let the experience change the government's policy in any way. The year after, another company, A/S Lysefjord, applied for another large concession for

[575] NOK 36,000,000. See St. prp. nr. 90 1908, p. 2, St. prp. nr. 91 1908, p.3.
[576] NOK 100,000
[577] See statements by Torgeir Vraa, Waldemar Brøgger, Fredrik Stang and Christian Holtermann Knudsen. Stortingsforhandlingene 1908, pp. 3634-3637, 3645-3655
[578] See statements made by Nils Ihlen 13.09.1909. Odelstingsforhandlingene 1909 pp. 1903-1907.
[579] For the Norsk Hydro/BASF deal, see: Andersen, *Hydro 1905-1945*, pp. 72-106.

around 100,000 hp, which would also be used to produce nitrates.[580] Exactly what links the company had to BASF and/or Norsk Hydro is not entirely clear,[581] but in its application the company stated that it intended to produce nitrates with BASF's Schönherr arc process. There was thus every reason to assume some form of cooperation between the company and BASF. Yet, Nils Ihlen proceeded to approve a concession on practically the same terms as the concessions given to BASF the previous year. This concession did however include a term stating that a majority of the shares could not be owned by anyone who owned, or leased power from, another Norwegian hydropower plant without permission from the government.[582] This term had been introduced as an anti-monopoly clause in the Castbergian-law, but as Nils Ihlen himself admitted, it gave "no significant assurance as to who will come to own these shares in the future".[583] In other words, the Knudsen-government was willing to grant a further concession to a company who could become part of the BASF/Norsk Hydro-combine, which it estimated already controlled at least 600,000 hp. This amounted to about 10% of the governments estimated hydropower potential of the country.[584]

The three large hydroelectric concessions granted during the Knudsen-government prove the new government's willingness to continue the "harnessing" policy of its predecessors. Indeed, Knudsen himself had announced that his government would follow such a strategy in a speech to his party, not long after taking office.

> It is of course not the intention of the Liberals, as it is not the intention of this current government, *to bar the access of foreign capital*, for foreign enterprise to come into [this] country and utilize our waterfalls and our mines. The foreign capitalists should be welcomed to this, *when they accept our terms*.[585]

Here the government followed the same logic that had been presented in the Bredal-committee report, that there was an upper limit to foreign ownership of Norwegian natural resources, but that

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[580] St. prp. nr. 114, 1909, pp. 2-3

[581] The company had not acquired the necessary capital when it applied for a concession. After the concession was granted, the company was sold to A/S Elektrokemisk, a hydropower holding company controlled by Sam Eyde. Erling Petersen, *Elektrokemisk A/S 1904-1954* (Oslo: Elektrokemisk, 1953), p. 54; Gunnar Nerheim, *"Ingen skal fryse med kraft ifra Lyse" : historien om Lyse kraft 1947-1997* (Sandnes: Lyse kraft, 1997), pp. 46-47.

[582] St. prp. nr. 114, 1909, p. 10

[583] «[…]ikke nogen væsentlig betryggelse for, hvem der kommer ti i fremtiden at være eier af disse aktier». Stortingsforhandlingene 1909, p. 3190. His point was effectively proven later as the company was sold to A/S Elektrokemisk without informing or applying for a further concession.

[584] The governments estimate of BASF/Norsk Hydro's size and the country's total hydropower potential is based on statements by Prime Minister Knudsen in 1909. See Odeltingsforhandlingene 1909, p. 1929

[585] «Det er selvfølgelig ikke venstres mening, som det heller ikke er den nuværende regjerings mening, *at utelukke adgangen for utenlandsk kapital*, for utenlandsk foretagsomhet til at komme ind I landet og utnytte baade vore vandfald og vore gruber. Dertil skal de utenlandske kapitalister være velkomne, *naar de akcepterer vore betingelser*.» Gunnar Knudsen and Johan Castberg, *Politiske Foredrag ved Venstrestevnet i Fredrikstad den 21 juni 1908* (Kristiania: Norges venstreforening, 1908), p. 13. Emphasis in original.

this limit had indeed not been reached yet. As Knudsen stated during the heated debates following the concessions to BASF:

> It is our opinion, that as long as the Norwegian people does not have sufficiently strong capital to exploit our natural resources, we should acquiesce to foreign companies and foreign capital doing it; but what separates us [the Liberals] from the [political] right is that we want that it will one day become the property of the country and its inhabitants.[586]

Trying to prevent monopolization in the short term though a selective concession policy was according to Knudsen likely to prove a futile venture. Instead, he argued:

> The safest solution to the creation of these trusts- and monopolies is the state taking it [natural resources] over. This is the only and safest solution to these questions. This is why we will enforce the Right of Reversion so that one can be sure that these mighty resources will one day fall on the hands of the public.[587]

In other words, if the concession laws could be made safe from circumvention, foreign investments was both necessary and beneficial to the economic development of the country. As the Knudsen-government considered it difficult to control monopolization by controlling who actually owned a company, they instead relied on controlling the consequences. The Right of Reversion would ensure long-term national and public ownership, and the clauses on mandatory relinquishment of power to the state and municipalities would both ensure supply to local consumers, and prevent price gouging. Moreover, the waterfalls in question were all located on the west coast, which had a much higher hydroelectric potential per head than the flatter and more populated east. The size of these proposed investments relative to the Norwegian economy should be kept in mind. According to the (albeit rough) estimates given during the concession applications, the three energy intensive industries would cost the investors roughly £ 3,350,000,[588] an amount equivalent to over 4% of Norwegian GDP in 1910.[589]

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[586] «[…]det er vor mening, at saa længe det norske folk ikke er kapitalsterkt nok til at udnytte vore naturherligheder, saa faar vi finde os i, at undelandske selskaber og udenlandsk kapital gjør det; men det er det, som skiller os fra høire, at vi vil, at det en dag skal falde til landet og til landetsindvaanere[…]». Odeltingsforhandlingene 1909, p. 1936.

[587] «Den sikreste løsning paa disse trust- og monopoldannelser er, at staten overtager det. Det er den eneste og sikreste løsning paa disse spørsmaal. Derfor er det ogsaa, vi vil hævde hjemfaldsretten, for at man dog kan være sikker paa, at engang falder disse mægtige naturkræfter i samfundets hænder.» Odeltingsforhandlingene 1909, p. 1917

[588] NOK 61,000,000.

[589] Norwegian GDP in 1910 has been calculated to 1,435,000,000. *Historisk statistikk 1994*, (Oslo: Statistisk Sentralbyrå, 1994), Table

The Knudsen government also continued an overall welcoming approach to foreign mining investments, insofar as it did not deny any concession applications. However, as advertised when the government took office, the concession terms would be made stricter. Indeed, the principle of setting a Right of Reversion-clause to foreign mineral concession was introduced immediately, before the Castberg-proposal had been completed in October 1908. The Knudsen-government also heightened the concession taxes for minerals. Here it set a standard of a tax equivalent of roughly 3% of net extraction value in the long term, but for some concessions the company would be except during the initial start-up phase.[590]

As Knudsen's Liberal Party government embraced the "harnessing" strategy, it was now the progressives' turn to defend its merits. While the conservatives and the socialists both attacked the government for a policy that appeared inconsistent with what it had claimed when in opposition, the conservatives never actively challenged the "harnessing" strategy, and the socialists were too few to make an impact themselves. Instead, the challenges to the governments' concession practice came from within Liberal party.

Whereas much of the progressive wing of the Liberal party had aligned with farmers to challenge the concession policy of the Michelsen/Løvland governments, the Knudsen government was now heavily criticised for not attending adequately to rural needs. The harnessing policy established the precedent that the natural resource industries warranted special taxes and regulations, in order to compensate for a number of negative side effects. However, both the taxes and the Right of Reversion would fall to the state. This did not sit well with a number of rural representatives, who wanted more of the benefits to fall to the districts were the "damage" was actually done.[591] Simply compensating for economic damages to local property owners was not enough. Industrialization might lead to new economic burdens on local municipalities, particularly as they would also come to bear the brunt of unemployment following sudden work stoppages. However, the demands were also linked to many of the agrarian representatives' larger unease with industrialization of the countryside in general. In their eyes, the new industry would radically transform the local communities into noisy, dirty places full of restless industrial workers from other parts of the districts, which would also marginalize the local political power of the existing

[590] See for instance the concession granted to the British owned *Birtavarre copper mines*. "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913," pp. 200-17.
[591] See statements by Hans Bergersen Wergeland, Sjur Torleifsen Næss, Ellig Eriksen Wold, Lars Knutson Liestøl, Eukert Gerhard Schanche and Sigmund Kolbeinsen in the Tyin-Matre case. Stortingsforhandlingene 1908, pp. 3616-3625, 3632-3634, 3637-3638, 3643-3645, 3650-3651

population. All this warranted some compensation for the more “intangible” damage done to these communities.

As previously noted, it was particularly the issue of river regulations that became most controversial, as it so clearly pitted farming interests against the interest of power generation. Here, *what* was being expropriated and submerged mattered more than *who* owned the companies who did it. The only concession case rejected in the Storting during Knudsen’s time as Prime Minister was the proposal to increase the regulation of Otteråen – a mainly Norwegian financed project. The regulation would increase the yield of the three existing hydropower plants by 19,000 hp, two of which were owned by Norwegians.[592] If further falls were developed, the regulation could increase the hydroelectric potential of the whole watercourse by 80,000 hp. However, this prompted furious protests from one of the affected municipalities. Based on these protests, a group of rural Liberal party members joined with the socialists and rural representatives from the conservatives and voted 57 to 50 to remove the controversial lake from the regulation concession.[593] Removing the lake from the regulation plan would make the whole venture much more expensive, and the plan was thus rejected by the applicants.[594]

The Otteråen-case showed the tension inherent within the political alliance that underpinned the radical natural resource policy of the Liberal party. However, this was more the exception than the rule. Largely, the Knudsen-government and its supporters were united in a harnessing strategy that welcomed foreign direct investments and continued growth in the natural resource intensive industries, but on terms designed to ensure long-term national ownership, prevent monopolization, secure some workers’ rights and capture some of the resource rents for the public sector. Under the Knudsen-government, no hydropower or mineral concession application was denied, and besides the Otteråen-case, no applicant withdrew from negotiations on the ground of not accepting the concession terms. This does not mean that no companies who might otherwise have considered investing in Norway shied away due to the concession laws. Yet, from the way the Knudsen-government practiced the concession law, there is no indication that it intentionally followed a course intended to slow down growth in the resource intensive industries.[595] Besides

[592] St. prp. nr. 84, 1909. The third hydropower plant belonged to the factory Vigeland Bruk, which was owned by British Aluminium Company.
[593] Stortingsforhandlingene 1909, pp. 3344-3345
[594] St. prp. nr. 120. See also Sigmund Skomedal, *I skiftende tider og inn i en ny tid : fra Kringsjaa til Urevatn : Otteraaens brugseierforening gjennom 100 år 1900-2000* (Kristiansand: Otteraaens brugseierforening 2000), pp. 28-29.
[595] This conclusion is shared by an earlier study of the Knudsen-governments concession policy. See Annaniassen, "Rettsgrunnlag og konsesjonspraksis."

extending the regulations to Norwegian owned companies, there was overall little difference between the Knudsen-governments natural resource policy and that of the previous regime.

V. Trying to turn back the tide: Conservatives and the principle of equal treatment (1910-1911)

The Knudsen-governments principle of equal treatment remained highly controversial, and the push back came almost immediately. The issue featured prominently in the 1909 election, which the liberals lost. The Liberal party and Castberg's Labour Democrats only obtained 48 representatives. The Conservatives and the newly formed centrist National Liberals[596] on the other hand now formed a majority with 64 representatives.[597] Based on this victory, the Conservatives and the National Liberals formed a coalition government headed by Wollert Konow (SB).[598] Many, especially among the conservatives were eager to use their new won power to repeal the Castbergian concession laws, and replace them with something more akin to the Bredal proposal. However, actually turning back the legal framework set up by the Liberal party proved to be politically challenging, and eventually largely failed.

One of the first signs that turning back the Castbergian laws would not be a straightforward matter came already in Konow's inauguration speech. Much to the consternation of the laws most ardent opponents, the new government would not immediately take on the Castberg-laws. Instead, Konow stated that the government would first seek to rework the Watercourse law to adhere to the constitutional ban on uncompensated expropriations. If this were successful, the government would then move on to rework the concession law to fit the Watercourse law.[599]

In other words, Konow's government wanted to turn back the Knudsen-governments transformation of recognizing private ownership over riparian rights to a continental concession laws system. Castberg had prepared a proposal for a Watercourse law in 1909, which went even further than the Concession law in recognizing the georgist principle of a public claim on the economic rents

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[596] No. *Frisinnede Venstre.* This party was formed by the remains of the Liberal party which had been loyal to Løvlands centrist government.

[597] The Labour party increased its presence from 10 to 11.

[598] Wollert Konow (SB) shared the same name as his cousin, the previously mentioned Liberal Party MP, Wollert Konow (H).

[599] Kaartvedt, *Drømmen om borgerlig samling 1884-1918*, 1, pp. 319-20; Fredrik Stang, *Erindringer fra min politiske tid* (Oslo: Grøndahl & Søn, 1946), pp. 137-38.. This most of this account was written in the winter of 1912-1913.

from hydropower regulations.[600] However, due to the Storting session coming towards an end when the proposal was presented, the issue was postponed to 1910, and then promptly retracted when the centre-right alliance came to power. When the new minister of justice, Herman Scheel presented his own counter proposal in 1910, the georgist elements had been thoroughly expunged.[601] All duties on hydropower regulations should strictly be set to cover tangible economic damage, and the government would have no right to expropriate the regulation dams without compensation once the time limits expired. However, property owners whose properties would be expropriated by a hydro regulation would instead have the right to receive part of the value increase resulting from the regulation. With the Konow-government's new law, municipalities or the state would not have any right to claim a share as representatives of the "public", besides technical regulations, hydropower regulations would be solely a private affair.

As many of Konow's allies had foreseen, reworking the Watercourse law first was a poor strategy to reintroduce the principle of private ownership rights to rivers. Hydropower regulations had always been the most controversial aspect for farmers, who also made up an important part of both the Conservative Party and the National Liberals.[602] Whereas there had been great scepticism among farmers and rural representatives of the blatant way Castberg's concession law reformed private property to public property, they were not ready to accept that hydropower regulations was more or less solely a private concern.[603] That only property holders had the right to obtain a share of the increased value, while the rest of the effected community would have to do with reparations for quantifiable damages, was too limited an interpretation. Most rural representatives wanted at least some form of specific taxation to provide for the intangible damages, as well as to bolster the municipal economies for possible increased economic burdens that might follow from infrastructure and work stoppages related to industrialization.

Consequently, the parliamentary law-committee rejected Scheel's strict private property principles.[604] Instead, the law committee presented a watered down compromise, which paid lip service to the principles of private property, but retained the fiscal and "confiscatory" elements that had been established in practice since the Mjøsa-case of 1907. This included special regulation duties for both the state and municipalities, without adhering strictly to any arbitration based on actual quantifiable economic damage, as Scheel had envisioned. Thus, while regulation duties were

[600] Ot. Prp. nr. 2, 1909
[601] Ot. Prp. nr. 44, 1910
[602] Thue, *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, p. 162; Kaartvedt, *Drømmen om borgerlig samling 1884-1918*, 1, pp. 321-22.
[603] See Indst. O. I, 1911
[604] Indst. O. I, 1911

referred to as reimbursement for damages, they could as easily be used for fiscal ends. In other words, public institutions retained the right to some sort of *rent-capture* from watercourse regulations. The law committee's modification also effectively reintroduced the Right of Reversion for water regulations as the state had the right to take over the regulation works free of charge if the parties could not agree on new regulation terms when the time limit expired.[605] Moreover, the committee proposal also reintroduced the practice of economic nationalist and anti-monopoly terms familiar from the concession laws, such as preferred access for Norwegian personnel and materials, as well as the possibility for the state and the municipality to rent some of the electricity at fixed cost plus rates.[606]

When it became clear that the parliamentary law committee had rejected the essence of the Scheels proposal, Konow (SB) dithered. Leading conservative newspapers urged him to stake the government's survival on having Scheels proposal accepted without amendments, dramatically paraphrasing Madama Butterfly in that "[those] who cannot live with honour must die with honour."[607] However, governmental *seppuku* did not tempt Konow (SB), who realized it would likely come to this if the government would threaten to resign on an unaltered version of Scheels proposal.[608] Instead, the government chose to focus its prestige on the wording of §1, which underlined that riparian rights were private property in principle, rather than focusing on the subsequent paragraphs which undermined it in practice.[609] Thus, following another heated parliamentary debating marathon, The Storting passed the parliamentary law committees amendments with only minor altercations.[610]

The rematch over the concession laws in 1910-1911 ended with what in reality was a resounding defeat for the principle of private ownership of riparian rights. As the previous years had shown, natural resource rents had been thoroughly politicised. As farmers and rural interests occupied a key centre ground in Norwegian politics, the new centre-right government could not muster the support needed to turn back this tide, as this would effectively mean that rural representatives would have to relinquish the control over natural resources, as well as the practice of municipal remuneration, which they had obtained over the preceding years. The liberalist and industry friendly wing of the centre-right alliance on the other hand, continued to be tainted by the

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[605] §13. Indst. O. I, 1911, p. 120
[606] §11.9 and §11.10. Indst. O. I, 1911, pp. 118-119
[607] "Industriens fremtid i Norge" *Morgenbladet* 19.05.1911.
[608] Kaartvedt, *Drømmen om borgerlig samling 1884-1918*, 1, pp. 319-20; Leiv Mjeldheim, *Ministeriet Konow, 1910-1912 : ein studie i parlamentarisme og partipolitikk* (Oslo: Samlaget, 1955), p. 77.
[609] See statements by Bratlie and Konow (SB) Odeltingsforhanlingene 1911, pp. 291-309. See also *Ministeriet Konow*, pp. 77-80.
[610] Besl. O. nr. 60, 1911, Besl. L. nr. 73, 1911

fact that a Watercourse law which favoured unencumbered access to resource rents for private owners, would also mean a liberal regime for foreign owned industry.[611] Foreign owned companies did not only still completely dominate the hydroelectric-intensive industries. They were also dominant among the privileged group who had managed to secure their riparian rights before the panic law of 1906 had taken effect, and thus avoided both the Right of Reversion and mandatory power relinquishing. Thus, the Watercourse Act served as an important control and rent-capture tool for foreign owned industry.

VI. Political consistency or democratic flexibility? (1910-1912)

While the Conservative-National Liberal effort to alter the Watercourse Law failed, the government still held the power to influence natural resource policy through its implementation of the 1909-concession law. In doing so, the Konow (SB)-government would be faced by the dilemma posed by all governments set to interpret the concession laws, namely how to balance the government's desire for a different policy with the desire for a consistent, fair and predictable concession implementation.

This was not of course a new problem, but had been a recurring issue in the whole "harnessing-strategy". Since the first "panic laws" in 1906 had not set any clear guideline for concession policy, the Norwegian governments established a concession practice somewhat ad hoc through negotiations with the applicant companies. As new policy issues cropped up, new terms had been introduced, with both concession proposals and concession practice created in tandem. This practice was continued by the Knudsen-government, as the principle of Right of Reversion and no capital control had been introduced in practice in anticipation of the permanent concession law. While the governments had generally stuck to a policy principle once established, the idea of an evolving provisional concession policy was criticized by both sides of the political aisle. The right criticized the uncertainty this generated for investors, while arguing for stricter principles to avoid handing out too many "cheap" concessions before The Storting could form a firm base line.

Yet, as previously mentioned, both proposals for a permanent concession law also left considerable room for policy differentiation. Thus, it was possible that concession policy might shift radically as governments changed, due to both overall differing political outlook and due to other less principled real political considerations. Such arbitrariness and uncertainty particularly worried Norwegian industry interest groups. Thus, the *Polytechnical Society's "*Watercourse group*"*, one of

[611] See for instance statements by Valentin Valentinsen and Oddmund Vik, *Odeltingstidene* 1911, pp. 310, 366

the main interest groups for Norwegian engineers engaged in the energy intensive industries, had lobbied the government to take the *implementation* of the concession law out of the purview of the ministers, and rather giving it to a permanent technocratic governmental body.[612] The idea was initially rejected by the Bredal-committee in 1907, however the idea was reintroduced in Castberg's aborted Watercourse law, and added as an amendment to the Castberg's concession law by the parliamentary law-committee for both hydropower and mineral concessions.[613] Here, however, the special commissions would only have an advisory role.

The idea of special commissions to handle all concession applications also touched upon another vital issue, the need for some insight into the industries they were set to regulate. Following the Persson dispute under the Michelsen-government, critics from the right did not only challenge the Bothner's judgement, but rather the whole ministry of justice as lacking the necessary insight to properly handle concession cases. In light of this, the Løvland-government had not only replaced Bothner, but also reorganized ministerial authority regarding concession laws. Subsequently, hydropower concessions would be handled by the Ministry of Public Works (who already handled the state's hydrological branch), mineral concessions would be handled by the Ministry of Trade and forest concessions would be handled by the Ministry of Agriculture.[614] However, lack of thorough, reliable, and disinterested understanding of the industries remained a problem. This was particularly the case for mineral concession cases, where the government frequently turned to outside consultation.[615]

The Knudsen government had outlined a scheme where the Watercourse Commission should have four members representing different backgrounds and interest groups relevant to hydropower concessions, in addition to the Watercourse director. One member should represent farming or forestry, one should represent industry and two should have a background in engineering and/or timber floating.[616] As for the Mining Commission, there were no interest group specifications, but instead only three representatives with a background in mining engineering and/or mining industry.

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[612] See Polyteknisk Forenings Vasdragsgruppe to the Storting, dated 12.06.1908. Appendix 2, Dokument nr. 65, 1908.
[613] Indst. O. II, 1909, pp. 87-89
[614] In his diary, Johan Castberg noted that he had been promised to have concession implementation returned to the ministry of Justice when he took office. Whether true or not, the Knudsen government in any case retained the division established under Løvland. Kåre Fasting, *Nils Claus Ihlen : 1855 - 24. juli - 1955* (Oslo: Gyldendal, 1955), p. 58.
[615] The Persson case offers a good example of this. Also, see Indst. O. II, 1909, p. 89
[616] Mentioned in Polyteknsik Forenings Vasdragsgruppe to Ministry of Public Works, dated 27.11.1909. NRA, Industridepartementet, Avdelingen for vassdrags- og elektrisitetsvesen, Ek, Box 12

Even with only an advisory role, it was possible that these new special commissions would come to play a key role in shaping future concession policy. Seating these committees with people with a sympathetic view of resource intensive industries thus became an important issue for the Norwegian industry interest groups after the Castberg concession laws had passed the Storting. Regardless of whether their advice had been warranted or not, a number of industry and engineering interest groups began to forward candidate suggestions to the government, which, judging by the many similarities in the candidates presented was at least partially a coordinated effort.[617]

While the outline of the two commissions looked somewhat technocratic on paper, the Knudsen-government had no intention of letting them be dominated by people inclined towards a liberal interpretation of the concession law. In addition to appointing O.W. Lund, who had been suggested by several interest groups, and Harald Bugge, one of the head of Brugseiernes Landsforening, the government appointed Lars Liestøl, a veteran Liberal party member one of the most outspoken supporter of rural interests in concession cases, as the appointed representative for agriculture/forestry.[618] Moreover, as one of the two engineers, the government chose Valentin Valentinsen, who in addition to being an experienced engineer was also a Liberal party politician and a committed Georgist.[619] The Mining Commission was not divided into different expertise or interest group categories, but the government made sure to avoid appointing too many representatives with close ties to foreign owned mining industry. Instead, the group was dominated by representatives from the mining bureaucracy, the state owned silver mine Kongsberg and the Norwegian owned copper mine at Røros.[620]

The diverse backgrounds of the commission members would also be reflected in their policy recommendations. This was most marked in the Watercourse Commission, where the two Liberal party members would repeatedly argue for tougher terms, and the two other members favouring liberal terms, with the Watercourse director leaning one way or the other on a case-by-case basis.

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[617] Brugseiernes Landsforening to Minstry of Public Works, dated 14.10.1909. Norske Elektricitetsværkers forening to Ministry of Public Works, dated 30.10.1909. Norske Ingeniør- og Arkitekt-Forening to Ministry of Public Works, dated 29.11.1909, Polyteknsik Forenings Vasdragsgruppe to Ministry of Public Works, dated 27.11.1909, Den Norske Fællesforening for Haandværk og Industri to Ministry of Public Works, dated 29.11.1909. NRA, Industridepartementet, Avdelingen for vassdrags- og elektrisitetsvesen, Ek, Box 12

[618] Lars Liestøl had also been the sole member of the parliamentary law committee to vote against the creation of the Watercourse Commission.

[619] Valentinsens Georgist inclinations is metioned in Thue, *For egen kraft : kraftkommunene og det norske kraftregimet 1887-2003*, p. 52.

[620] The sole exception with clear links to foreign owned mining was Henrik Kristian Borchrevink, a deputy-representative, who was managing director in the German owned zinc company Bergaktieselskapet Norge. He was however countered by another deputy-representative, Johan Didrichsen, who was a board member and financier of the Norwegian group in A/S Røstvangen, along with Gunnar Knudsen himself. See *Departementstidende* 1909, p. 810

This division within the Watercourse Commission is best illustrated in the four water regulation cases decided in 1912. The Konow-government's reworked Watercourse Law of 1911 for considerable case-by-case variation on the two aspects most closely related to resource-rent capture and redistribution, namely concession taxes and time limits. Concession taxes could be set to vary between NOK 0.10 and 1.00 per hp. annually, for both effected municipalities and the state. The Right of Reversion could be set at anything between 60 and 80 years – the same limits given by the Castberg-law. Yet, there was no clear principles as to what criteria's should decide where within the band the Commission should draw the line. The four times where regulation taxes had been introduced before were all set at NOK 1.00 per hp. gained from the regulation. Except for in the Glomfjord case, the municipalities effected by the regulation overwhelmingly argued for the highest possible taxes and the lowest time limits, while the industry, and the local councils were the industry was located argued against them.[621] Thus, the Liberal party members argued for higher taxes and sometimes shorter time-limits, albeit without necessarily following the municipalities' demands for the strictest allowed by law. Conversely, the two other appointed members argued for taxation on the lower end of the scale. Notably, all members of the Watercourse Commission followed a practice of setting taxation rates individually on a case-by-case basis, rather than trying set a universal taxation standard.

[621] In the case of Otteraaen, out of the ten municipalities consulted, eight argued for maximum taxation, one did not specify, and one was against any water-regulation. In a similar vein, four argued for the shortest possible time limit, two suggested 70 years, one suggested 80 years, and the rest did not specify. St. prp. nr. 120, 1912. In the Arendal-case, four argued for maximum taxation, three did not specify, and one was against the whole venture. St. prp. nr. 119, 1912. In the Randsfjord case, three favoured maximum taxation, while two others suggested 0.50 and 0.60 respectively. St. prp. nr. 116. Glomfjord differed from the three others in that it was located in Northern Norway, and did not significantly affect many existing settlements.

Without any unanimous decision from the Watercourse Commission, the decision was thus pushed forward to Ministry of Public Works. Rather than following a the majority decision of the Watercourse Commission, the conservative Minister of Public Works Nils Olaf Hovdenak, chose inn all four cases to strike a compromise between the divergent opinions in the Watercourse Commission, although leaning decidedly more towards the low-taxation end of the scale (see Table 2). Nevertheless, when the cases were taken to The Storting, new tax rates and time limits were proposed by the parliamentary law committees. Once again, there was little effort to adhere to the rates proposed further back in the decision process chain (the Watercourse Commission and the Minister of Public Works), or to the other cases being processed at the same time. Instead, the law-committees set new compromise proposals, with the majority leaning back towards higher taxation, but often with one or more low-tax dissentions. There was however one crucial exception, as the time limits were all set to 75 years. The final decision was thus left to parliament, who settled on yet new taxation levels, with narrow voting margins in all but the Glomfjord case.

Table 2: Regulation concessions decided in 1912

Name	**Glomfjord A/S**				**Arendal Vasdrags Brugseierforening**				**A/S Randsfjord ++**				**Otteraaens Brukseierforening**			
Nationality	Swedish				Norwegian				Norwegian				Norwegian/UK			
Power	44 000 hp				69 000 hp				17 000 hp / 13 000hp				101 700 hp (pot.)			
Tax & timelimt	M	S	OT	Y	M	S	OT	Y	M	S	OT	Y	M	S	OT	Y
Watercourse Com. Majority	0,10	1,00	2,00	60y	0,20	0,10	0,50	80y	0,10	0,10	0,50	80y	0,10/ 0,25	0,10/ 0,25	0/ 1,00	80y
Liestøl & Valentinsen	0,50	–	–	–	0,50/ 0,75	0,25/ 0,50	1,00	70y	0,75	0,50	2,00	80y	0,25/ 1,00	0,50/ 1,00	0,50/ 2,00	70y
Bugge & Bødtker/Lund	0,10	0,10/ 0,50	0,50/ 1,00	80y[i]	0,10	–	0,25[ii]	–	–	–	–	–	–	–	–	–
Ministry of Public Works	0,10	0,60 iii	1,00	75y	0,20	0,10	1,00	80y	0,10/ 0,60	0,10	0	80y	20/ 50	0,10	0	80y
Parliamentary Committee	0,10	0,70	1,00	75y	0,70	0,50	2,00	75y	0,75/ 1,00	0,20	2,00	75y	0,40/ 1,00	0,10/ 0,20	1,00/ 2,00	75y
Right dissent	–	–	–	–	0,20/ 0,50	0,10	1,00	80y	0,10/ 0,60	0,10	1,00	–	0,20/ 0,50	–	0,50/ 1,00	80y
Left dissent	–	–	1,00	60y				60y	–	–	–	–	–	0,20	–	–
Stortinget	**0,10**	**0,70**	**1,00**	**75y**	**0,50**	**0,40**	**2,00**	**75y**	**0,50/ 0,80**	**0,10**	**2,00**	**75y**	**0,40/ 1,00**	**0,10/ 0,20**	**1,00/ 2,00**	**75y**
Voting[iv]	*109-11*				*61-57*	*62-57*	*81-38*	*Ret.*	*68-49*	*59-58*	–	*Ret.*	*71-49*	*90-30*	*93-27*	*80-40*

M = Municipal tax | **S** = State | **OT** = One-time tax | **Y** = Time limit (years)
All taxes listed in NOK.

[i] Only proposed by Bødtker
[ii] Only proposed by Bødtker
[iii] The duty was set at NOK 0,40, with another NOK 0,20 added as compensation for the state's property rights in the waterfall.
[iv] In many cases there were several consequtive votes between alternative proposals. The one listed is the decisive vote.

The four regulation cases decided in 1912 set a number of significant precedents. First of all, there was no attempt at any level to set a regulation tax standard, thus cementing a norm that taxes should be set on a case-by-case basis. Moreover, there lack of consensus in the Watercourse Commission as well as the lack of adherence to its recommendations further down the decision line also firmly buried any notion that the commission would act as a decisive institution stabilizing Norwegian concession policy. Rather than the commission shaping a stable pro-investment technocratic consensus the Norwegian business interest groups had hoped for, it would instead mirror the continuing tension over what constituted a sound natural resource policy. Norwegian concession policy would continue to be shaped *ad hoc*, even after the introduction of a permanent concession law, in a somewhat messy, unpredictable, but ultimately rather democratic fashion.

VII. A return to differentiation (1910-1912)

As regulation cases had to be approved by a majority in the Norwegian parliament, they were naturally more politicised and less easy for the government to control. However, during the centre-right governments of Wollert Konow (SB) and his successor Jens Bratlie, the government introduced new policy principles into its implementation of the Castberg-laws. As previously mentioned, the idea of equal treatment of foreign and domestic owned companies was greatly resented by the political centre-right. However, the government was not prepared to abandon the harnessing strategy towards foreign direct investments, and welcomed new foreign investments into both hydropower (Swedish owned Glomfjord) and mining. Instead, the Konow-Bratlie governments sought to create more favourable conditions for Norwegian owned industry.

A number of developments in the beginning of the 1910s made a policy towards Norwegian owned industry seem like a more viable option than it had been in the preceding years. *Det Norske Aktieselskap for Elektrokemisk Industri* (Elkem), a waterfall holding company controlled by Sam Eyde, had previously been a closely interwoven sister company to Norsk Hydro, owned largely by the Wallenbergs. However, as Norsk Hydro had evolved, the waterfalls remaining in Elkem seemed less necessary to Hydro's future development. Thus, when Sam Eyde was dismissed as general director of Norsk Hydro following a series of disagreement with its French owners and German partners, the Wallenbergs offered to sell Elkem to Eyde, who accepted together with a number of other Norwegian investors.[622] Among other waterfalls, Elkem owned a share majority in A/S Arendal Fossekompani, which Eyde used to create one of the first industrial scale hydroelectric companies

[622] Birger Dannevig, *Aktieselskabet Arendals Fossekompani : 1896-1911-1961* (Arendal: Arendal Fossekompani, 1960), pp.20-22; Sogner, *Skaperkraft*, pp. 27-37; Petersen, *Elektrokemisk*, pp.48-50.

with a Norwegian shareholder majority.[623] At the same time, another Norwegian owned enterprise, Tinfos Papirfabrik had expanded its moderate hydropower operations on Notodden, and raised the necessary capital to start an experimental electric pig iron work, organized as into the sister-company A/S Tinfos Jernverk.[624]

Both these two Norwegian ventures had obtained their riparian rights before the "panic-law" was passed. [625] This meant that they did not need apply for an acquisition concession, as covered by the 1909 Castberg-laws. While they still needed a government permission to regulate water flow (see the Arendal Vasdrag-case, Table 2), they avoided the Right of Reversion for their new power plants. However, neither Tinfos Papirfabrik nor Arendal Fossekompani planned to do energy-intensive production within their own company, and instead planned to lease out power to other production companies, which required power lease concessions from the government. In the power lease concession to *Norsk Elektrisk Metallindustri* in 1909, the Knudsen-government had established the principle that if the power came from a private hydroelectric plant exempted from the Right of Reversion, they should be made subject to a power lease tax, in this case set at NOK 0.75 per hp.[626]

Yet, when Tinfos Jernverk applied for a power lease concession of 10,000 hp in early 1911, they pleaded that they would be exempted from concession taxes on the grounds that they were nearly fully Norwegian owned company, attempting to "open a new industrial sector of incalculable dimensions for our country".[627] In this, the Konow (SB)-government readily agreed. In order to ensure that it remained in Norwegian hands, the Minister of Public Works took the opportunity to reintroduce the Bredal-proposals capital ownership distinction of 2/3ds Norwegian ownership. The year after, A/S Ringerike Nikkelverk, a small-scale Norwegian owned nickel mining company, was also given more lenient concession taxes after agreeing to reserve its shares for Norwegian citizens.[628]

There was no provision in the Castberg-law that outlined such an arrangement. On the other hand, there was also no provision that specifically forbade it. Thus, the centre-right governments embraced the flexibility the law granted in forming new concession policy principles in line with their own preferences. In doing so, the centre-right ministers continued the practice established in the

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[623] The investors included among others Gunnar Knudsen.
[624] Hallgrim Høydal, *Drivkraft i 100 år : Tinfos papirfabrik - Tinfos as 1894-1994* (Notodden: Tinfos, 1994); Kjell Roar Gulsrud, *Tinfos jernverk A/S 1910-1960* (Notodden: Jernverket, 1960), pp. 5-11.
[625] A/S Arendal Fossekompani had offered to sell Bøilefos, the company's largest waterfall, to Elektrokemisk in 1907. Elektrokemisk preferred instead to buy the to the whole company instead, almost certainly to circumvent the concession law. Dannevig, *Aktieselskabet Arendals Fossekompani*.
[626] "Meddelte vasdragskoncessioner, II. Efter Koncessionsloven 18. September 1909 – 30. Desember 1914" Appendix to St. prp. nr. 1, 1916, Hovedpost IX A, chapter 9, pp. 9-12.
[627] «[…]aapne for vort land en ny industrigren av uoverskuelig rækkevidde[…]» Ibid., p. 59
[628] On this occasion, the limit was set at ¾, rather than 2/3. No explanation for this is given in the sources. "Meddelte Bergverkskoncessioner 1903-1913", pp. 268-272

years following the "panic-law" of setting new norms in policy implementation in anticipation of *future changes* to the concession law itself. While Wollert Konow (SB) had pursued a strategy of introducing a new regulation law, it was no secret that there was desire within large segments of the centre-right to rework the Castberg-law of 1909 to end the principle of equal treatment, and remove the Right of Reversion for Norwegian owned companies.

A further development made a return to a policy of differentiation between Norwegian and foreign owned company more feasible. A key point in the Knudsen-governments argument for equal treatment had been that it was difficult to properly discern who actually owned a share at a given time, and thus prevent circumvention of the law. However, in 1910, the Norwegian parliament finally passed a new law on joint stock companies, which had been under development for nearly 10 years. Among other things, the new share law had provisions for named shares. The law specified that the company was required to keep an updated log of all shareholders at all times and that no transaction of named shares would be valid if not reported to the board.[629] While this did not make it impossible to circumvent the law, it was now much easier to monitor share ownership than what had been the case when the Castberg-laws were introduced.

After the fall of Wollert Konow (SB) and the reorganization of the centre-right government under Jens Bratlie, the new government moved to formally reintroduce differentiation based share ownership into the 1909-concession law. A proposal to scrap the Right of Reversion for Norwegian owned companies had already been presented in the summer of 1911 by Johan Gustav Austeen, a National Liberal MP, but without government sanction.[630] The bill presented by the government in 1912 was none the less identical to Austeens.[631] While presented as a return to the national capitalist principles outlined by Bredal in 1908, it was not a strict reversal of the 1909-law. Only companies with 100% Norwegian share ownership would be exempt from the Right of Reversion, which would instead be replaced by a provision allowing the state to redeem the plant at cost when the concession expired.[632] All other concession terms under the 1909-law would still be applicable.

As the Bratlie-governments revision was not presented before the autumn of 1912, it would not be decided in the Storting until after the election of the same year. Consequently, the concession law became a major election campaign issue for both the Liberal party and the Conservative/National Liberal alliance. The Conservatives heavily emphasised the view that the

[629] §33 and §34. Lov om aktieselskaper og kommandoaktieselskaper, datert 19.07.1910
[630] Johan Austeen to Odelstinget, dated 29.05.1911. Dokument nr. 52, 1911
[631] Ot. Prp. Nr. 1, 1913
[632] The proposal also allowed the state to forward this right to one or more municipalities

Castberg-laws had stifled industrial development, particularly the Norwegian owned one.[633] As a basis for this view, the centre-right alliance lent credence to the leading hydropower owners' interest groups, but also cited a 1912 report from the Watercourse Director that there were fewer incoming concession applications, and that many large concessions were left undeveloped.[634] The Liberal party on the other hand reiterated its argument from 1909 in that removing the Right of Reversion for Norwegian owned companies would open the way for circumvention and perpetual foreign ownership.[635]

Exactly how much difference the Castberg-laws had made to the growth of resource intensive industries was however less clear cut than the government tried to present it. It was true that fewer concession applications had been forwarded to the Konow (SB) up until the beginning of 1912, and there was little development in the four largest hydropower concessions granted with Right of Reversion. However, this perspective seemed at odds with the four large regulation concessions granted in the summer of 1912, which together made up an increase in output of over 200,000 hp. Norwegian newspapers could also report that, A/S Aura, a new large foreign owned company was preparing to apply for a concession to obtain and regulate a new watercourse in western Norway, which could prove to be as large as Norsk Hydro.[636] Overall, the natural resource intensive industries continued to enjoy tremendous growth rates. Between 1909 and 1912, the output in mining and the chemical industry grew by an annual average of 30.1% and 22.3% respectively.[637]

Emphasising the lack of industrial growth as an argument for change thus proved a double-edged sword for the centre-right. While it played well with its own industry-friendly and liberalist wing, it was less persuasive for the rural farmers who at best viewed the growth of big industry as a mixed blessing. This group had been the Liberal party's main dissenters during the creation of the 1909-law, and generally formed the right flank of the party. Consequently, it was this group that the centre-right first and foremost needed to woo. While the farmer's wing had been sceptical to the

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[633] See for instance: "Statsråd Stang om koncessionspolitikken og regjeringens proposition. Den nationale linje mod den socialistiske" Aftenposten 23.09.1912. "Koncessionslovene" Nordre Bergenhus Amtstidende 28.09.1912

[634] Watercourse Director (Ingvar Kristiansen) to Arbeidsdepartmentet, dated 09.01.1912. Quoted in Ot. Prp. Nr. 1, 1913, p. 8

[635] See for instance "Anfaldet paa koncessionslovene: Det første skridt" Nordenfjeldsk Tidende 16.10.1912, «Koncessionspolitik» Nordre Bergenhus Folkeblad 14.10.1912, «Norske Selskaper og hjemfaldsretten». Tromsø Stiftstidende 01.10.1912

[636] A/S Aura's waterfalls prospective riparian rights were calculated to yield between 200,000-250,000 hp. «Nyt stor-industrielt foretagende» Stavanger Aftenblad 08.08.1912

[637] Statistisk sentralbyrå Norge, *Økonomisk utsyn 1900-1950*, Samfunnsøkonomiske studier (Oslo: Statistisk Sentralbyrå, 1955), p. 195, Tabell 3; Lange, "The Concession Laws of 1906-09 and Norwegian Industrial Development," p. 320.

Castberg-laws disregard for the principles of private ownership, this was not enough to rouse support among Norwegian farmers, many of whom had long since parted with their riparian rights to city speculators for a pittance. Instead, they were more worried about the continued industrial growth as a threat to the social order and their political position. The high industrial growth of recent years had also intensified competition for labour, which meant that farmers had to pay much higher wages to seasonal farm hands.[638] Consequently, many farmers did not see the need for further industrial expansion as a good reason to introduce a law that reduced restrictions on Norwegian owned companies, as well as possibly weakening the levers of control over a foreign dominated industry. This view was also shared by some of the candidates of the National Liberals on the west coast, who vowed not to support any change to the concession law if elected.[639]

In the end, the whole campaign turned out to be a disaster for the Conservative/National Liberal alliance. When the votes were counted, the centre-right vote declined from 42.3% to 33.3%. Yet the first-past-the-post system of the time punished the alliance even harder, as the number of representatives shrank from 76 to 24, giving the Liberal party a clear majority in the Storting.[640] While it was not the only reason for the centre-rights defeat, the leading conservative newspapers all concluded that the failure to win over the rural vote to the government's new concession law proposal played a decisive role.[641] After the failure to return the primacy of private ownership into the Watercourse Law, the election defeat marked the final nail in the coffin of the centre-rights attempt to reverse Castberg's radical concession law. As an editorial in the National Liberal oriented daily *Tidens Tegn*[642] laconically summarized, "With the presentation of government's concession proposition, this came to be the axis around which the last week's election campaign would turn. A majority of the country's voters has rejected our standpoint."[643]

After the election, Gunnar Knudsen formed a new Liberal party government, and promptly retracted the proposed change to the 1909-law. Thus, the rural farmers had once again proved decisive in tipping the balance towards a policy that favoured democratic executive supremacy over private property rights. The political alliance forged over the Mjøsa-regulation, between economic

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[638] See for instance the statements of Sven Aarestad, former Minister of Agriculture under Michelsen and Løvland, to the Farmers League of Aust-Agder in February 1912. Sven Aarrestad, *Bonden og dei andre* (Risør: Erik Gunleikson, 1913), pp. 27-28.
[639] «Direktør Hirsch» Stavanger Aftenblad 06.09.1912
[640] Kaartvedt, *Drømmen om borgerlig samling 1884-1918*, 1, p. 338.
[641] «Hvad nederlaget lærer os!» *Aftenposten* 13.11.1912. "Stangs proposition og de smaa raggete hester" *Aftenposten* 14.11.1912, «Seieren» *Morgenbladet* 13.11.1912
[642] Tidens Tegn was a leading paper for the National Liberal Party
[643] «Ved den av regjeringen fremlagte proposition i koncessionsspørsmaalet kom dette spørsmaal til aa bli den akse valgkampen i de siste uker dreiet sig om. Vort standpunkt har faat landets flertall imot sig.» "Nederlag" *Tidens Tegn* 23.10.1912

nationalism, social reformism and rural interests had held firm against the attempt to withstand the centre-rights attempts to curtail the government's power over the natural resource industries.

VIII. Foreign reactions (1906-1913)

The "harnessing"-strategy, as previously mentioned, depended on some form of acceptance from abroad. If inward direct investments should continue to drive industrial growth, it was necessary that foreign investors found Norwegian natural resources attractive enough to invest in them still, despite the regulations introduced under the concession laws. Moreover, as these industries (and the Norwegian economy in general) was still very much geared towards foreign trade, it was pertinent that there were no adverse reprisals against Norwegian trade, or Norwegian businesses operating abroad – most importantly shipping and whaling.

As we have seen, the introduction of the first temporary concession laws had met little outright hostility from abroad. Following the introduction of the first temporary concession laws, the British government did convey the protests of the largest affected British companies, Kellner-Partington and Dunderland, and also voiced concern that the legislation might lead to capital flight.[644] However, the laws were not retroactively applied, and the Norwegian government emphatically maintained, "all rights, that in accordance with law or treaty is obtained by foreigners will naturally be respected and protected".[645] Moreover, the British government found that Norway had no treaty obligation to treat British subjects equally in matters of commerce.[646] Thus, while civil servants of the British Foreign Office found the concession laws both "objectionable"[647] and "unsportsmanlike",[648] the Norwegian government had not broken any clear rules, and the British response remained limited. Nor could the Norwegian consulates abroad initially report much hostility towards Norwegian policy in the foreign business press. There had eventually been some notable divestments, but these were mostly limited to the pulp and paper industry, where there were a number of Norwegian entrepreneurs ready to take over.

The initially muted response gradually began to change, following the ascension of the first Knudsen-government and the introduction of the first permanent concession laws in 1909. The

[644] Herbert to Løvland, dated 06.09.1906. NRA, Utenriksdepartementet, Dd, box 772, folder BI
[645] No. "[…] alle rettigheter,der I henhold til lov eller traktater er erhvervede af udlændinge selvfølgelig vil blive respekterede og beskyttede.» Løvland to Stephen Leech (British Chargé d'Affaires, Kristiania), dated 12.09.1906. NRA, Utenriksdepartementet, Dd, box 772, folder BI
[646] Commercial Norway No. 3601, Commercial Norway No. 6191, Herbert to Sir Edward Grey, dated 18.02.1907, FO 368 117, TNA
[647] Commercial Norway No. 6191, FO 368 117, Foreign Office (FO), The National Archives of the UK (TNA)
[648] Leech to Law, dated 02.08.1906, FO 368 36, TNA

Castberg-proposals for mining law reform attracted disdain within international business circles, particularly due to the way it required continuous government approval for extraction plans, with one vitriolic letter in the British based *Mining Journal* denouncing the Norwegian government as "trying to Hayti [sic] a close second in burlesque".[649] The same journal ran a series of negative articles on the proposed mining-law changes in 1908, urging the British government to apply "friendly pressure" on the Norwegian government to postpone the new laws, with British recognition of Norwegian claims in the arctic as possible leverage.[650]

The most critical noises were however to come from the German Empire. Shortly following the introduction of the Castberg-law, the Kaiser's government requested assurances that no German acquisitions of normal real estate would be subject to conditions equivocal to "ransom or demands of other extraordinary financial burdens", [651] to which the Norwegian government could do little but point to outline and general applicability of the 1909-concession law.

German hostility towards the Norwegian concession laws flared up again over the deterioration and break-up of the Norsk Hydro/BASF-alliance. The cooperative climate within the BASF/Norsk Hydro alliance had soured, not least over the in-house competition between the Hydro's Norwegian *Birkeland-Eyde* arc-furnace and BASF's similar *Schönherr*-technology. When Sam Eyde was fired as General Director in 1910, the nationalist, left-leaning Norwegian press was quick portray this as a move by the BASF to sideline the Norwegian alternative for their own monopolistic purposes, with some even adding an anti-Semitic angle for good measure.[652] Conversely, Eyde was transformed from monopolistic foreign agent to national hero sacrificed on the altar of foreign monopoly capitalism, almost overnight.[653] When BASF decided to end its Norwegian engagement in the autumn 1911, one of their reasons for doing so was that it considered there was too much uncertainty over the Norwegian concession policy in the current political climate.[654] The anti-BASF agitation in Norway led parts of the German press to call for Imperial vigilance against the "anti-German mood" gripping Norway,[655] and to papers closely aligned with the Prussian civil service to advocate the Imperial

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[649] "The Norwegian Farce" The Mining Journal 19.12.1908
[650] Legation de Norvege, London (Irgens) to Utenriksdepartementet, dated 21.12.1908. NRA, Utenriksdepartementet, Dd, box 772, folder BI
[651] "[…]løsesum eller paalæg av andre ekstraordinære finansielle byrder." Ministry of Justice to Ministry of Foreign Affairs, dated 19.02.1910. Utenriksdepartementet, Dd, box 1372
[652] See for instance "Saaheim: Under tyske pengejøders tegn" Bratsberg-Demokraten 20.08.1910, who's title translates as "Saaheim: Under the sign of German money-jews". Dagbladet, a leading Liberal party aligned newspaper, also printed a caricature drawing of Eyde being kicked out his orchard by one of his former assistants, while a group of stereotypical jewish-looking capitalists enjoy the bountiful harvest. Dagbladet 02.10.1910
[653] Andersen, *Hydro 1905-1945*, pp. 130-32.
[654] Abelshauser et al., *German Industry*, pp. 144-45.
[655] "Deutschfeindliche Stimmung in Norwegen" Gothaische Zeitung 17.11.1910

Government to use future trade negations to pressure the Norwegians into ending their protectionist practices.[656] Indeed, the Norwegian legation in Berlin considered it likely that such pressure had indeed begun to be applied, following German reluctance to grant whaling licences to Norwegian companies in German South-West Africa.[657] Yet, despite a number of warning signs, there were to be no concerted actions by foreign governments to overturn the Norwegian concession.

The harnessing strategy however also depended on continued interest from private foreign investors. In this regard, it is not unlikely that some potential investors were turned off by the uncertainty generated by the hostile public atmosphere against foreign ownership. Besides BASF, the Wallenbergs also chose to divest from A/S Elkem, A/S Tyssefaldene, and reduce their portfolio in Norsk Hydro following Paribas ascendancy. According to Wallenberg-historian Olle Gasslander, this was, at least for a significant part, due to uncertainty over concession policy.[658] Moreover, documents from the British Foreign Office indicate that the British legation's warning to the Norwegian government that British investors were being turned off from investing in Norway was not just an empty bluster, but was also their actual impression. In fact, the British envoy frequently lamented the unwillingness to invest in Norwegian natural resources to Whitehall, and warned that German investors did not seem to hold the same reservations, and would thus reap the benefits of potentially strategically important industries.[659]

Yet perhaps even more alarming for the prospects of the harnessing-policy were the reports of disappointingly low returns from much of the Norwegian resource industry. This was especially marked in the iron mining industry. The separation and concentration technologies had largely failed to produce the results that investors had initially anticipated. Dunderland Iron Ore Company, which had once looked like becoming the largest mining operation in the country closed down already in 1908, after only two years of regular production.[660] The German-owned Salangen mine soon ran into similar problems. Thus, when *Neue Hamburgische Börsen-Halle* and *Reichsbörs Berlin* advised its readers to take heed before investing in Norwegian mining it was not concession law that was

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[656] "Korrespondenz aus Christiania: Norwegische Wirtschaftspolitik" Internationale Wochenschrift für Wissenschaft, Kunst und Technik" 01.07.1911

[657] Legation de Norvege, Berlin (Ditten) to Utenriksdepartementet, dated 20.11.1911. Legation de Norvege, Berlin (Ditten) to Utenriksdepartementet, dated 22.11.1911. NRA, Utenriksdepartementet, Dd, box 772, folder BI

[658] Gasslander, *Bank och industriellt genombrott II*, II, p. 333. The Wallenbergs did however retain ownership of the Orkla mining operation, which soon grew to be the biggest sulphur and copper mine in Norway.

[659] Arthur Herbert to Sir Edward Grey, dated 06.03.1907, FO 368 117, TNA. Commercial Norway No. 16755, Arthur Herbert to Sir Edward Grey 27.04.1909 FO 368 314, TNA. Arthur Herbert to Sir Edward Grey 11.02.1910, FO 368 440, TNA.

[660] Slottemo, *Malm, makt og mennesker*, pp. 57-60.. The closure of Dunderland was reported to have had a very adverse affect on British appetite for mining in Norway. Vicekonsulatet (Hartlepool) to Generalkonsulatet (London), dated 14.01.1909. NRA, Utenriksdepartementet, Dd, box 772, folder BI

singled out as the problem, but rather low profitability and misleading share subscription invitations.[661]

BASF's decision to pull out of the Norwegian nitrate industry heralded the most radical change in fortune for the Norwegian resource intensive industries. Besides its many problems with its French partners, the Norwegian engineers and the volatile Norwegian public opinion, the main reason why BASF pulling out was that the electric-arc process had simply failed to live up to its expectations.[662] BASF's belief in the venture was worsened even more by drop in prices for Chilean nitrate in 1911. Instead, the German chemical giant saw more potential in the high-pressure ammonia synthesis process developed by Fritz Haber and Carl Bosch, which required much less energy. The changing fortunes of the nitrates industry was hugely important for Norwegian energy-intensive industry. The two largest existing industrial hydroelectric plants, as well as four of the largest hydropower were all geared toward nitrate production. However, the full significance of this would not be felt for some time.

Thus, while the Norwegian concession-law had not been challenged by the governments of capital exporting countries, there were some signs that the standing of Norwegian natural resources as an investment opportunity was declining. In many cases were the concession laws had played a part, it was not so much the direct terms of the concessions themselves, but rather the uncertainty of the concession laws themselves that turned foreigners off from Norwegian natural resources. Despite the fact that the concession laws had been largely implemented in a fairly liberal fashion, the continued political controversy over the issue opened the possibility that the wide powers vested in the concession laws could at some point fall into the hands of a government much less favourably disposed to foreigners.

IX. Summary and concluding remarks

The evolving Norwegian concession system for natural resources between 1906-1913 created a wide-reaching 'harnessing'-policy for foreign direct investments that is a policy that did not block foreign direct investments, but allowed it to operate in the country under regulated conditions designed to favour a number of national concerns. These can be broadly summarized as: *preventing*

[661] "Deutsche und fremde Grubenunternehmungen in Norwegen". Reichsbörs Berlin 23.06.1912, "Erschliessung norwegischer Erzlager". Neue Hamburgische Börsen-Halle 13.10.1908
[662] Abelshauser et al., *German Industry*, pp. 144-45; Haber, *The chemical industry*, p. 87.

long-term foreign dominance, ensuring rent-capture to the public sector, preventing monopolization, improving economic linkages and ensuring some basic rights for the company's workers. While the political rhetoric emphasized different goals at different times, and terms were adjusted, all these aspects were present in some form already in the Michelsen-government's concessions. Despite the concession question being one of the foremost political issues of the time, this overall policy principle remained essentially unchanged, and was continued by all six governments until the First World War. Besides the highly controversial Persson case, no concession to a foreign investor had been denied a concession outright for minerals or hydropower. Conversely, there was a broad political consensus to block all further acquisitions of forests by foreigners.

Instead, the main political dividing line would come over to what extent the harness-policy should trump the freedom of Norwegian owned companies and the pre-existing concept of private property of hydropower. Here the Liberal/Labour Democrat alliance favoured a complete switch to a concession system with no legal differentiation based on share ownership, to both prevent circumvention of the law, avoid economic retribution from abroad, and out of a desire to extend some regulations to domestic owned business. The Conservative/National Liberal alliance favoured a hybrid system that would maintain property rights over riparian rights, but only for domestic owned companies. With the 1909-law the concession law had completed a transformation of the Norwegian natural resource regime from one which recognized *private ownership* for running water and *finders-keepers* for minerals, into a strict continental-inspired concession system, where undeveloped resources were effectively controlled by the state.

Removing previously recognized forms of private ownership without compensation was in many ways a clear breach of "the rules of the game" of the liberal economic order. However, as this "confiscation" did not cover mines and hydropower stations that were already developed, it avoided the most serious intrusion on the rights of the foreign investors who already operated there. While there was some tension over the concession law with capital exporting countries, particularly the German Empire, there was never any serious pressure put on the Norwegian authorities to reconsider. Besides the process of shifting from one form of ownership system to another without compensation, the Norwegian concession laws were strict, but were far from unique in the western world. While some investors were undoubtedly turned off by the shift in legislation, there was no massive boycott of Norwegian natural resources by foreign investors. The companies who chose to divest from hydropower or mining were rarely frightened off by the concession law alone, but also by other economic reasons.

Instead, it was primarily Norwegian riparian speculators who would have the value of their property compromised. Yet, while this disregard of private property rights caused outrage in the political right, they were not able to build a majority to have the 1909-law repealed. The Castberg-law had been based on a broad convergence of interests within the Liberal/Labour Democrat alliance, and had only been passed with help of the socialist Labour Party. However, it was in the end the agrarian and rural vote who would tip the scale favour of the leftist alternative by preventing the centre-right governments of 1910-1912 from repealing the laws.

The result was a law system that concentrated much economic power in the State. The state was given wide regulatory powers to block or impose conditions on all acquisitions of natural resources. This could at least in theory create a very unpredictable and arbitrary use of these powers. This was tempered somewhat by the fact that applications to mining and hydropower were generally never blocked outright, and that before the passing of the 1909-law, the governments in charge attempted to apply the law in accordance with the principles of the laws under preparation. Concession terms set in negotiations with the applicant company would often serve as “milestones”, and set the standard for future concessions. However, even after the passing of the 1909-law, the concession policy remained an evolutionary process, with new principles and standards being introduced ad hoc. Furthermore, there was no serious effort to form guidelines as to what would determine where on the scale the time limits and regulation taxes should be set in different concessions. Instead, the enabling laws would remain flexible, were the freedom of democratically elected officials was valued over big business desires for predictability.

Such a flexible concession system, which granted wide powers to the government in charge, could in theory be used to favour certain groups. To some extent, this was the case. The concession laws did have a slant in favour of small and medium landowners – farmers, with or without forests. This was most clearly seen in the forest concession policy, where backward integration by consumers was prevented to uphold the bargaining power of forest owners. This was partially a reflection of the large segment of small and medium landowners in the Storting, and the fact that they constituted an important centre-ground in the two-block political system. However, there is no sign of an active policy by any of the governments in this period of trying to *slow down* resource intensive industrialization, as some of the most anti-industrialist farmers favoured. To the extent this did occur as a result of these laws, this was rather an unintended consequence. Moreover, other socio-economic groups were also given special treatment in the laws. Industrial workers received some new basic rights and some protection against immigrant competition. In addition, the Norwegian industry received protection from power-monopolization, given the right to purchase minerals, and was given beneficial access for its machines and materials.

Thus, the whole harnessing-system of 1906-1913 should primarily be seen as a broad national compromise, rather than a regulatory system captured by any special interests. The wide electoral representation of the Norwegian democracy helped to prevent particular narrow segment of society to steer natural resource policy directly in its favour. The concession-law system had created a system where the state was given wide powers to regulate ownership of natural resources, divided between the elected government and the parliament. The system could be messy, and at times unpredictable, but the democratic institutions of the country helped ensure that it had to spread the benefits broadly.

Only one group can however be seen as a clear loser in this arrangement – the Norwegian industrialists and speculators who operated as middlemen between Norwegian resources and foreign investors. As the harnessing policy continued to grant foreigners access, their livelihoods were not ruined. But the whole concession policy undoubtedly lowered their possibilities for high profits, particularly as the 1909-law put an end to the prospects of Norwegian power companies enjoying much easier terms while cooperating with foreign industry. Besides arguing for limits on foreign ownership of forests, the interest groups representing Norwegian industry and engineering was nearly universal in its condemnation of the resource nationalist policy. Unwilling and unable to act as national champions for Norwegian industrialization, Norwegian industrialists had to see themselves largely relegated to a secondary role in the concession system.

Chapter 4: Should Sweden have a concession law? (1907-1920)

As the newly independent neighbour was hammering out an ever widely increasing concession system for its natural resources, Sweden would take a somewhat different route. Unlike Norway, where the regulation of foreign ownership quickly turned into a comprehensive set of regulations and taxation, Sweden effectively separated the issues of foreign ownership and resource regulations in its reforms after 1907. The Restriction Act passed in 1916 gave the Swedish government the possibility of denying natural resource acquisitions by foreign owned companies, but not to set up any equivalent of the Norwegian 'harnessing'-strategy.

Instead, other regulations for natural resources would follow different patterns. Swedish forest ownership in the north was tightly regulated from all further company acquisitions, which would eventually be extended further south. Mining regulations did not see any major reform, but the state continued to wield a significant influence through its crown lands ownership, where staking claims were limited, and through its partial ownership of LKAB. Perhaps the greatest contrast with the Norwegian system was in hydropower, where following the Water Act of 1918, hydropower licences would not be handled by the government, but rather by a special branch of the judiciary.

This did not mean that a similar solution to the neighbour to the west was not discussed. Indeed, reforming the Swedish natural resources into a concession system was frequently discussed in the years leading up to the First World War. The part-nationalization of LKAB and the introduction of the Norrland-law had put some of the most hotly debated natural resource issues to rest; a number of areas still remained in limbo. This chapter will explore the economic and political factors that kept the Swedish Riksdag from taking a similar route as the Norwegians.

I. The King's vein: Swedish hydropower

When contrasting the development of Swedish hydropower politics with its neighbour to the west, it is first important to note some of the differences between the type and distribution of Swedish and Norwegian river systems. In a number of respects, the Swedish hydropower as an economic resource was quite different from its Norwegian counterpart. Unlike Norway, Sweden had no wide lake filled mountain plateau with steep waterfalls near the coast. Instead, Swedish water systems were dominated by wide rivers flowing eastwards. This meant that there was less potential for the

cheap high-pressure hydroelectricity prevalent along the west-Norwegian coast. Furthermore, regulating these watercourses to even out the difference between the spring floods and drier periods required much larger storage basins. Consequently, Swedish hydropower was overall more expensive to develop. The rivers with the highest hydroelectric potential was also located in the north, where the ports were ice locked for large parts of the winter.

Besides physical differences, there were also significant legal differences in the acquisition of Swedish riparian rights. Swedish law did recognize private ownership of rivers to the owners of riverbanks, similar to the Norwegian system. However, based on medieval Swedish customs, the Swedish state controlled what was known as the "Kungsådran" or "King's vein" in a number of rivers. This custom, at various times defined as either the middle third of the river, or a third of the waterflow, was put in place to ensure a free flow of water through Swedish rivers and prevent hindrances to river transport, timber floating and fish migration. Consequently, building dams across the Kungsådra was thus illegal until 1899, when the Riksdag passed a new law allowed developers to seek a government permission to build across it.

Permissions to build across the Kungsådra were as a rule granted, but without royalties or set time limits. Instead, permissions were subject to conditions aimed at safeguarding other activities in the river, such as fishing, timber floating and transportation. Hydroelectric developers had to guarantee a waterflow sufficient for these activities, as well as the construction of measures such as fish ladders to aid fish migration past the hydroelectric installation. However, obtaining these permissions could be a lengthy process. Swedish historian Eva Jakobsson, who has studied the Kungsådra-resolutions from 1899 to 1918, shows that they only rarely took less than a year, and often took three years or more.[663]

A second legal difference that made Swedish hydropower less attractive to hydropower development were the restrictions on water regulation and expropriation. Unlike in Norway, Swedish law did not allow water regulations that diminished the value of someone's private property, and there were no provisions for the owner of a large majority of riparian rights to expropriate remaining holdouts. This opened the possibility of small riparian rights owners to stall development of a large project.

In other words, Swedish hydropower was not as lucrative for energy intensive industry as Norwegian hydropower, both for geographical and legal reasons. This also helps to explain why there was overall little interest in Swedish hydropower among foreign investors, which were more or

[663] Jakobsson, *Industrialisering av älvar: studier kring svensk vattenkraftutbyggnad 1900-1918*, pp. 130-39, 295-98.

less absent from any power generation development. Despite this, there was undoubtedly a large economic potential in Swedish hydropower. Sweden had the second highest hydroelectric potential per capita in Europe, calculated at over 700 hp per head.[664] Moreover, hydropower offered a path to reduce Sweden's dependence on imported coal.

The great potential value of the resource coupled with a legal framework that was unwieldy for hydroelectrically development created a clear impetus for reform. In 1906, the liberal government of Karl Staaff appointed a committee to prepare proposals for a revision to the riparian laws, headed by the Hugo von Sydow.[665] However, not everyone was of the mind that riparian reform should primarily be aimed at making hydroelectric development easier and more profitable for private investors. The left of the Swedish Riksdag, especially in the Second Chamber, wanted increased government powers to expropriate riparian rights in certain cases, as well as the possibility to set maximum prices for electricity to prevent price gouging by a monopoly supplier. The left wing of the Liberals proposed to go even further. Spearheaded by social reformists, the Stockholm mayor Carl Lindhagen and Baron Palmstierna, they favoured a more fully-fledged concession law, possibly with the inclusion of rent capturing measures such as royalties and a Right of Reversion.

The left wing of the Second Chamber was to no small degree inspired by the Norwegian legislation, and the applicability of the Norwegian situation to Sweden became a hotly contested part of the debate. Swedish conservatives generally stressed the point that the radical Norwegian solution was completely unwarranted in Sweden, as the Norwegian legislation had primarily been motivated by the desire to regulate foreign ownership.[666] The proponents on the other hand underlined that the Norwegian laws were not solely about regulating foreign ownership, but had taken on wider social dimensions under Castberg and Knudsen. Moreover, they were also keen to maintain that while foreign acquisitions of hydropower was not a pressing issue at the moment, this

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[664] In 1913, the influetnial hydro engineer Sven Lübeck calculated that river regulations could yield atleast 4 million turbine horse powers. The population of Sweden was at that time about 5.6 million. *Industrialisering av älvar: studier kring svensk vattenkraftutbyggnad 1900-1918*, p. 244; "Maddison Historical GDP Data," World Economics, http://www.worldeconomics.com/Data/MadisonHistoricalGDP/Madison%20Historical%20GDP%20Data.efp.

[665] Alf Åberg, *Från skvaltkvarn till storkraftverk: Om den enskilda och kommunala kraftindustriens tillkomst och utveckling* (Stockholm1962), p. 91.

[666] Lagutskottets Utlåtande No. 50, Bih. Till Riksd. Prot. 1909, 7 Saml., pp. 24-25. See also this article compairing the concession question in Norway and Sweden in the conservative oriented Svenska Dagladet: "Vattenkraftrågan i Norge och i vårt land" Svenska Dagbladet 18.07.1909.

might change following a future legal reform which made the resource more attractive, which it then would be unable to control.[667]

There was in any case strong support for some sort of concession law in the most democratically elected Second Chamber. In 1909, the Second Chamber voted overwhelmingly to request a government inquiry into expanding a concession law for the distribution of hydroelectric power. However, in both cases the requests were killed in the Conservative dominated First Chamber. When later comparing the state of Swedish natural resource regulations with its Norwegian neighbour, Lindhagen lamentedly summarised his thoughts on the discrepancies is as:

> "[…] we are in any case always behind and too late, because our parliament is not as prudent. And why is it thus? Well, it's because we have a First Chamber, which they do not have in Norway."[668]

Yet, while there were indeed strong support of some sort of concession law in the Second Chamber, it is far too simple to conclude that given a more democratic parliament, Swedish legislation might have followed in a similar vein. Indeed, most of the Liberal Coalition Party opposed rent-capture measures for hydropower concessions, including both royalties and right of the reversion, which the later Liberal minister of Justice Gustaf Sandström denounced as "not only a violation of property rights, but also undoubtedly entail predominantly deleterious economic consequences for the state".[669] Nor was the Liberal party willing to challenge the ruling (albeit not undisputed) legal opinion that the state did not *own* the kungsådra, but that it was its custodian as a means to ensure the common interests of transportation and fish migration. If these interests could be served by other means than keeping a third of the river open, the state would, according to Sandström, have no right "demand payment for carrying out a sensible legislative amendment".[670] As we shall see in the next section, similar division within the left occurred over the question of introducing a concession law to other natural resources.

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[667] See for example statements by Baron Palmstierna, *Motioner i Andra Kammaren No. 16*. Bih. Till Riksd. Prot. 1909, 1 Saml. 2 Afd. 2 Band. Pp. 2-3. Andra Kammarens Protokoll, No. 55 1909, pp. 71-74, No. 35 1911, pp. 32-34

[668] Andra Kammarens Protokoll, No. 60 1914, p. 45

[669] «[…]icke blott innebära en kränkning af äganderätten, utan äfven från statsekonomisk synpunkt säkerligen medföra öfvervägande skadliga verkningar». Motioner i Anda Kammaren, No. 88 1910, p. 5

[670] «[…]taga betalt för att den [staten] genomför en förståndig lagändring». Andra Kammarens Protokoll, No. 53 1910, p. 24

II. Mineral reform deadlock

Sweden's mineral laws after 1907, not unlike its hydropower laws, were broadly seen to be in need of reform. The right to stake claims on crown lands in the county of *Norrbotten* had been temporarily suspended since 1902, and this suspension was expanded in 1907 to also encompass crown lands in the nearby counties of Västerbotten and Jämtland – thus covering much of northern Sweden. This gave the government more control, but also removed the incentive for costly mineral exploration by the private sector. Consequently, the Lindman-government (1906-1911) sought to find a new system that would still leave the main initiative – and risk – for exploration and development in the hands of private interests, but at the same time give the state some form of control. Furthermore, the government wanted to replace the riskier option of becoming a participant in a mining operation through its rights as a landowner with a set royalty based on the mines output.[671] The government thus favoured a lease-system, which granted the discoverer of a mineral claim a right of first refusal to develop the claim for a minimum set amount of time, as well as a royalty. However, finding what the Lindman-government could consider a good balance between these considerations proved to be a challenge, and there was overall little enthusiasm within the iron and mining industry itself for a system that permanently abolished the traditional right to stake mineral claims.[672]

Lindhagen and other radicals found the governments proposed reform of claims on crown lands entirely inadequate, and instead proposed to the remove the right to stake claims in the country as a whole. They based this proposal on an understanding that the pre-1723 *bergregal* was still the basis of Swedish mining law, and the right to stake claims – even on private land – could be suspended and replaced by a concession system. If this would diminish private exploration, the government should instead finance such exploration itself.[673]

In order to prepare the way for such a reform, Lindhagen and his supporters wanted not only a full government inquiry into the introduction of a concession system for minerals, but also for all the "natural resources to which mutual common interest are tied",[674] which also included forests, hydropower and peat. Yet while this idea of such an inquiry was solidly supported by the Social

[671] Kung. Majt. Prp. Nr. 119 1909

[672] This is based on the statements made by the states chief mining officer as well as the head of the iron industry interest group, Järnkontoret. The county governor of Västerbotten was also negative to removing the right to stake claims permanently, while the county governors of Norrbotten and Jämtland were positive. Kung. Majt. Prp. Nr. 119 1909, pp. 18-20

[673] Motioner AK 1909, nr. 112. Bihäng till Riksdagens protokoll, 1 Saml. 2 Afd. pp. 3-9.

[674] "[…]naturtillgångar, vid vilka ett gemensamt allmänt interesse äro knutna». Motioner AK 1909, nr. 112. Bihäng till Riksdagens protokoll, 1 Saml. 2 Afd. p. 1

Democrats, it split the liberals in two. Lindhagen's motion was rejected by the parliamentary committee, but a dissenting opinion by Lindhagen proposing a similar inquiry for mineral rights was only narrowly rejected by 99 against 82, indicating that about 2/3 of the liberal MPs in the Second Chamber supported Lindhagen.[675]

Yet, the Lindman-government's mineral reform bill fared little better when it was put forward in 1910. After having been continuously reworked since 1907, the Riksdag still objected to a number of details in the proposal. The Riksdag accepted the governments bid to introduce special regulations on designated "state mining fields" (*statsgruvafält*), surrounding a number of mining claims already owned by the state. However, the rest of the reform was rejected in favour of further redrafting. In doing so, a group of liberals together with Lindhagen penned a reservation in the committee urging the redraft to "take into consideration how and under what terms the right to stake claims on private land could be repealed and replaced by another essentially different system built on concessions".[676] This reservation was passed by the Second Chamber. Yet, when Lindhagen penned a new motion for a comprehensive inquiry into concession laws the year after, it was again narrowly defeated in the Second Chamber by 97 against 91, even with the codicil that the inquiry should explore options "without unauthorized or damaging infringement on private enterprise and private acquisition beneficial to society.[677]

The radicals had by this time become increasingly marginalized within the Liberal party. After adopting a radical agricultural reform programme in 1907, the party had gradually retreated from this position after a backlash from its agrarian wing, who felt the party made too radical inroads on private property rights. This led Lindhagen to leave the party and instead join the Social Democrats in 1909, with Baron Palmstierna following suit in 1912.[678] The Liberal party would continue to thread a fine line between increased government control and preservation of property rights, while promotion of a radical comprehensive concession law would largely be left to the Social Democrats. This was an important contrast with the Norwegian development. Whereas the

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[675] Andra Kammarens Protokoll No. 58 1909, p. 51. As the exact voters are not registered, the calculation is based on the assumption that no conservatives supported Lindhagen, and that the attendance in the Riksdag on that day was proportional to the total number of MPs.

[676] «[…]taga i öfvervägande, huruvida och under hvilka villkor inmutningsrätten må jämväl på enskild mark kunna upphäfvas och ersättas med ett annat väsentligen på concession byggdt system[…]"Sammansatta Lag- och Jordbruksutskottets Utlåtande Nr. 1, 1910. Bihäng till Riksdagens protokoll, 7 Saml. 2 Afd. pp. 24-30. Quote is from p. 30

[677] «[…]utan obehörigt eller skadligt intrång på den enskilda företagsomheten och det samhällsgagnande enskilda förvarfvet[…]". Andra kammarens fjärde tillfälliga utskotts utlåtande Nr. 9 1911, p. 11. For the vote, see: Motioner AK 1911, nr. 244. Bihäng till Riksdagens protokoll, 1 Saml. 2 Afd. Andra Kammarens Protokoll No. 35 1911, p. 52.

[678] Gellerman, *Staten och jorbruket*, pp. 134-54.

Norwegian agrarians had accepted a radical reform of the use of privately held riparian rights as a necessary mean to regulate foreign ownership and hydroelectric development, their Swedish counterparts – who saw neither widespread foreign ownership nor breakneck hydroelectric development – decided to opt for more cautious measures.

III. Government ownership rather than regulation?

Whereas the hydropower and mineral reform remained deadlocked, this did not mean that the governments remained passive in these sectors. Instead, in both hydropower and minerals, the Swedish government would expand its role through direct ownership rather than regulatory reform. Unlike the Norwegian government, the Swedish government took a much more active role in developing hydropower and obtaining mineral claim. However, these ventures were not necessarily undertaken in competition with private Swedish industry. Instead, they were often complementary developments that private Swedish investors were reluctant to risk themselves. This did not only create a less confrontational atmosphere between Swedish government and Swedish industry over natural resources, but also undercut the idea of dangerous private monopolization of hydropower resources that was often espoused by the political left.

The Swedish state had taken an active part in developing its own hydroelectric generating capacity at an early stage. At the beginning of the century, the state had won a lengthy legal dispute over the riparian rights of large parts of *Trollhättefallen*. This waterfall, located close to Gothenburg, had by far the highest hydroelectric potential outside the sparsely populated north. In 1905, the Riksdag approved the acquisition of the remaining privately held rights in the fall, and the year after the Riksdag unanimously sanctioned a proposal from Karl Staaff's Liberal government that the state should develop the falls itself.[679]

In contrast to the many disagreements over hydropower legislation, the decisions to establish a large state run power plant at Trollhättan were carried out with a remarkable level of political consensus. While the conservatives had initially wanted to sell or lease out the state's riparian rights, Swedish business interests were overall supportive of full state ownership and did

[679] Kung. Majt. Prop Nr. 130, 1906, Første Kammarens Protokoll 1906, nr. 44, p. 7, Andra Kammarens Protokoll 1906, nr. 50, p. 11. See also: Lars Lundgren, "Energipolitik i Sverige 1890-1970. En skiss," (1976), pp. 19-26; Rolf Gradin, ed. *Vattenfall umder 75 år* (Stockholm: Statens Vattenfallsverk, 1984), pp.18-19.

not oppose the principle that the state should be become a direct actor and potential competitor to private interests in hydroelectric generation. As a number of historians have pointed out, the economic foundations of the private company that eventually sold its rights to the state were weak, and it was not obvious that another private company would be able or willing to take on the risk and financial burden of developing the falls.[680] As the fall was developed by the state, ample cheap power would likely be available to new industries at a much earlier stage than would have been the case if it were left in private hands. On the other hand, direct state ownership also ensured that monopolization and price gouging would be less likely, while also ensuring that the profits from "Sweden's Niagara" would end up on public hands.

The institution set up to run the state's hydropower development also helped to allay the apprehension of many who would otherwise have been critical to direct government ownership. In 1905, the Riksdag had created a separate government body to administer the government's riparian rights should best be utilized, named *Kungliga Trollhätte Kanal- och vattenverk.* This institution had subsequently been a key advocate for a state owned development of Trollhättan. However, the board of this institution was not picked from the Swedish bureaucracy, but instead by engineers and business representatives.[681] It had a mandate to run the government's properties in a "business-like manner" and thus had a large degree of autonomy. This meant that it was less likely to be used as a political tool of the government in office, as well as keeping the costs down. In 1909, this institution was set to run all the state's hydroelectric undertakings, under the new name *Kungliga Vattenfallsstyrelsen* (later known as *Vattenfall*). [682]

Trollhättan was followed by two more large plants during the Lindman-government, with the Riksdag approving the development of *Porjus* in 1910 and *Älvkarleby* in 1911. Älvkarleby, located in the very south of Norrland, was close to much of the industrial heartland of Sweden and had a large number of potential customers.[683] Porjus on the other hand, located in the far north, was a much more ambitious project. The idea began when the Swedish State Railway wanted to introduce its first large scale electrification in anticipation of increased traffic on the Kiruna-Narvik railway. Like Trollhättan and Älvkarleby, conversion would reduce Sweden's dependence on imported fuel, and was also calculated to cost less than the coal-fired alternative in the long run. The Swedish State

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[680] Jakobsson, *Industrialisering av älvar: studier kring svensk vattenkraftutbyggnad 1900-1918*, pp. 81-84; Lundgren, "Energipolitik i Sverige," p. 58; Gradin, *Vattenfall umder 75 år*, p. 19.
[681] Jakobsson, *Industrialisering av älvar: studier kring svensk vattenkraftutbyggnad 1900-1918*, p. 77. This included the director of TGO, Erik Frisell.
[682] Lundgren, "Energipolitik i Sverige," pp.23-26; Jakobsson, *Industrialisering av älvar: studier kring svensk vattenkraftutbyggnad 1900-1918*, 76-90.
[683] Sven Parding, "Eldistributionens utveckling: En studie av Älvkarleby Kraftverk," in *Vattenfall under 75 år*, ed. Rolf Gradin (Stockholm: Statens Vattenfallsverk, 1984).

Railways favoured a smaller and cheaper development of the Vakkokoski fall, but when the soon to be named Kungliga Vattenfallsstyrelsen was tasked to look into the matter in 1908, they opted for a more ambitious option.

Instead of Vakkokoski, Kungliga Vattenfallsstyrelsen proposed developing Porjus, a much larger waterfall located further away. This would not only provide power to the iron ore railway, and have power to spare for the Norrbotten mining operations.[684] Porjus, which could yield 50,000 hp, would also have power to spare for new energy intensive industries. Capacity could be further expanded in the future by developing the nearby Harsprånget falls, calculated to output another 180,000 hp.[685] Initially, there were few industrial customers willing to commit to leasing power from the new plant. Despite this, both chambers in the Riksdag unanimously supported the conservative government's proposal to develop the plant in 1910.[686]

In comparison with the two other large undertakings, the Porjus development leaned even more heavily on fostering industrial growth rather than controlling or profiting from a valuable resource. By making large amounts of hydroelectricity available in northern Sweden, the Swedish state might be able to facilitate the growth of new energy intensive industries that would not otherwise have developed. As the minister of Civil Affairs, Hugo Hamilton explained to the RIksdag:

> It should hardly be thought likely, that such a large private undertaking will come together at one once, that it can immediately consume the amounts of energy necessary to motivate a power plant on the scale of the Porjus plant or its equal. But it is first with power pants on a large scale that it becomes possible to produce energy in the Lule River to such a low price, that electrochemical or electrothermic methods are profitable. If there is already such a power plant, capable of delivering electric power to at a cheap price, it is obvious that it will be significantly easier for private enterprise to establish such industries in these areas […][687]

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[684] LKAB and TGO had looked into aquiering power from a Vakkokoski development, but the rapid increase in power demand for electric powered drilling had led to estimated power needs beyond the capacity of falls.
[685] Staffan Hansson, *Porjus : en vision för industriell utveckling i övre Norrland* (Luleå: Institutionen för Industriell Ekonomi och Samhällsvetenskap, 1994), pp. 118-19.
[686] Första Kammarens Protokoll 39, 1910, p. 39, Andra Kammarens Protokoll 50, 1910, pp. 5-39
[687] Kung. Majt. Prop Nr. 119, 1910. pp. 30ff. Swe: «Det torde nämlingen knappast vara sannolikt, att en så stor privat anläggning på en gång kommer till stånd, att den omedelbart kan förbruka energibelopp, tillräckliga att motivera ett kraftverk af Porjusverkets dimensioner eller liknande. Men först vid kraftverk i större skala blir det möjligt att i Lule älf åstadkomma energi till så pass lågt pris, att de elektrokemiska eller elektrotermiska metoderna löna sig. Finnes nu redan ett sådant kraftverk, som kan leverera elektrisk kraft till billigt pris, är tydligt att det blir väsentlig lättare för den enskilda företagsamheten att i dessa orter igangsätta industrier[…].»

While this could be interpreted as subsidy to big industry, this also held strong support across the Swedish political spectrum and was approved unanimously by the Riksdag. However, in addition to the fact that the Swedish states hydroelectric developments in the north favoured new big industry, it also incentivised such industries to relocate from the south, leaving more power for household consumption and small business'. Thus, even this development could also be seen as a continuation of a policy where the state undertook large and expensive developments to make hydroelectricity available to the country at large.

In a similar way, the state also took an active mineral policy through direct ownership. After the 1907-deal between the state and TGO, the Lindman government followed up by arranging to buy *AB Svappavaara Malmfält*, a Swedish company holding a cluster of smaller ore fields about 40 kilometers south-east of Kiruna. The company had received a railway concession to construct a side-railway to Kiruna in 1901, but was still dependant on the state owned railway for ore transports to the sea. Consequently, the company had been in negotiations with the Swedish government either to form a separate agreement in the vein of the LKAB-arrangement or to sell their mineral claims outright for SEK 8.5 million. The Lindman government found it best to buy the company outright, as this would provide a guarantee against foreign influence and make it easier to set aside the deposits as mineral reserves for the future. In order to offset the costs of the acquisition, the government arranged to make an amendment to the arrangement with LKAB the year before. In this amended deal, LKAB would be allowed to extract and ship another 9 million tons of iron ore over the course of 1915-1932. In return for this, LKAB would pay SEK 3.5 million up front, as well as a SEK 3.00 royalty per ton for half the quantity extracted.[688] This royalty was expected to cover the remaining costs of the acquisition, and even leave the Swedish state with a surplus of just under SEK 5 million by 1933.

In other words, this arrangement reinforced LKAB/TGO as a national champion for ore exports. The Swedish state promised to reserve any ore extracted from its newly acquired fields for domestic smelting, and not for export until 1938. This was in many ways a natural continuation of the policy from the 1907-accord, which reserved the ore with the lowest phosphorus content for domestic smelting, as parts of the ore claims owned by AB Svappavaara were rich in low phosphorus ore. However, it also secured LKAB a monopoly position as exporter of the Lapland ore.

This position was further cemented in 1913, when the Swedish government once again amended the LKAB-accord to allow for further increases in extraction rate and exports. As demands from Germany continued to increase in the years leading up to the First World War, TGO began to push for permission to be allowed to increase its exports from LKAB. The company's key argument

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[688] Kung. Majt. Prop Nr. 176, 1908

was that if they could not meet the demands of European steel industry, the European steel industry would eventually be forced to make large investments to secure its ore elsewhere, in places like South America or North Africa. The liberal Staaff-government was overall sympathetic to these concerns, and eventually negotiated an amended accord where LKAB could export another 31 million tons of ore. This constituted an overall increase of about 26%. In return, the state would receive a royalty equivalent to the estimated net profit (SEK 6.00 per ton) on half the ore extracted, as well as reduce the amount the state had to pay to buy the company at the end of the period.[689]

While these two decisions did not go without criticism in the Riksdag, there was overall broad political support for the approach. After the long wrangling over the size of iron ore exports and their effect on Swedish iron and steel industry, by 1913 the high exports of phosphorous iron ore had won broad acceptance. There was some criticism from the conservative opposition that the government should not have granted an increase in the ore export allowance to LKAB before securing some concession from the German Empire. However, in the end only the Social Democrats voted against deal. Moreover, even they did not argue that the agreement was fundamentally wrong, merely arguing that the government should have extracted a higher price from the company.

IV. The Road to the Restriction Act: New regulations on foreign ownership

While the question of foreign ownership had not played a central part of the debates on Swedish hydroelectricity, the issue of foreign ownership over natural resources had not ended with the Norrland-law of 1906 and the LKAB-deal of 1907. However, as we have seen there was no highly valuable resource or national interest at stake that could focus and mobilize popular opinion in the way the Norrbotten ore and the Norrland forests had done. The debate on foreign ownership and proletarisation of farmers did briefly flare up again when Kellner-Partington obtained AB Mølnbacka-Trysil, a Swedish pulp and paper company with large forest properties close to the Norwegian border in Värmland, in 1908, with among other the former Minister of Finance, Elof Biesèrt raising the

[689] Meinander, *Gränges*, pp. 123-25.

alarm.[690] Nevertheless, while the Mølbacka-Trysil acquisition was unpopular, it neither held the economic nor strategic importance of anything like the Norrbotten iron mines.

Consequently, there was little urgency to create legislation to regulate foreign ownership. While both chambers of the Riksdag had passed a motion requesting regulations on foreign share ownership in 1902, it had been left dormant. The issue was eventually passed into the preparations of a wider reform law on joint stock companies. This new joint stock company law proposed that all Swedish joint stock companies that did not contain "fully adequate guarantees against unauthorized foreign influence"[691] in their company charter would have to seek permission before acquiring real property. Without any clear definition of what such guarantees should contain, the government would have the right in each case to decide if the provisions taken in the company were sufficient.

The committee that prepared the proposal was not coy about its many misgivings as to the proposed law effectiveness and possible negative side effects when it presented its proposal in early 1908. Firstly, the committee argued that with the Norrland forest laws of 1906 and the LKAB-agreement of 1907, the most pressing concerns for regulating foreign ownership had been solved. Secondly, the law would make it more difficult for Swedish owned companies to acquire capital from abroad, as shares with ownership restrictions could not be used as collateral for bonds or loans abroad, which could potentially also effect companies outside the natural resource sectors. Thirdly, the law might also lead to reciprocal measures against Swedes abroad and "lead to international entanglements, more grave than those dangers, one would at the same time avoid."[692] When the Swedish Council of Legislation (Lagrådet) issued many of the same objections the year after, the proposal was quietly dropped from the revised proposal.[693]

However, the issue would be revived by the Liberal government after coming to power in 1911. In answer to an interpellation by Lindhagen in April 1912, the new Minister of Justice, Gustaf Sandström, informed the Riksdag that the government had begun preparations on a law to regulate foreign ownership of natural resources, which it intended to present the following year.

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[690] See for instance: «Betänklig norsk bolagsinvasion i Värmands grannsocknar» Dagens Nyheter 20.01.1908, «Engelska miljonköp af svenska industriegendomar» Svenska Dagbladet 24.03.1908, "Utländska fastighetsförvarf å svensk mark" Aftonbladet 04.04.1908

[691] «fullt tillräckliga garantier mot obehörigt utländsk inflytande» *Förslag till Lag angående förbud i vissa fall för aktiebolag att förvärfva fast egendom eller idka gruvdrift.* Bih. Till Riksdagens Protokoll 2. Saml. 2. Afd. 1 Band 1910, p. 117.

[692] "[…]fremkalla internationella förvecklingar, betänkeligare än de vådor, man med densamma villa undvika." [] 1910, p. 114 Bih. Till Riksdagens Protokoll 2. Saml. 2. Afd. 1 Band

[693] Lagrådet is a Swedish government agency composed of current and former justices of the Supreme Court and Supreme Administrative Court, and is set up to pronounce on the legal validity and effectivity of legislative proposals. It's pronouncements are not binding.

This drive to regulate foreign ownership was not only propelled by a change of government, but also by the perception of a growing threat to the central Swedish iron ore industry. From 1911, both liberal and conservative Swedish newspapers reported that Swedish iron mines in central Sweden were being acquired by German companies, possibly with the intention of diverting the low-phosphorous ore to Germany. This could not only precipitate higher extraction rate and shorten the lifespan of the mines, but also pose a threat to the Swedish iron and steel companies that did not own their own ore supply. The government launched an official investigation into the matter in December 1912, which found that between at least 15% and 20% of all low phosphorous mines had were now in foreign hands.[694]

As before, the reports of foreign acquisitions of a key strategic resource concretized the possible dangers and thus the need for some form of intervention in both popular opinion as well as parts of the ironworks industry. Without new legislation, the ability for the Swedish state to control this development was limited. It was still bound by its trade agreement with Germany not to impose export restrictions on iron ore. Moreover, as was noted by mining officials during the government inquiry, foreign ownership would make it more difficult to control exports in the future, presumably as a foreign powers would be more likely to intervene to protect its own citizens. Once again, the reaction of the Swedish government ran counter to the obsolescing bargaining model. As it became clear that the iron ore of central Sweden was of interest to continental investors, the government did not move to make the prospects harder for the foreign owned companies who already operated, but sought to prevent the level of foreign ownership to rise further.

The fact that the preparatory documents for the final law is missing from the Swedish state archive (Riksarkivet) makes leaves some details in this process unclear. In any case, the Liberal government postponed presenting a new proposal, intending instead to bring it to the Riksdag in 1914.[695] However, the government resigned in February 1914, after clashing with King Gustav V over defence spending and the king's independent role. Its replacement was an officially unaligned, but conservatively oriented "civil service"-government, headed by Hjalmar Hammarskjöld.[696] The law proposal was thus once again put on hold, until 1915. It is unclear whether this was due to a reluctance to pass such a legislation by the Hammarskjöld-government, or whether the proposal was simply postponed due to the change of government and then the outbreak of war. In any case, following a motion by a Conservative MP of the First Chamber in 1915, both chambers voted

[694] Elias Mossberg to Statsrådet, dated 09.01.1913. SE RA 420132 13 1 FIa 46 Folder 1
[695] Dagens Nyheter 12.08.1913
[696] Mats Svegfors, *Hjalmar Hammarskjöld* (Stockholm[?]: Albert Bonniers Förlag, 2010), p. 43. The new government also included the aforementioned banking magnate K.A. Wallenberg as foreign minister.

unanimously for a call on the government to propose new legislation on the regulation of foreign ownership. [697]

The government still had some misgivings about the possibility that the law would have unintentional negative consequences. Yet unlike in 1908-1910, the now Minister of Justice Bernt Hasselrot concluded, "any inconvenience would presumably hardly be so considerable, that it is not equalized by the protection of our country's natural resources".[698] As the government clearly stated, the desire to keep central Swedish mineral wealth out of foreign hands had made such regulation more pertinent than before. The government also underlined the law would prevent foreign capitalists from obtaining Swedish companies with forest holdings pre-dating the 1906 Norrland Act. Moreover, Hasselrot considered the possibility of reciprocal actions by foreign powers to be unlikely.

> That a country, whose wealth to a very large extent consists of its natural assets of forests, ores and hydropower, which it needs as a foundation for its industry, tries through controlling measures to protect the most valuable of these resources against foreign exploitation, is moreover such a natural thing, that an objection from abroad can not be warranted.[699]

While it is possible that the altered conditions and general increase of state control in Europe made it easier to legitimize discriminatory state powers in Sweden, there was also an example much closer at hand.

> In Norway, […]one has through [the] laws of 1909, which subsequently in some respects [has been] tightened and completed, introduced very rigorous regulations against foreigners, especially with regards to the acquisition of forested lands, without this, as far as is known, having prompted any reprisals in one form or another from a foreign power.[700]

The proposal itself was in many ways shaped not to make the law too intrusive for Swedish owned enterprises. The bill was a refinement of the one that had been scrapped in 1910. Instead of

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[697] See: Motioner FK 1915, nr. 4. Bihäng till Riksdagens protokoll, 3 Saml. Lagutskottets utlåtande 1915, Nr. 6. Bihäng till Riksdagens protokoll, 9 Saml. Första Kammarens Protokoll 1915, nr. 24, pp. 20-21. Andra Kammarens Protokoll 1915, nr. 25, pp. 4-5

[698] Kung. Majt. Prp. Nr. 137 1916, p. 41

[699] «Att et land, vars rikedom i mycket väsentlig grad består i dess naturtillgångar av skogar, malmer och vattenkraft, vilka det väl behöver som underlag för sin industri, försökar genom kontrollåtgärder skydda de värdefullaste av dessa naturtillgångar mot utländsk exploatering, är för övrigt en så naturlig sak, att en invänding från utlandet ej gärna kan vara befogad». Kung. Majt. Prp. Nr. 137 1916, p. 40

[700] "I Norge, […] har man genom lager av år 1909, som sedermera i vissa avseenden skärpts och fullständigats, infört mot utlänninger riktade, mycket rigorösa beståammelser, särskilt med hänsyn till förvärv av skogbärande mark, uten att detta veterligen föranlett nögra repressalier i en eller annan form från utländsk makts sida." Kung. Majt. Prp. Nr. 137 1916, p. 40

the vague formulation of the previous iteration, the new law would create a standardized control mechanism to distinguish Swedish controlled companies from foreign controlled ones. Any joint stock company that wanted to avoid applying for a permission would have to have shares registered by name, and include a restriction in its charter to allow no more than 25% of the voting power of shares to be in foreign hands. In other words, the Hammarskjöld government outlined a system which allowed “passive” share ownership, as long as control over the company remained on Swedish hands. This would make financing Swedish enterprises easier. Swedish joint stock companies with these provisions would also count as a Swedish legal subject in the same way as a Swedish citizen, which would allow it to own shares in other companies with similar restrictions. Companies without such restrictions could also apply for a ‘general permission’[701] where they would be preapproved for future acquisitions of real property.

The proposal also retained an exception for real property that were not important natural resources like forests, minerals, turf and hydropower, but rather smaller plots or storage areas. In this, the law proposal followed the intentions outlined in the 1902 motion, which included the same reservations. Companies that did not have the necessary ownership restrictions in their charter to become exempt would have to clear the property in question with the local county governor, who would only take the matter to the central government if the piece of property could be considered as being a natural resource. This would make the law quicker for applicant companies, and also reduce the administrative load of the state.

As this regulation only covered the buying and selling of real property itself, it alone would not prevent a company from acquiring a controlling stake in a company that owned natural resources. In order to cover this, the law also mandated that all joint stock companies who owned mines, riparian rights with a minimum yield over 500 horsepowers or over 1,000 hectares of land at the time the law was introduced could only sell shares to Swedish citizen or Swedish companies with the aforementioned 25% restriction. This should not however restrict foreign owners from having the right to obtain the number of shares necessary to maintain their relative ownership position if the company issued new shares. However, this paragraph had a very important qualification. Presumably, because it would be very difficult to monitor, this legal paragraph was only valid for companies with registered shares and not bearer shares.[702] Thus, in practice, many joint stock companies were exempt from this control.

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[701] Swe: “allmänt tillstånd” Kung. Majt. Prp. Nr. 137 1916, p. 2

[702] No explicit explanation of this given either in the law or the following promemoria on the law issued by the government, besides “If shares in such company set to the bearer, one has not considered oneself able to enact any restriction over the right to dispose over the shares in question.” Kôersner, *Lag om vissa*

Nevertheless, after being the source of much disagreement for two decades, the 1916 *Restriction Act*[703] was passed through the Riksdag with little fanfare and few objections. The Riksdag did make some adjustments in order to make the law a bit harder to circumvent. It removed the option for companies to apply for 'general permission', as it would put companies with such a permission at an unfair advantage, and as such a permission could also be removed by the government, did not really grant the kind of long term predictability for the company. Furthermore, it lowered the limit for foreign share holdings from 25% to 20%.[704] Objections from Lindhagen that the open door for non-voting shares would make it too easy to circumvent the law, was disregarded, and with no counter proposal, the law was passed unanimously.[705]

With the introduction of the Restriction Act, the issue of foreign ownership was decoupled from other regulations of natural resources. The legislation also created a clear set of distinctions as to what constituted a Swedish company, and what constituted a foreign owned company. Companies who fulfilled the specific criteria of the former would be free to acquire property as before.

Thus, the Restriction Act had a more limited ambition than its Norwegian equivalent, as it emphasised Swedish control. Rather than a set of regulations made to ensure that Swedish companies acted in accordance with what was perceived as the national interest, the law implicitly assumed that Swedish capitalists would use the resources in a way that benefitted Swedish interests, which foreign owners would not. The law was deliberately shaped as to try to limit the negative impact on Swedish owned companies, even if this came at the cost of leaving some potential loopholes open. This obvious contrast to the Norwegian legislation was particularly welcomed by pro-industry conservatives. As conservative MP Sven Lübeck concluded as the law was passed in the Riksdag:

> I will express this satisfaction [with this legislation] so much more, as it is worth knowing that when our neighbouring country Norway found it necessary to legislate against

inskränkningar i rätten att förvärva fast egendom eller gruva eller aktier i vissa bolag given den 30 maj 1916, pp. 119-20.

[703] Swe. *Inskränkningslagen*. The full name of the act is: *Lag om vissa inskränkningar i rätten att förvärva fast egenom eller gruva eller aktier i visa bolag.*

[704] The Riksdag committee also removed the possibility of granting "general" permission to a company – instead all permissions for acquisitions were given on a case-by-case basis. Lagutskottets utlåtande Nr. 34 1916. Bih. Till riksdagens protokoll 1916. 9 saml.

[705] Første Kammerns protokoll Nr. 70, 1916, Andra kammarans protokoll, Nr 73, 1916.

foreign influence, this legislation became such that it did not just affect the foreigners but also the domestic entrepreneurship in a very burdensome manner.[706]

V. Water Act of 1918

The Restriction Act of 1916 had put the issue of regulations of foreign ownership of natural resources to rest for the time being, without granting the Swedish state the power to introduce new comprehensive regulations for Swedish owned companies. Two years later, another big natural resource issue -- regulation of hydropower -- would also be put to rest in a way that limited the scope of government regulatory discretion.

While the majority of the Second Chamber had been pushing for some sort of concession law, the committee set down in 1906 to look at the matter came to a very different solution to reforming riparian law. When the committee presented its report, it proposed that instead of granting the government increased rights to regulate private hydroelectric development, decisions on these matters should be moved to the judiciary. The commission proposed the creation of special Water Courts, presided over by a judge, two hydro engineers and a juryman. The proposal stated that hydroelectric developments should be approved if the economic gain could be measured as double or more of the damage caused by it. The proposal also gave the owner of a majority of an exploitable watercourse the right to expropriate any holdouts. This court would make decision on how best to uphold the kungsådra-provisions on waterflow, timber floating and fish migration.[707]

This solution was well received by Swedish industry. Sven Lübeck, the secretary and founder of the private hydroelectric industry association *Svenska Vattenkraftföreningen* (Swedish Hydropower Association), described the proposal "an obvious liberation from a number of evidently impractical forms, unclarities and inconsequences".[708] Not only would the new expropriation rights make hydroelectric developments much easier to initiate, but the Water Courts offered both a quick and predictable hydroelectric policy, insulated from case-by-case interference from elected officials. The Water Courts thus in many ways resembled the kind of authority the Norwegian hydroelectric

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[706] "Jag vill uttala denna tillfredsställelse så mycket hellre, som det torda vara bekant, att när man i vårt grannland Norge fann det utländska inflytande på naturtillgångarna nödvendig föra en lagstiftning, så blev denna lagstiftning sådan, att den komm att drabba icke blott utlänningarna utan även den inhemska företagsamheten på ett mycket betungande sätt." Andra Kammarens Protokoll Nr. 73 1916, p. 43

[707] Sven Lübeck, *Utvecklingen af Sveriges vattenkraftindustri och vattenkraftpolitik under det senaste årtiondet* (Stockholm: Svenska Vattenkraftföreningen, 1913), pp. 18-21.

[708] "[…]uppenbarligen befrielse från en del påtagligen opraktiska former, otydligheter och inkonsekvenser[…]» *Sveriges vattenkraftindustri och vattenkraftpolitik*, p. 21.

industry had wanted the Watercourse Commission to be. This outcome and the praise it received was not coincidental. Johan Gustaf Richert, a well-respected hydrological engineer, conservative MP and vice-chairman of Vattenkraftföreningen, had played a crucial role in formulating the proposal as part of the water law committee.[709]

This proposal was also welcomed favourably by the conservative Lindman-government, who quickly moved to begin preparations for a law-proposal based on the committees outline. However, after sending the proposal out to referral to the civil service, the conservatives suffered a defeat in the 1911 elections. After the expansion of suffrage in the 1909 electoral reform, the conservatives lost ground in both chambers, Lindman resigned, forcing King Gustav V to ask Karl Staaff to form a new Liberal government.[710] Yet, despite much talk and deliberation, when Staaff's Liberal government resigned in 1914 it had yet to put forward its own ideas for reform of the hydropower legislation.

With a new conservative oriented government in power from 1914, proponents of a concession law now anticipated that the new government was likely to proceed with a solution based upon the industry-friendly 1910-report. Once again, Palmstierna and Lindhagen led the main criticism of the law, and besides the usual warnings of foreign ownership specifically appealed to the interests of small farmers which might be side-lined by legislation based on the 1910-report.[711] However, they were not the only critics. Liberals in the First Chamber who were worried that the new laws gave too much power to developers, and that smaller riparian owners facing expropriation – most prominently farmers – were unlikely to have the money and the organizational capabilities for claiming their rights in the system the proposal outlined.

The objections were dismissed by the conservatives in the parliamentary committee, but a minority of Liberals and Social Democrats issued a dissenting reservation which urged the government to "take into consideration if not, regarding the lucrative riparian rights, no less societal interests than even the agricultural populations justified wishes should be taken into account to a greater extent".[712] This reservation was voted through by the Liberals and Social Democrats in the Second Chamber, while the First Chamber instead offered a compromise statement on the divided

[709] "Den svenska vattenkraftindustrien inför en ny vattenlag," in *Lübeckiana: Valda skrifter av Sven Lübeck*, ed. J. Gust. Richert, et al. (Stockholm: 1927), p. 302.
[710] Stråth, *1830-1920*, p. 192.
[711] Motioner AK 1915, nr. 62, 137. Bihäng till Riksdagens protokoll, 4 Saml. Jakobsson, *Industrialisering av älvar: studier kring svensk vattenkraftutbyggnad 1900-1918*, p. 164.
[712] "taga under övervägande, huruvida icke, beträffande den luktrativa vattenrätten, ej mindre de samhälliga intressena än även den jordbrukande befolkningens berättigade önskemål böra beaktas i högre grad" Jrdbruksutskottets utlåtande Nr. 66. Bihäng till riksdagens protokoll 1915. 10 saml. pp. 19-33. Quote on p. 33

views. The result was in any case the creation of a new inquiry by the government to go over the matters again.[713] This inquiry, at the time referred to as “committee of experts”[714] would not reflect Sweden’s full political spectrum. Instead, it was to be headed by Karl-Henrik Högstedt, an audit secretary and legal scholar, who had also been a member of the 1910 inquiry. He would be accompanied by two Liberal MPs who specialized in agriculture and Sven Lübeck, the conservative MP and founder of the interest group *Vattenkraftföreningen*. [715]

The “majority”-position of the new report, penned by Högstedt and Lübeck and presented in spring 1917, made only minor changes to the 1910 inquiry. This included adjustments on how overall cost and gain of a development was calculated, as well as compensation. It also included a provision similar to the Norwegian system, where a hydro developer had to set aside 5% of the power generated to the local municipality at a fixed price.[716] The two Liberal politicians on the other hand issued a minority position, which included a concession law system with a yearly tax per horsepower to the local municipality (for river regulations), and a time limit followed by an option for the state to redeem the development at full value.

As before the new report was presented in 1917, it once again stressed the importance of reforming regulations to help speed up hydroelectric development. Using hydroelectricity as a way to increase Swedish self-sufficiency had been a broadly shared goal for a long time, but the war had made the issue all the more pressing. Shortages of coal and oil were taking their toll on the Swedish economy, and demand for electricity increased markedly. The shortages caused by the blockade had also helped fuel the discontent against the conservative oriented governments of Hammarskjöld (1914-1917) and Swartz (March-October 1917).[717] After the 1917 election, King Gustav V was forced to accept a new Liberal-Social Democratic coalition government, marking the final battle over parliamentarism. And while the main goal for the coalition government was to introduce a universal suffrage reform, the shortages that plagued Sweden also had to be dealt with.

While coming to terms with the Entente was crucial in easing the shortages, the government also pushed forward with the utilization of domestic resources. In April 1918, the government proposed to develop Harsprånget, a waterfall downstream from Porjus. With an added regulation dam upstream from Porjus, the government anticipated a yield from Harsprånget of 118,000

[713] Sven Lübeck claimed that the government had already planned to re-examine the proposal before the protests in the Riksdag. Lübeck, "Den svenska vattenkraftindustrien," p. 302.
[714] Swe.: Sakkunniga kommittée
[715] Åke Ingeström was a director at *Varpsnäs landbruksskola* (agricultural school), while Daniel Persson was a member of the Riksdags agricultural committee.
[716] The price should cover the costs of the development (including interests) + 2% on the capital laid down.
[717] Steven Koblik, *Sweden: The Neutral Victor* (Stockholm: Läromedelsförlagen, 1972), Chapters I-III.

horsepowers at the first stage, and 265,000 horsepowers at full development. This would then power AB Elektrosalpeter's planned arc-process nitrate plant, as well as provide power to for future expansion of the nascent electric iron smelting works that were being tried out to overcome coal shortages. [718] This would however come at a price – a heavily inflated wartime price. The first building step alone was calculated to cost no less than SEK 69,500,000.[719]

Yet, the shortages also increased the impetus for legal reform for hydroelectric development. In March 15, 1918, the new Minister of Justice, Eliel Löfgren presented a new proposal to settle the matter of riparian development reform. The proposal was based on the Högstedt-inquires suggestions, but included some notable changes. Löfgren raised the local tax included royalties between SEK 0.10 – 3.00 per horsepower/year, albeit only for power gained by water regulations, and also included a time limit with a redemption clause. However, Löfgren drastically reduced the time limit from 95 years to 40 years. Furthermore, the proposal also allowed the state to seek a reappraisal of a hydroelectric licence after 55 years, which could change or add terms to safeguard "common interests" according to the legislation in place at the time of the reappraisal. Any costs or diminished value incurred to the developers as a result of such a reappraisal of regulated water flow would receive no compensation.[720] Yet, one very crucial principle from the 1910-report remained; it would not be a concession system decided by the executive but instead by a specialized Water Court.

This line pleased neither the government's Social Democratic coalition partners nor the opposition Conservatives. The Conservatives wanted to implement the Högstedt-Lübeck proposal, which meant removing among other things royalties, time limits and the redemption clause. The Social Democrats on the other hand, wanted a full Norwegian-style concession law, with royalties for all developments and an uncompensated Right of Reversion after 50-60 years.[721] However, the socialists were not able to convince any significant number of MPs outside their own wing, and the Right of Reversion was rejected by the Second Chamber with 71 votes against 65.[722] Yet, while the government's proposal carried the day in the Second Chamber, the First Chamber rejected it in favour of the conservative proposal.

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[718] Hansson, *Porjus*; Nils Forsgren, *Harsprånget: Storverket som aldrig höll på att bli av* (Harsprånget(?): Porjus Arkivkommitté, 1995), pp. 11-15.
[719] *Harsprånget*, p. 17.
[720] For reappraisals of developments of other hydroelectric installations would only be compensated if the cost exceeded 1/3 of the total value of the development. See Chater 4, §6.
[721] Tredje särskilda utskottets memorial Nr. 1. Bihäng till riksdagens protokoll 1918. 11 saml. 3 avd. pp. 235ff
[722] Andra Kammarens Protokoll 1918, Nr. 67. p.63. The transcript gives no list of who exactly voted, but the socialists (Social Democrats and the recently split off Left Party) held 97 of 230 seats, i.e. 42%.

This impasse sent the proposal back to the Riksdag committee. Not wanting to postpone the new legislation any further, the Riksdag committee suggested that both chambers should vote on the proposal again. In order to make it more digestible for the First Chamber, the committee made a few changes, making costs and diminished value of developments due to licence reappraisals liable for government compensation of the costs or diminished value exceeded one quarter of the total pre-appraisal value.[723] The First Chamber also had another strong incentive to agree to this compromise proposal. As universal suffrage was on the cards for both chambers, the next election would likely break the conservative's dominance of the First Chamber. This could potentially open the way for an in their eyes less favourable reform after the next election.[724]

Wartime shortages also created a push to loosen the restrictions on mineral exploration. As the blockade became more effective, Sweden began to experience marked shortages on a number of minerals of strategic importance, both for its industry and its defence, such as nickel, pyrites and especially copper. With a full mineral reform still pending, the liberal-socialist Edén coalition opted to amend the suspension of the right to stake claims on state land to cover only iron ore. According to Löfgren, "[…] the choice between systems does not entail any decision on this question for the future. Now the only thing that matters is to find the way which under the current circumstances […] as soon as possible [can] produce the largest amount of the minerals of which the country lacks."[725]

Although it was not all the conservatives had wanted, the resulting reform was still positively viewed by the private Swedish hydroelectric industry. One obvious contrast between the Norwegian concession laws and the Swedish laws was the prominent role private hydroelectric industry groups, most notably Vattenkraftföreningen, had played in the creation of the laws. This does not only show how these actors managed to present their preferences as the scientific, modern and rational view, as underlined by Eva Jakobsson. It is also clear that this closer relationship between private hydropower developers and Swedish politicians was much easier than in Norway because there was not the same unease that the preferences of private industry were also the preferences for foreign developers poised to grab the country's most valuable resources in perpetuity. In Sweden, it was easier to sell the idea that predictability for private developers was a way towards progress. In

[723] Tredje särskilda utskottets memorial Nr. 2. Bihäng till riksdagens protokoll 1918. 11 saml. 3 avd.
[724] In the 1920 election, the first following the universal sufferage reform, the conservatives in the First Chamber fell from 88 representatives to 37, while the Socialists increased from 17 to 54, out of a total of 150. Stig Hadenius, *When the Law Does Not Matter: Konflikt och samförstånd*, 7th ed. (Stockholm: Hjalmarson & Höberg Bokförlag, 2003), p. 280.
[725] «[…]innebär naturligvis valet mellan system icke något avgörande för fremtiden i detta hänseende. Det gäller nu endast att finna den väg, som under de förhandenvarende omständigheterna[…] så fort som möjligt få frem största mängd av de mineral, på vilka landet lider brist.» Kung. Majt. Prp. 183 1918, p. 16

Norway, predictability for investors was instead downprioritized in favour of flexibility of regulate foreign acquisitions. This key difference also played into why the Norwegian riparian reform was a much more chaotic and ad hoc affair, while the Swedish question was allowed to remain unreformed for nearly two decades of committees, proposals, drafts, redrafts before the law was finally passed. The public outcry in 1906 in Norway made a similar long deliberation process before any new regulations impossible.

While the absence of foreign investors and other differences in legal and economic condition of the two countries can explain much of the differences, it is also important to note the historical contingency of the timing of the Water Act. The hope of using hydroelectricity as a substitute for coal in the interest of economic development and national security had long been a goal shared across the Swedish political spectrum, but the difficult final years of the First World War brought a whole new urgency to the issue. Rather than proposing a new system that would give the government more direct influence over hydropower regulations, the liberal-social democratic government chose to make amendments to the proposal favoured by the conservatives, rather than creating a wholly new system, which would likely take more time. Without this urgency, it is not impossible that the Liberals and Social Democrats might have settled for a government concession system.

VI. The Restriction Act in practice

The Water Act had left the regulation of hydroelectric development outside direct government control. On the other hand, the Swedish government had obtained new ways of regulating the development of natural resources through the 1916 Restriction Act, even if it was deliberately made to be less all-encompassing than the Norwegian concession laws. It gave the government considerable power to differentiate between the kinds of foreign direct investments it found acceptable and which it did not. Indeed, it lay in the government’s power to make the Restriction Act essentially a sleeping law, only necessary for extraordinary circumstances. Thus, the consequences of the new act would also lie in its implementation.

By conducting a thorough study of how the law was enacted in the years following its introduction it becomes clear that the Restriction Act were not just worded differently, or took a more lenient approach to “passive” foreign ownership, but would also be enacted in a very different

manner than the Norwegian concession laws. The first – and very obvious contrast – is that the Restriction Act was not interpreted as allowing the government to set terms to concessions for foreign owned companies. Indeed, the law did not specify that terms were an option, so this is perhaps to be expected. Yet, this was also the case with the first temporary concession laws, but there the government had interpreted the flexibility and mandate of the law quite differently. In other words, there was nothing similar to a "harnessing strategy" in the Swedish Restriction Act. Permission was either granted or denied.

The second element that becomes obvious is that the law was not a sleeping law. Instead, the law was implemented fully and consistently with the intention of keeping Swedish natural resources out of the hands of foreign owned companies. The war had turned the international capital flows around, and there are very few examples were foreign owned companies tried to acquire natural resources. The vast majority of cases in the first years after the law was introduced deal with more or less fully Swedish owned companies wanting to obtain land, which were nearly all approved. However, from the few there are it is possible to discern a clear policy line.

The first example of a foreign owned company being barred from buying natural resources comes in 1918. The company in question was the German owned *Gruvaktiebolaget Dalarna,* which applied to buy a series of iron ore claims in central Sweden.[726] The company argued that these claims could not be profitably worked alone. However, some of the claims had been staked on land owned by *Stora Kopparbergs Bergslags AB*. This was of course perfectly legal according to Swedish mineral laws, although the landowner had the right to claim a 50% share. However, after the government contacted Stora Kopparberg on the issue, the company strongly underlined that the claims in question "should not be acquired by companies under foreign influence, since these mines constitute integrated parts of an ore field whose ore are much needed for the domestic iron production and [which of] the greater part already is in our possession".[727] It should be noted that Stora Kopparberg was not the only ones opposed to the acquisitions, so it is by no means reasonable to conclude that the attitude of Stora Kopparberg was decisive.[728] Nevertheless, it does show how

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[726] SRA, Justitiedepartementet Konseljärenden 1918, 12.04.1918: Nr. 50

[727] "[…]icke må förvärvas av bolag under utlängsk inflytande, enär dessa gruvor utgöra integrerande delar av ett gruvfält, vars malmer äro välbehövliga för den inhemska järntillverkningen och redan till största delen befinna sig i vår ägo." Stora Kopparbergs to Kommerskollegium, 14.01.1918. SRA, Justitiedepartementet Konseljakt 1918, 12.04.1918: Nr. 50

[728] It was also opposed by the states chief mining officer of the region, the local county administrative board and the Swedish Board of Trade. Thomas Dahlblom to KB i Kopparbergs län, 02.11.1917, Länsstyrelsen i Falun to The King, 05.01.1918, Kommerskollegium, Industribyrån to The King, 21.02.1918. SRA, Justitiedepartementet Konseljakt 1918, 12.04.1918: Nr. 50

the Swedish government was willing to give competing Swedish owned companies a voice in the process.

Even though the German owned company was not granted permission to obtain these claims, the way the company argued its case hints to a principle that seems to have been a guideline in the government's handling of these cases. Gruvaktiebolaget Dalarna contested that the claims were not an expansion into entirely new areas, but a rational continuation of its existing operations. In other words, the German owned company assumed that the law would not be used to stop pre-existing foreign owned companies from continuing their operations.

This no-expansion principle was also central to the application of another case the year after. Fagersta Bruk, a large ironwork that was also owned by the Lübeck ore trader Possehl, sought permission to buy around 350 hectares of forests adjacent to the forests already owned by the company. However, it argued that this was not an expansion, but rather a rearrangement to rationalize its forest operations, as it had sold off forests of equal value. This principle was indeed accepted by the Swedish government. However, it did not agree with the company's valuation of the forests it had sold, and would thus only approve half of the company's acquisitions.[729] Whether this idea had been communicated beforehand is not clear, but it seems to have been accepted as a guideline from the very beginning, and would continue to be so in the future.

Overall, the law was enacted in a more legalistic manner than its Norwegian equivalent. Not only was there no attempt to reinterpret the law to introduce terms or another form of more hands on political management, but there was also a resistance at interpreting the law to go beyond the scope of natural resources. Part of this might be explained by the fact that much of the role of enacting the law was handed to the *Kommerskollegium* (Swedish National Board of Trade), a government agency with a long institutional history responsible for advising on issues of foreign trade.[730] While the National Board of Trade had only an advisory role, the government as a rule would not counteract its recommendations.

The clearest example of this came in 1919-1920, when Aktiebolaget Svenske Denofa applied to obtain a property for its new factory in Nödinge, with the intention of producing oil and fats products. However, this company was controlled by the British fats giant Lever Brothers.[731] This

[729] Kommerskollegium to The King, 23.11.1918. SRA, Justitiedepartementet Konseljakt 07.02.1919: Nr. 26
[730] Det svenska urverket - Kommerskollegium 350 år
[731] Kommerskollegium, Industribyrån to The King, 21.05.1920. SRA, Justitiedepartementet Konseljakt 18.06.1920: Nr. 44

company, with its “trust like or monopoly like character”[732] was viewed with dread by the Swedish soap and fats industry who vehemently argued against allowing it entry into the country.[733]

Yet, despite agreeing that Lever Brothers might pose a threat to Swedish soap and fats industry, the Swedish National Board of Trade argued that the Restriction Act had not been intended to restrict the establishment of foreign owned industries, and that “real property of smaller dimensions” was to be exempted from the staid restriction. Instead, the law’s primary focus was to prevent “foreigners [the] opportunity to obtain a controlling influence over the country’s most important natural resources, such as forests, mines waterfalls and land etc. of a more considerable size”.[734]

It should however also be noted that the Kommerskollegium did not only advice this as a matter of principle. It was also because it foresaw that breaking this principle

> […] might in turn lead to reciprocal treatment of Swedish interests in other countries, especially the neighbouring countries. With regards to the effort, which especially under the latest years have been made itself felt by a number of larger Swedish industrial undertakings to through the establishment of branches or subsidiaries abroad widen their areas of activity, a limit of these opportunities would therefore entail considerable damage to Swedish interests abroad.[735]

In any case, despite the Kommerskollegium’s restricted interpretation of the law caused an uproar in parts of the socialist press, the Social Democratic government – who was in power for the first time in 1920 – followed the Kommerskollegium’s recommendations.[736]

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[732] “trustartad eller monopolartad karaktär”. Kommerskollegium, Industribyrån to The King, 21.05.1920. SRA, Justitiedepartementet Konseljakt 18.06.1920: Nr. 44

[733] Sveriges Kemiska Industrikontor to Kommerskollegium, 02.02.1920. SRA, Justitiedepartementet Konseljakt 18.06.1920: Nr. 44

[734] […]utlänningar tillfälle att erhålla ett bestämmande inflytande över landets viktigare naturtillgngar såso skogar, gruvor, vattenfall och landområden m.m. av mer betydande storlek.” Kommerskollegium, Industribyrån to The King, 21.05.1920. SRA, Justitiedepartementet Konseljakt 18.06.1920: Nr. 44

[735] «[…] kunde i sin tur befaras leda till reciprok behandling av svenska intressen i andra länder, särskilt i grannländerna. Med hänsyns till den strävan, som i synnerhet under de senaste åren gjort sig gällande från en del större svenska industriföretags sida att genom upprättande av filialer eller dotterbolag utomlands vidga sina verksamhetsområden, skulle en begränsning av möjligheterna härför kunna medföra åtskillig skada för svenska intressen i utlandet.» Kommerskollegium, Industribyrån to The King, 21.05.1920. SRA, Justitiedepartementet Konseljakt 18.06.1920: Nr. 44

[736] See: “Utländska industritrustar få etablere sig i landet” Norrskensflamman 21.06.1920. SRA, Justitiedepartementet Statsrådsprotokoll, huvudserie, vol: 182 (1920 maj – juni).

VII. Summary and conclusions

By the end of the 1910s, the Sweden had put in place a system of resource regulations that was markedly different from its Norwegian counterpart. By the end of World War I, the Swedes had after much back and forth introduced a law to regulate foreign ownership, as well as reform the regulation of hydroelectric development. However, crucially, regulation of foreign ownership in Sweden would be decoupled from any state centred rent capture initiatives. Even the Water Act, which did include some provisions on duties to the local populace, these would be strictly linked to actual negative impacts caused by hydroelectric development, rather than the local municipality claiming a "rightful share" of the wealth generated by the utilization of the resource.

As we have explored in this chapter, this disparity can be best explained as a confluence of factors. The most obvious contrast was the lack of a clear and widely shared focal point for resource nationalist mobilization. Inward foreign direct investments into minerals and especially hydropower development was much lower in Sweden, and direct government ownership was much higher in both sectors than was the case in Norway. Previously in both countries, resource nationalism had predicated on a convergence of different interests and anxieties of economic globalization. Without any clear unifying point of unwanted foreign acquisitions or of privately held resources that yielded extraordinary returns, there was much greater resistance to throwing traditional notions of private property to the wind. This meant that the calls for a radical increase of state control over natural resources remained mostly restricted to the socialists.

This changed somewhat when German companies started obtaining central Swedish iron mines. Yet, the response to this issue was carefully crafted – both in its letter and in its implementation – not to be too intrusive to the Swedish owned industry, and did not include any rent capture mechanisms or other restrictions besides ownership nationality. In other words, the Restriction Act prevented new foreign acquisitions of mines, but imposed no restrictions on ore exports for Swedish owned mines, or mines already on foreign hands. This binary setup of the Restriction Act also reflected back on an important structural difference between how Norwegian and Swedish politicians viewed the prospects of future investments in the sectors they sought to regulate. In Sweden, the private domestic industry was considered strong enough to act as the senior party in all future mineral and hydroelectric developments, without leading to an unacceptable drop in investments. This made it possible to introduce a law that as a rule denied new foreign direct investments into minerals and hydropower. In Norway, this was not the case, and hence the need for the "harnessing strategy".

The solution did not only reflect Swedish iron mine owners efforts to help keep foreigners out, but otherwise keep the state at an arm lengths distance. The lack of a rent-capture element also reflected that while the central Swedish iron mines were strategically important to the longevity of the Swedish iron industry, they did not yield the kind of vast economic rents as the much richer ores in Northern Sweden. Moreover, the Swedish state held considerable reserves of low phosphorus iron ore through its direct ownership of mines in Northern Sweden.

Moreover, the timing of the Swedish regulations were also important. When the Norwegians introduced the concession laws, they were in some ways entering into uncharted legislative territory, without any obvious example of countries who had undertaken a similar reform. However, when the Swedes passed the Restriction Act and the Water Act in the latter years of the First World War, they were at least well aware of the experience of the neighbour to the west. Swedish politicians could note that there had been no obvious reprisal action against the Norwegian laws in other countries. On the other hand, for those who were keen to limit the role of the state in business, the Norwegian experience also provided a warning of how a measure initially intended to regulate foreign ownership quickly ballooned into a broader law regulating all private acquisitions of natural resources. And despite a more acrimonious relationship between the Swedish state and Swedish business in general when it came to natural resources, limiting the state’s power to intervene became ever more important for the right as the prospect of full democracy loomed, with the likely consequent gains of socialists.

Chapter 5: From 'harnessing-strategy' to 'brake law'? Radicalization of Norwegian concession policy (1913-1920)

As we have seen in the previous chapter, the Restriction Act of 1916 and the Water Act of 1918 were intentionally designed to limit political interference in the natural resource acquisitions of Swedish owned enterprise. This happened despite the fact that the war vastly expanded the role of the Swedish state in the economy overall. In fact, the shortages brought about by the war actually had a somewhat liberalizing effect on the regulations of hydropower and minerals for private Swedish companies. Sweden's neighbour to the west was no less effected by wartime shortages, but here the Norwegians would instead take a very different route. Instead of liberalization in order to increase the use of domestic resources, Norwegian resource policy would instead become more restrictive towards all private investments.

The Norwegian concession laws, with their enabling law form and broad mandate to mollify the negative aspects of foreign ownership and big industry was from the very beginning a system which opened the way for a much more direct political interference. Yet, as we have seen, the wide power granted by the law was to some degree tapered by a "harnessing strategy" where investments – both foreign and domestic – would as a rule be welcomed if they accepted the conditions outlined in the concessions. With the election victory of the Liberal party in 1912, the attempts by the conservative alliance to redraw the concession law seemed to be put to rest.

Yet there would be no stabilization around the Liberals' compromise of 1909 in the Liberal party's long seven-year reign from 1913 to 1920. Instead, the "harnessing strategy" turned out to rest on fragile political foundations, and events would soon set in motion a radical revision of Norwegian resource policy, which would intensify during the war. This revision would lead to a new concession law in 1917, which added new terms, increased the public take and stated that foreign owned companies would only obtain concessions to develop hydropower in "singular circumstances". Yet, more than the law itself, which on the face of it read as an adjustment rather than a full reform, the period would see an even sharper change in concession practice. Despite increases in concession terms and taxation, the largely welcoming "harnessing strategy" practices since 1906 would be abandoned. Instead, the Norwegian government would shift towards a policy that not only restricted foreign owned companies from developing further hydropower, but also from leasing hydroelectricity. As wartime shortages increased, the law would ultimately be used to selectively deny new Norwegian owned private hydropower developments. In the process, the Norwegian concession laws would be further transformed from a resource nationalist measure, to a broad political tool for political regulation of key sectors in the Norwegian economy.

I. Strains in the harness (1913)

To the extent that investors' anticipation of political and economic risk changed the prospects for the harnessing-strategy, this was, as we have seen, largely unappreciated by both Norwegian politicians and the Norwegian electorate. Ever since 1888, the most committed economic liberalists and business friendly wing of the political right had time and again warned that regulation of foreign direct investments would lead to disastrous consequences for Norwegian economic growth. And time and again, they seemed to have been proven wrong, as many foreign investors readily acquiesced to the terms set by the Norwegian state in order to partake in the country's highly attractive natural resource sector. When parts of the Conservative/National Liberal-alliance made similar predictions as to the effect of the 1909-law, at the same time as the country experienced unprecedented growth in both the chemical industry and mining, many were naturally sceptical. The champions of free enterprise and an open door policy had simply cried wolf one time too many.

Instead, as the first Norwegian owned competitors began to enter the fray, there seems to have been altogether more scepticism of the continued high foreign lead growth, than anxiety about capital shortages. As we have seen, the farmers' wing of the Liberal party held an ambivalent attitude towards industrialization in general, and had not shirked from opposing its own government on hydropower regulations on previous occasions. Also, while the Liberal party had stressed that it was not possible to properly distinguish between foreign and domestic owned company, and a similar regulatory system for joint-stock companies was thus necessary, the Liberal government did not follow a strictly equal treatment policy when it regained power. With the Right of Reversion in any case ensured for all new concessions, the Knudsen-government continued the practice of exempting Norwegian companies from power lease concession taxes, in exchange for submitting to capital control terms.[737] Just as Castberg and Knudsen's wide-reaching, statist "harnessing"-strategy seemed to have been vindicated at the ballot box, strong forces within the Liberal party began to consider whether recent developments had made it necessary to rethink the whole compromise.[738]

[737] See concession granted to A/S Rena Træsliberi in 23.05,.1913. "Meddelte vasdragskoncessioner: II. Efter Koncessionsloven (18. September 1909-30. Desember 1914)," ed. Arbeidsdepartementet (Kristiania1916), pp.86-92.

[738] Gjermund Grivi, one of the leading spokespersons on concession issues of the farming wing of the Liberal party had already in 1911 declared his preference that no more hydropower concessions should be granted to foreigners. *Odeltingsforhandlingene* 1911, p. 336. Grivi would later replace Lars Liestøl in the Watercourse Commission, when Aasulv Bryggesaa, the initial replacement, entered Gunnar Knudsens second cabinet.

The tension within the harnessing-strategy compromise came to a head over the concession to A/S Aura in the summer of 1913. The company was a subsidiary of *Nitrogen Products & Carbide Co. Ltd* (NPCC), a British-owned company, which sought to dominate the European production of cyanamide, a nitrate product made from carbide. The company had a complex ownership structure, with the largest shareholder group being Alby United Carbide Co., and its board of directors, who also formed the board of NPCC.[739] Among them were Albert Vickers, co-head of the engineering and arms manufacturer Vickers Ltd. Cyanamide could be used directly as a fertilizer, but the company's prospectus also outlined plans to process cyanamide into nitric acid and ammonium nitrate, key components for high explosives.[740] Through Alby United Carbide, the company already ran a carbide and cyanamide plant on the Norwegian west coast, powered by A/S Tyssefaldene, and held 50% ownership in A/S Meraker Smelteverk, a smaller carbide plant in central Norway.[741] In addition, the company had obtained substantial riparian rights on Iceland, and the right of first purchase for another two large watercourses in Norway.[742] A/S Aura would massively expand NPCC's operation, with a plan to construct a new hydropower facility on the west coast of Norway with a capacity of over 210,000 hp, which it would use to produce carbide and cyanamide. The development was estimated to cost over £2,400,000 for just the power plant and the regulation works.[743]

NPCC was thus in many ways the very epitome of the *large foreign monopolist connected to a Great Power* that repeatedly stirred unease in Norway. Moreover, it largely dispelled any notion that the concession had turned foreigners off Norwegian hydropower. In an unprecedented move, four out of five members[744] of the Watercourse Commission recommended breaking with the harnessing strategy, and instead reserving the falls and the power generation for Norwegian investors.[745] The company's Norwegian representative rejected any such arrangement, stating that it would lead NPCC to scuttle its planned investments in nitrate production in the country. A/S Aura prospective investments were enormous, amounting to somewhere close to 3% of Norwegian GDP for the power producing side of the operation alone,[746] and would provide investments and economic opportunities on a scale that no fully Norwegian owned company was likely to match for

[739] Compare "Nitrogen Products & Carbide Co. Ltd. Directors Report and Accounts 1914" and "Alby United Carbide Factories, Ltd. Directors Report and Accounts 1913" Guildhall Library, Annual Reports, box 1287 and 1285. The company also had a significant Norwegian minority, owning over 7.5% of the £2,000,000 share capital. Norwegian Legation, London (Benjamin Vogt) to Utenriksdepartementet, dated 25.12.1913. NRA, Utenriksdepartementet, Dd, box 1443, folder BI
[740] See share prospectus in "Nitrogen Products & Carbide Co. Ltd." Farmand 31.05.1913, pp. 404-405
[741] Anders Rokne, *Odda smelteverk A/S i femti år : 1924-1974* (Odda: Odda smelteverk, 1974), p. 17.
[742] *Toke* and *Bleskestad-Bratland*
[743] NOK 43,656,600. St. prp. Nr. 146, 1913, p. 10
[744] Liestøl, Valentinsen, Bugge and the Watercourse Director Kristiansen.
[745] Statements made on 9-10.02.1911 and 02.08.1912. St. prp. nr. 146, 1913, pp. 16-17
[746] Calculations are based on the 1910 figure for Norwegian GDP, given in: *Historisk statistikk 1994*, Table

the foreseeable future. Moreover, as the waterfalls were calculated to cost around £11.40 per hp. to develop, they were not among the cheapest.[747] Thus, Andreas Urbye, the Knudsen-governments new Minister of Public Works, decided to disregard Watercourse commission, and instead follow the established "harnessing strategy".

Anticipating that the concession was likely to be controversial, Urbye attempted to head off criticism of being soft on foreign investors by bargaining for terms close to the maximum stipulated in the 1909-law. With a right of reversion after 65 years, and a maximum annual concession tax of NOK 2.00 per hp, divided between the state and the local municipalities, the terms the government managed to obtain in the negotiations with the company were the strictest set to a concession yet, thus further undermining any notion of standardized concession terms.[748] Nevertheless, the stricter conditions were not enough to unite the Storting behind the concession. A sizable minority of the parliamentary law-committee proposed postponing the whole arrangement, with secondary proposals making the conditions even stricter than those outlined by Urbye.[749]

The governments proposed concession united critics from both the right and left, who questioned the consequences of allowing such a large and powerful foreign company to lay claim to such large power resources. Even though it was now the socialist Labour Party who led the charge, the objections against the concessions were indeed very reminiscent of those that had been repeatedly put forward since the very first temporary concession law. Firstly, the concession would make foreign owned export industry the main beneficiaries of Norwegian natural wealth, perhaps to the detriment of the future energy needs of households and cottage industries. Moreover, even more ominously, the high levels of foreign ownership could place Norway in a semi-colonial relationship with capital exporting nations. Christian Michelet, the leading spokesperson for the group of conservatives who opposed the concession, warned that "merchants and bankers come first, then the statesmen – and then all too often the soldiers follow after that"[750] which could ultimately lead Norway to "become another Egypt or Persia".[751]

What was new was that both the right and the left now openly questioned the harnessing strategy's key counter-measure to these two challenges – the Right of Reversion. Part of the criticism

[747] In comparison the large hydropower development projects granted concessions in 1914 were estimated to cost £3.24 (Bremanger), £5.91 (Osa), £7.70 (Sauda) respectively. Only Høyang was estimated to cost more, at £12.59 per hp. The stimates were made by the Watercourse Director.
[748] St. prp. nr. 146, 1913
[749] Indst. S. LIX, 1913
[750] «[…]at det er kjøbmændene og bankierene, som kommer først, saa kommer statsmændene – og kun altfor ofte kommer soldaterne efterpaa.» "Vore fosse og den udenlandske kapital". Morgenbladet 08.11.1913
[751] ORIGINAL QUOTE. Ibid

was that it was simply too long to wait for the power plants to pass to the state. If it turned out that domestic electricity demand would become greater than anticipated, the richest and cheapest hydropower resources would be locked into export-oriented industry for the better part of a century. Another part was whether it was possible to be certain that the Right of Reversion would be at all respected by the foreign owners, and their home countries, when the time came for them to pass to the Norwegian state.[752] In ominous tones, the leading Labour Party newspaper warned that against foreign trusts, the Right of Reversion could turn into "a devils pillow, from which we will not rise until we have become an economic 'sphere of influence'".[753]

Such criticism and accusations of hypocrisy from the opposition was perhaps to be expected. In many ways, the flexible nature of the concession law terms were set in negotiations between the applicant company and the government and there was always an opportunity for the opposition to score some points by criticizing the government for not getting even better terms. Without having to bear responsibility for turning away potential investors, the opposition could 'outbid' the government and thus claim the mantle of the true defender of national interests for themselves. As seen in chapter 3, this was indeed a common feature of all concession debates since the Michelsen government. Yet, for Knudsen's government, it was more worrying that these concerns also struck a chord within the Liberal party, were some accused the Knudsen government of breaching the party's election manifesto's claim to "protect the country's economic and national independence against overwhelming influence by foreign capital".[754] In the Storting, parts of the rural wing openly opposed the concession, and many of the Liberal MP's who voted in favour, were keen to underline their doubt and reservations in doing so.

The concession was eventually passed, but with a smaller margin than any previous concession which did not involve submerging considerable areas of arable land. The proposal to postpone the case was rejected with 86 votes against 34, of which only six were from the governing parties. However, 30 Liberal and Labour Democrat representatives joined in a defiant vote to remove the clause that the government would promise to lease power to the company for 15 years after the power plant would pass to the state, which only passed with a narrow 66 votes against 54. As the

[752] The statements by Labour MPs Carl Emil Christian Bonnevie and Anders Johnsen Buen. Stortingsforhandlingene 1913, pp. 2549-2544, 2572-2573, 2577-258. See also statements by Conservative MP Christian Fredrik Michelet: Ibid, pp. 2557-2558

[753] «[…]en djævelens hodepute, hvorfra vi ikke reiser os, før vi er blit en økonomisk 'interessesfære'". *Er venstre allerede i forfald?* Social-Demoktraten 18.07.1913

[754] «Vern om landets økonomiske og nationale uavhængighet mot overmæktig indflydelse av fremmed kapital.» §3, *Venstres Program 1912*. See for instance statements by Liberal professor Jon Skeie, in *Venstre fædrelandsløse politik,* Social-Demokraten 19.07.1913

company had stated that such an alteration would make them go elsewhere, the significance of this move by the Liberal MPs could not be misunderstood.

The Aura case had thus turned the whole natural resource question around. Almost overnight, the prospect of gigantic new investments in Norwegian hydropower dispelled any idea that the concession laws had made private investments in Norwegian hydropower unviable. Instead, critics from all across the political spectrum voiced the concern that both the concession law and its implementation had been too relaxed. Johan Castberg – minister of Trade and the very author of the 1909-law – called for a new revision of the concession law during the Aura-debate, stating that:

> If this concession is granted, it must be on the understanding that it does not bind us to giving large concessions on the same terms in the future, but that it should mark the beginning of a new phase […] in our concession policy, which shall result in a more powerful legal protection, than what we have hitherto succeeded in raising in future cases of the same kind[755]

Prime Minister Knudsen himself had staunchly defended the government's concession to A/S Aura. Yet, the very next day he confirmed that the government would seek to amend the concession laws, and intended to work towards a new proposal for next year's parliament.[756] Instead of the 1912 election acting as a final settlement in favour of the Knudsen government's concession policy, a process to forge a new compromise had begun.

Angry agrarians and the shape of laws to come?

Knudsen had been coy about providing details about what a reworked concession law would look like. What was clear was that any reworked resource policy had to take a stance on two key points of criticism against the harnessing strategy. The first, which had again been raised to the foreground with the Aura-concession, was the question of whether or not the country had reached an "upper limit" to foreign hydropower ownership, and whether it was now time to begin denying further concessions to foreign owned companies. According to the calculations of Watercourse Director Kristiansen in the autumn of 1913, the huge gap between the riparian rights held by foreign companies as compared to Norwegian ones had only increased after the concession laws. Whereas foreign owned companies had obtained concessions for hydroelectric capacity of over 700,000 hp,

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[755] "[…]hvis denne koncession indvilges, maa det være med den forutsætning, at den ikke binder os til at gi store koncessioner paa same vilkaar i fremtiden, men at den skal danne indledningen til en ny fase, vil jeg sige i vor koncessionspolitik, som skal resultere i et kraftigere lovens vern, end det hittil har lykkedes os at reise overfor fremtidige saker av samme art[...]" Stortingsforhandlingene 1913, p. 2569

[756] *Stortinget*, Social-Demokraten 24.07.1913

Norwegian owned expansion had been limited to riparian rights obtained before the mandatory inclusion of a Right of Reversion.

Table 3: Hydroelectric capacity of concessions granted to foreigners and Norwegians, 1913[757]

	Norwegian owned	**Foreign owned**
Developed, without RoR	258,400 hp.	400,000 hp.
Developed, with RoR	1,600 hp.	10,000 hp.
Total developed capacity	**260,000 hp.**	**410,000 hp.**
Yet undeveloped, without RoR		160,000 hp.
Yet undeveloped, with RoR		580,000 hp.
Total capacity	**260,000 hp.**	**1,150,000 hp.**

Moreover, the Aura-concession and the rapid growth of the electrochemical industry had also brought forward the question of how much hydroelectric resources should be made available to export oriented big industry at all, and whether more should instead be set aside for household consumption and industries oriented towards the home market.

A key factor permeating both these issues, was that they were all seeped a great degree of uncertainty. There were few politicians in 1913 who advocated absolute positions, such as outlawing all foreign ownership or advocating free property rights for all natural resources. Instead, there was a wide consensus that natural resource policy should be some form of balancing act on all three issues. While the different policy positions on these issues were of course grounded in different political and ideological outlooks, they were also lines drawn varying presuppositions on what would be the likely outcome of these policies in the future.

Some of these uncertainties were practically unresolvable, such as speculations on the likelihood of foreign powers disregarding the Right of Reversion. So far, there had been hardly any notable foreign political reactions to the concession laws and the right of reversion. Yet, the Right of Reversion was also facing a more immediate threat from within. During the concession law debates, the opponents of the Right of Reversion for Norwegian owned companies had often claimed it constituted an unconstitutional confiscation without compensation. The Liberals election victory in 1912 put an end to the prospects of removing the Right of Reversion for Norwegian owned companies in the Storting, but one outraged Norwegian waterfall speculator was determined to try

[757] Referred in: "Vore fosse og den udenlandske kapital". Morgenbladet 08.11.1913

the law in court.[758] Based on that his riparian rights had only sold for about half the price he had originally been offered after it was effected by the 1909-concession law, Captain H. Johanson sued the state for compensation in accordance with the constitution's ban on confiscation. In December 1913, he lost the case in the lower courts, but Johanson promptly appealed to the Supreme Court.[759] The case did not initially receive wide attention in the major newspapers, and was rarely presented as an argument for restricting further private hydropower concessions. Yet, given the split in the supreme court that would inevitably show itself, when the case was decided in 1918, it might have contributed to the sense that the Right of Reversion might not be as solid a long term guarantee for public and national interests as the proponent of the harnessing strategy would like it to be.

Uncertainty was however not only restricted to the future of the Right of Reversion. There was also much uncertainty on the economic future of the resource intensive industries. As previously noted, the Aura concession had swung much of public opinion in the direction that demand for cheap hydroelectricity would only increase in the years to come. More than anything, it was the nitrate industry that looked to have an almost unlimited growth potential, and consequently an equally limitless demand for hydroelectricity. In November 1913, liberal oriented Dagbladet relayed a lecture in the Norwegian Farmers Association, which estimated that three new nitrate plants similar to the works of Norsk Hydro would be needed, *every year*, to keep up with future world demand.[760] This opinion was not only restricted to the popular press. When asked to advice on a revision of the concession law in the autumn of 1913, the Watercourse Commission described the value of hydropower as "ever increasing",[761] as "its quantity is in fact limited, while demand increases with technological development".[762]

Yet, there was no exact agreement on exactly how limited the potential Norwegian hydropower was. Important facts, such as the country's total available hydropower was still being reworked. Estimates varied widely, and the figures that were available were often treated with some mistrust.[763] Moreover, there was much uncertainty surrounding the estimates for future energy

[758] In the debate over the A/S Saudefaldene concession in the summer of 1914, the conservatives parliamentary leader, Edvart Hagerup Bull, stated that the issue of the Right of Reversion was not "politically dead", but that the "legal question" remained. *Stortingsforhandlingene* 1914, pp 2809-2810
[759] «Den første koncessionssak paadømt. Staten frifundet i byretten». Social-Demokraten 31.12.1913. "Koncessionssagen appelleres til høiesteret" Aftenposten 13.01.1914
[760] «Verdenforbruket av kunstgjødsel: Fremtidsmuligheter for vort landbruk og vor industry" Dagbladet 14.11.1913
[761] «Stadig stigende». Watercourse Commission to Ministry of Public Works, dated 19.11.1913. Appendix C of Ot. Prp. nr. 15, 1915
[762] «Dens mengde er nemig begrænset, mens efterspørselen vokser med den tekniske utvikling.» Ibid.
[763] See for instance the controvercy surrounding Waterfall Director Ingvar Kristiansens calculations of the hydropower potential following the Aura-concession: "I Blakstads middag" Social-Demokraten 29.07.1913, "Vasdragsdirektøren" Social-Demokraten 30.07.1913, "Fra Vasdragsdirektøren" Social-Demokraten

needs for households and smaller industry, which were often considered to be far too low. In part, this was a result of still insufficient capacity in the Norwegian bureaucracy, which was in the process of being improved.[764] Yet, it was also an unavoidable consequence of attempting to regulate a resource harnessed by a 'young' and rapidly changing technology, both in distribution and application.

These two issues was closely tied into a third, namely with how the rapid increase in the export oriented industry affected the agriculture sector. The agrarian wing of the Liberal party had at best been sceptical of big industry in general. Yet, besides objections to submerging productive land, the arguments against big industry had mainly been based on fears for its cultural and societal consequences. However, the rapid growth of energy intensive industry and large construction works needed to realize them, had sharply increased competition for labour in the countryside, were farmers found that they did not have access to the amounts of cheap seasonal labour that they once had. Such criticism had been voiced from time to time by farmers since the end of the 19th century, but increased sharply in the last years before the Great War.[765] Whereas the farmers concerns had previously been mollified by the prospect of the new industrial centres creating new markets for and higher prices for agricultural goods, rising wages made the resource intensive industries were now not only seen as a threat to the social order of the country side, but also to their livelihood.

While the agrarian wing of the parliament increasingly voiced their concerns as undisguised economic interests, the role of agriculture vis-a-vis industry was not just a matter of the relative economic decline of an old dominant group in Norwegian society. The economic arguments against the high growth rates in export oriented resource industries were also framed within a wider idea of "balanced" or "even" economic development, were uneven development risked damaging or crowding out pre-existing economic activity. The booming resource industries were accused of being fickle and depended on favourable economic and political conditions within international markets. Agriculture, geared towards domestic markets, was seen by many as both a safer and more

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04.08.1913. Conservatives also raised similar doubts. See: "Vore fosse og den udenlandske kapital". Morgenbladet 08.11.1913

[764] For an account of how *Vassdragsvesenet* – the department in charge of hydrological cases within the Ministry of Public Works – expanded from seven employees in 1907 to 110 in 1920, see: Thue, *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, pp. 102ff.

[765] See for instance: Tertit Aasland, *Fra landmannsorganisasjon til bondeparti : politisk debatt og taktikk i Norsk landmandsforbund 1896-1920* (Oslo: Universitetsforlaget, 1974), pp. 106-07. The greater emphasis on this aspect of agrarian politics from about 1910 onwards is based on my observations of how often it occurs in the Norwegian press and the parliamentary debates. This observation is also corroborated in Thormod Skatvedt, "Streif gjennom landbrukets og bøndernes kår," in *En epoke i norsk jordbruk : festskrift til Jon Sundby på syttiårsdagen 8. juni 1953*, ed. Hans Flåtten, Hans Holten, and Hans Bollestad (Oslo: Østlandets melkesentral, 1953), p. 26.

permanent form of economic growth.[766] Consequently, if temporary booms in the natural resource industries were allowed to crowd out farming, this did not only disrupt Norwegian culture and society, but could potentially leave the country economically worse of in the long term. To alleviate this, agriculture should be given time to "catch up" with the galloping progress in the energy intensive industries. Here however, abundant hydropower was not only a part of the problem, but also part of the solution. Cheap electricity could provide power for labour saving devices, in addition to heating and lighting, which could increase farming productivity and wage competitiveness.

Ultimately, these questions were about the extent to which it was beneficial for Norway to embrace economic globalization. In these matters, it is of course difficult to distinguish to what extent such ideas were promoted on the basis of "narrow" economic interests, or "genuine" belief in their applicability. Also, the importance of Norwegian agriculture to its overall economy had been in relative decline for a long time, and the levels of growth of resource industries was only one issue among many, including tariff protections and subsidy programmes.[767] Yet, what is clear is that the concerns about the long-term future of Norwegian farmers had a longer political reach than to just those who were directly affected by it. Indeed, such a view had also won ground in the Watercourse Commission. In November 1913, the commission argued that slower growth as a consequence of a stricter concession policy "would in the commission's opinion not be unfortunate",[768] citing the high competition on the labour market as a key justification:

> As it is now, the great building and regulation works takes up such a large workforce, that it is very hard for the competing industries to obtain people at such prices as they are able to pay. For the mother-industry, agriculture, the conditions in some places are quite despairing […][769]

Moreover – as seen in Chapter 3 – farmers and rural interests in many ways occupied a tipping position between the Liberal party and the Conservative alliance. The Liberal party's election victory in 1912 was mainly due to its improved results in the countryside, whereas it continually lost support among poorer city dwellers to the Labour Party – a fact that did not go unnoticed at the

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[766] See for instance Wollert Konows (H)'s speech at the inaugeral debate of 1914. Stortingsforhandlingene 1914, p. 72.
[767] See for instance *Norsk Landmannsforbunds Program 1912*
[768] "[…]vil efter kommissionens mening ikke være uheldig." Watercourse Commission to Ministry of Public Works, dated 19.11.1913. Appendix C of Ot. Prp. nr. 15, 1915, p. 64
[769] "Som det nu er, lægger nemlig de store igangværende utbygnings- og reguleringsanlæg beslag paa saa stor arbeidskraft, at det for de konkurrerende næringer er meget vanskelig at faa folk til saadanne priser, som de er istand til at betale. For modernæringen, landbruket, er f. eks. Forholdene paa sine steder ganske fortvilende[…]". Watercourse Commission to Ministry of Public Works, dated 19.11.1913. Appendix C of Ot. Prp. nr. 15, 1915

time.[770] Thus, a combination of sympathy with the perspective of the agriculture sector, as well as political expediency goes a long way explain the goodwill farming interests enjoyed in parliament following the 1912 election. In order to underline the importance the Liberals put on agriculture policy, Prime Minister Knudsen had himself taken on the reins as minister of Agriculture in his new cabinet.[771]

Thus, finding a way to placate the farmers was an important priority for the Knudsen government's new concession policy. After the Aura-concession had been approved in the Storting, Andreas Urbye took an unprecedented step and reopened negotiations with the company on a final amendment to the concession terms. By the end of 1913, Urbye had got A/S Aura to commit to letting Norwegian famers buy 10% of their fertilizer production, at a price 15% **below** export price.[772] This not only alleviated some of the concerns that NPCC could use its market power to drive up prices, but also effectively linked a direct farming subsidy to Norwegian concession policy. Yet, the terms were not only renegotiated to please Norwegian farmers. Urbye also secured new clauses on provision of medical assistance to workers, assistance with road construction and additional mandatory power leases to the state.[773] The new reworked terms to A/S Aura was thus not so much a reworking of harnessing strategy, as a continuation and a deepening of the same.

A more fundamental question for the future of the harnessing strategy was whether a reworked policy would begin to block foreign direct investments rather than just adding terms. In the eyes of the majority of the Watercourse Commission, that time had now come.[774] In November 1913, the Watercourse Commission submitted a statement to the ministry of justice which favoured a complete stop for new hydropower concessions to foreign owned companies – "at least until one

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[770] Fuglum, *Én skute - én skipper*, pp. 185ff; Nissen, *Gunnar Knudsen*, p. 218.. For an account of the Conservatives reorientation towards a more pro-agrarian line, see Kaartvedt, *Drømmen om borgerlig samling 1884-1918*, 1, 338-48.

[771] Prior to World War II, it was standard practice that a Norwegian Prime Minister would also take on an additional ministerial post.

[772] "Meddelte vasdragskoncessioner: II. Efter Koncessionsloven (18. September 1909-30. Desember 1914)," p. 129.

[773] "Meddelte vasdragskoncessioner: II. Efter Koncessionsloven (18. September 1909-30. Desember 1914)," pp. 125-34.. Precisely why the company agreed to reopen negotiations with the government, after the Storting had approved the concession is unclear. Despite numerous attempts, I have been unable to uncover any documents relating to the renegotiation in the Norwegian National Archives. Yet, it is not unlikely that NPCC was looking to maintain a good relationship with the government for possible future expansions. Moreover, the additional terms did not represent any particularly heavy economic burden for the company. The new conditions on providing medical personnel and road construction rather formalized provisions the company was likely to undertake in any case. Even with the conditions mandating them to make fertilizers available at a cheaper prize was unlikely to be used fully for a long time in the small Norwegian market.

[774] The only dissenting voice was Ole W. Lund, who did not want to exclude foreigners, but give more lenient terms to majority Norwegian owned companies. Watercourse Commission to Ministry of Public Works, dated 19.11.1913. Appendix C of Ot. Prp. nr. 15, 1915, p. 73

has obtained [more] experience".[775] As mentioned previously, the Commission had previously typically split down the middle on concession issues, with the two liberal politicians on one side, and the non-affiliated representatives of engineering and industry on the other side. Thus, the Commission broadly replicated the divide present in the Storting.[776] However, following its opposition against granting the Aura-concession, the Watercourse Director Ingvar Kristiansen[777] increasingly sided with the two Liberal party representatives, Valentin Valentinsen and Gjermund Grivi.[778] This created a majority within the Watercourse Commission, which consistently advocated a more radical hydropower policy, often placing itself also on the radical end of the policies promoted in the Liberal Party.

Yet, the prospect of a stricter policy raised the question of what should come in its place. While both the Labour Party, as well as elements within the conservative alliance, advocated a stricter policy towards large foreign enterprises, they had very different ideas as to what the alternative to foreign direct investments should be. The conservatives effectively reiterated their stance that a stricter policy against foreigners should be accompanied with milder terms for Norwegian owned companies, which should now play a more central role in hydroelectricity generation.[779] In other words, the conservatives' policy on Norwegian owned companies remained much the same. Yet, by proposing to block future foreign investments rather than "harnessing" them, milder terms to Norwegian owned companies was thus not presented as a way to even out the playing field, but rather as a necessary prerequisite to make it possible for Norwegian investors to fill the role previously dominated by foreigners.

The Labour party, on the other hand, advocated public ownership of all new power generation. This was of course a view very much in line with the overall socialist ideal of public ownership over the means of production. Yet, enthusiasm for full public ownership was not just restricted to the socialists, but also appealed to some of the social radical liberals, as well as the agrarians, including the two liberal representatives of the Watercourse Commission.[780] The idea of reserving all riparian resources for the public could unite a wide set of – sometimes conflicting – ambitions. Public ownership could ensure that all resource rents would come on public hands,

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[775] "[…]ialfald foreløbig intil man faar erfaring." Watercourse Commission to Ministry of Public Works, dated 19.11.1913. Appendix C of Ot. Prp. nr. 15, 1915
[776] See p. 143 of this thesis
[777] Frequently represented by his deputy Arthur Hugo-Sørensen
[778] Grivi replaced Lars Liestøl, who died in 1913, as the representative of "farming interests" in the Commission.
[779] See for instance: Johan Bredal, «Ventres Koncessionspolitik» Morgenbladet 30.07.1913, Hagerup Bull, «Vort Folks Fremtidsopgave: By Fossene ut med norsk Kapital» 21.09.1913 Morgenbladet, Christian Michelet, «Vore fosse og den udenlandske kapital» Aftenposten 08.11.1913
[780] Watercourse Commission to Ministry of Public Works, dated 19.11.1913. Appendix C of Ot. Prp. nr. 15, 1915

remove the problem of circumvention and strawmanship and could be used to prioritize and subsidise domestic and household electricity consumption.

There was however one major drawback with reserving hydroelectric resources for public ownership. If the country was to continue to provide cheap power to energy intensive industries, it also meant that the state and the municipalities would have to provide the necessary capital, and bear all the risks associated with it. This was all the more problematic as the capital for any large scale state ventures would likely have to be financed by foreign lending, adding to the country's already considerable foreign debt.[781] This was of course not a drawback for those who saw slowing down industrial growth in itself as a goal. Moreover, if demand for cheap hydroelectricity would continue to rise for the foreseeable future, the risks associated with industrial power generation would also be very low, and the benefits of public ownership even higher.[782]

On this issue, there was also some division within the government. Johan Castberg lent toward full public ownership for all new large hydropower developments, which was one of several reasons why he broke with the government in the spring of 1914.[783] Prime Minister Knudsen had often promoted the possibility that direct state ownership of natural resources might become necessary in the longer term.[784] Yet, he was not willing to accept such a complete shift to such a policy. On the other hand, nor was he willing to accept the Conservatives position. The Liberal government had continued the practice of setting somewhat milder terms to domestic owned mining and hydroelectric ventures, as established by the Conservative governments of 1910-1913, an approach that Knudsen also defended publicly.[785] However, he was not enthusiastic about setting discrimination between foreign and domestic capital formally into the concession laws, for much the same reasons he had previously opposed it. Nor did he see the need to lessen the regulations on private Norwegian investments beyond the scope provided in the current concession law, least of all with the Right of Reversion. As Knudsen reasoned in the Storting's inaugural debate of 1914 that it was not only undesirable due to the difficulties in controlling share ownership and Norway's

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[781] According to foreign minister Ihlen, Norwegian national debt at the beginning of 1914 was NOK 362,743,000,-, of which NOK 340,790,000,- was owed to foreigners. Stortingsforhandlinger 1914, p. 78. This was the equivalent of 260% of the budgeted ordinary state income for 1913-1914. St. prp. 1, 1913, p. 67.

[782] Labour MPs often asserted that publicly owned hydroelectricity rented out to the private sector could offer high profits to the state. See for instance statements by Lars Sæbø and Christopher Hornsrud, *Stortingsforhandlingene* 1914, pp. 78, 2563ff

[783] Fuglum, *Én skute - én skipper*, p. 193.

[784] Knudsen had presented the possibility of the state developing and renting out hydropower to industry as late as during the Aura debate, as a possible future substitute for foreign direct investment. See: See Stortingstidende 1913, pp. 2558-2560

[785] See references to Prime Minister Knudsens lecture to the youth wing of the Liberal Party in Aalesund. "Vor koncessionspolitik" Indherred 30.09.1913

economic relations with other countries, but also because "it is simply not necessary."[786] Developing hydropower – regardless of concession laws – was such a profitable undertaking that Norwegian capital needed no extra encouragement to invest. Instead, Gunnar Knudsen blamed the reluctance of Norwegian investors to invest in hydropower on the campaign against the right of reversion, conducted by the conservative opposition.[787]

The coming of the Norwegian industrial power companies (1914)

When Knudsen spoke at the inauguration of the 1914 session of the Storting, he was well aware that circumstance seemed to prove him right that special encouragement for private Norwegian investments was unnecessary. As the Liberals return to power ruled out any imminent end to the right of reversion, so the government received their first concession applications for a large greenfield hydropower development by fully Norwegian owned companies. By the spring of 1914, the Knudsen government received four such applications, from *A/S Osa Fossekompani*, *A/S Høyangfaldene*, *A/S Bremanger* and *A/S Saudefaldene*. None of these were as large as A/S Aura, but altogether the four hydroelectric works calculated to yield at least 177,000 hp, at a cost of over £ 470,000.[788]

Under these circumstances, Knudsen signalled that the government would change its policy towards new foreign owned hydropower companies. While hesitant to condone introducing strict separations based on capital ownership within the concession law, Knudsen argued that as fully Norwegian owned companies entered the fray, it might be "all reasons to take a 'breather' on big foreign concessions".[789]

Yet, it was not a pure coincidence that these four companies decided to form themselves as fully Norwegian companies at this point. The increasingly hostile attitude in Norway to foreign direct investment following the Aura concession might certainly have influenced Norwegian investors to voluntarily reserve share ownership for Norwegian citizens, anticipating a more lenient treatment by

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[786] « […]er den slet ikke nødvendig.» Stortingstidende 1914, p. 102

[787] Following the vote on the divisive Aura case, Gunnar Knudsen had personally marched down from the Storting to the editorial office to Morgenbladet (leading Conservative newspaper) to gave them an earful on how their campaign against right of reversion had scared away Norwegian investors. See: (untitled leader) Morgenbladet 23.07.1913

[788] NOK 25,925,250. Calculations are based on the estimates of the Watercourse Director, as quoted in St. prp. nr. 133, 1914; St. prp. nr 134, 1914; St. prp. nr. 141, 1914; St. prp. nr. 142, 1914.

[789] «[…]al grund til at puste i bakken like overfor utenlandske koncessioner». Stortingstidende 1914, p. 104

the Norwegian authorities.[790] Although the government did not state unequivocally that it would not put forward any new large-scale hydropower concessions to foreign owned companies, it did not do anything to dissuade investors from getting this impression. A/S Osa's founders had originally intended to seek most of its capital abroad. However, when the Watercourse Commission were consulted on the application in March 1914, they decided to oppose granting a concession, referencing their earlier statement in November 1913.[791] The Commission only had a consultative role, yet the government confidentially conveyed the Commissions verdict to A/S Osa, which persuaded them to restrict share ownership to Norwegian citizens.[792]

With four fully Norwegian owned hydropower companies applying for a concession, the Liberal government agreed not to delay for a full revision of the concession law before presenting them to the Storting, overruling the recommendations of the majority of the Watercourse Commission.[793] Once again, and to considerable consternation amongst those who favoured a more radical revision of the whole concession law, new hydropower policy would evolve ad-hoc through negotiations with applicant companies in anticipation of legal reform, rather than the other way around. Critics on the left argued that pushing through the concessions before a revision of the law allowed the companies to obtain more favourable terms than they were likely to get later.[794]

Yet, compared to what the norms for hydroelectric concessions had been in the past, the four new Norwegian owned companies were hardly given lenient terms. Instead, they were given terms roughly equivalent to those of A/S Aura the year before, with a concession time of 65 years, and an annual fee of NOK 0.50 to the state and municipalities, rising to 1.00 over the course of 15 years.[795] Moreover, the concessions were also made subject to a new redemption clause, in anticipation of a similar clause in the reworked concession laws.[796] This addition allowed the state, after forty years, to buy the hydroelectric plant for "its technical value" as well as the properties they used for "not under less favourable circumstances than that the waterfall with its plots and rights –

[790] Except for A/S Osa Fossekompani, the formal concession applications were submitted after the Aura-controversy in the early summer of 1913. Yet, A/S Saudefaldene had already presented itself as a Norwegian owned company, when it had sought a statement in support from the local municipality in early 1913.
[791] NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, Aa, Forhandlingsprotokoll nr. 2, p. 392
[792] St. prp. nr. 142, 1914. p. 7
[793] In this case, the deputy-Watercourse Director Hugo-Sørensen as well as the two Liberal Party representatives. St. prp. nr 133 1914, p. 20
[794] See statements by Hornsrud, Bonnevie and Castberg, Stortingstidende 1914, pp. 2563-2565, 2574-2575, 2585-2589
[795] This also included a clause on having to sell fertilizer to Norwegian farmers below export prices, similar to the A/S Aura concession. St. prp. nr. 133 1914, p. 34
[796] The idea had been discussed in previous legislation rounds, but was reintroduced by the two Liberal party members of the Watercourse Commission in its proposal for a reformed concession law in November 1913. See Watercourse Commission to Ministry of Public Works, dated 19.11.1913. Appendix C of Ot. Prp. nr. 15, 1915, p. 70

including regulation rights – is paid with what they have provenly cost the concessionaire".[797] As the Norwegian state could and would not rescind the concessions granted to foreign companies, the new Norwegian companies were only favoured in comparison with future foreign ventures, which presumably would not be allowed at all.

Despite this, opposition to the concession came primarily from those who wanted stricter terms. This came mainly from the Labour party, who wanted public ownership, and from elements of the agrarian wing of the Liberal party, who saw these new concessions as only further compounding the challenges of industrialisation and labour shortage. Moreover, the critics decried that, while the companies were fully Norwegian owned, they were not really equivalent competitors to the foreign owned energy intensive industries. In their concession applications, none of four companies envisioned using the power generated themselves. Instead, they intended to rent it out, likely to foreign owned industrial companies.[798] Thus, depending on assumptions of future demand for cheap electricity, the Norwegian companies were both accused of reaping extraordinary profits that could have just as well flowed to the public,[799] or conversely, they were likely to be so economically weak and dependant on the firms leasing their power that the foreign industrialists would in any case be the ultimate beneficiary.[800]

This pessimistic view on the bargaining power of power generating companies was fronted by some in the agrarian wing of the Liberal party. Yet, the most forceful exponent of this interpretation was the Watercourse Commission member Valentin Valentinsen. Elected to the Storting in 1910, Valentinsen was now a vocal proponent for a radical concession policy in both the Commission, the parliamentary committee as well as in parliament itself. Here Valentinsen combined both a positive and a negative anticipation of future power demand. According to him, his experience had shown that hydropower companies had a tough time leasing out power to energy intensive customers, and their bargaining position towards the hydroelectric companies was further eroded by glut in supply. However, in the longer term this was likely to change as "there is no doubt that in the years to come, one electrochemical process after another will be developed, which will require cheap power".[801] Consequently, Valentinsen urged the Storting to delay passing further

[797] St. prp. nr. 133 1914, p. 35
[798] St. prp. nr. 133 1914, St. prp. nr. 134 1914, p. 2, St. prp. nr. 142 1914, p. 1-2. The exception here was A/S Høyangfaldene which implied that it intended to form a joint venture manufacturing company. St. prp. nr. 141 1914, p. 3.
[799] This was particularly underlined by the Labour party. See for instance statements by Christopher Hornsrud. Stortingsforhandlingene 1914. pp. 2563-2565, 2614-2615
[800] See statements by Valentin Valentinsen. Stortingsforhandlingene 1914. pp. 2581-2584, 2607-2608
[801] "[…]men der er ikke tvil om, at der gjennem de nærmeste aar vil dukke op den ene nye elektrokemiske proces efter den anden, som vil behøve billig kraft for at kunne utnyttes". Stortingsforhandlingene 1914, p. 2582

large-scale hydropower concessions, regardless of ownership. Yet, given the recent policy of allowing foreign companies to obtain hydropower concession on terms, there was little sympathy for blocking concessions now that finally Norwegian companies ended the fray. The proposal to delay the concessions was thus defeated 81 against 36.[802]

II. The complicating factor of war

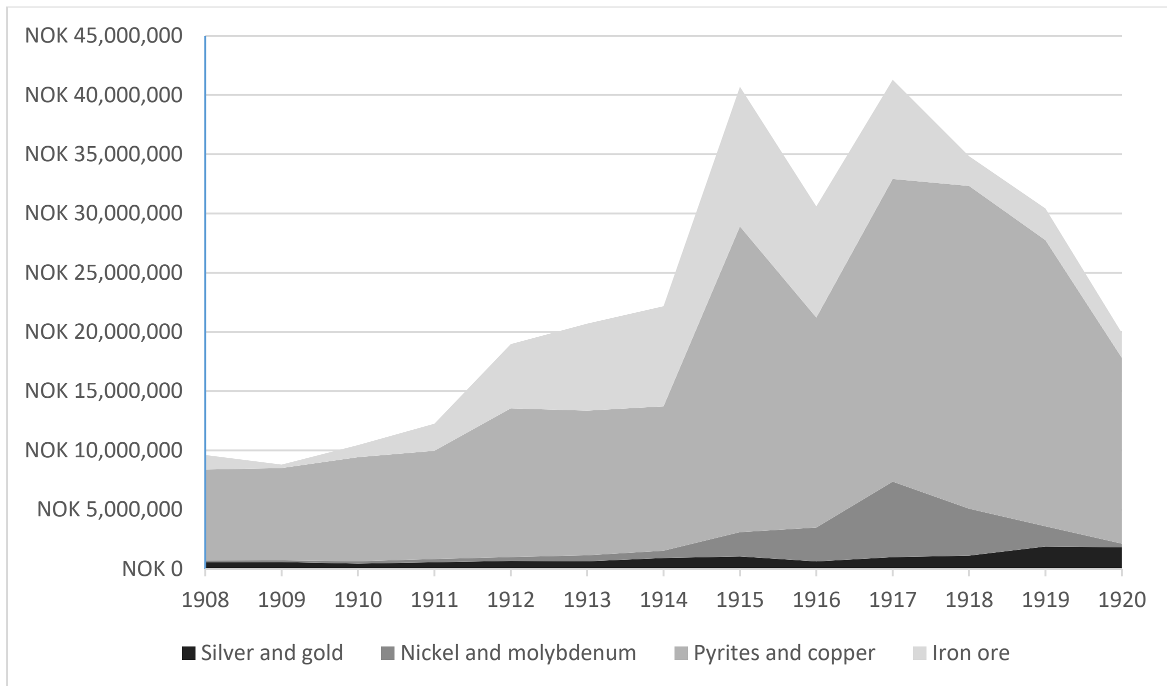
Less than a month after the Storting had decided the concessions to Sauda, Høyang, Osa and Bremanger, war broke out in Europe. While Norway remained neutral, the First World War would have a profound effect on the reshaping of Norwegian natural resource policy.

Norway's neutrality in the World War ensured that money would soon come pouring into the Norwegian economy like never before. Especially the Norwegian shipping industry experienced a period of extraordinary profits, due to the manifold increase in shipping rates. There was also a sharp increase in demand for Norwegian raw materials for the European war effort, including energy intensive products such as nitrate, carbide and aluminium, mined minerals such as copper and sulphur, as well as fish.[803] Much of these profits were ploughed back into the Norwegian economy, making it much easier for Norwegian investors to finance capital-intensive undertakings. Yet, increased demand also led to increased competition for resources, not least labour.

[802] Stortingsforhandlingene 1914, p. 2603. In addition to the Labour Party's 23 votes, 5 Labour Democrats and 8 Liberals – 5 of which should be counted as members of the agrarian wing of the party.

[803] Pål Thonstad Sandvik, *Nasjonens velstand: Norges økonomiske historie 1800-1940* (Bergen: Fagbokforlaget, 2018), pp. 166-69. For shipping rates, se also: Per Vogt, *Jerntid og jobbetid : en skildring av Norge under verdenskrigen* (Oslo: Tanum, 1938), pp. 62ff.

Figure 10: Nominal output value from Norwegian mines 1908-1920



At the same time, the war also underlined the vulnerability of the trade dependant Norwegian economy. The country was critically dependant on imports of coal, iron, steel, oil and foodstuffs from abroad. As the war dragged on, this would in time come to be used by the Entente to pressure Norway to limit its exports to the Central Powers, especially from 1916 and onwards. For those who had been most sceptical about the country's increasingly globalized economy, the war seemed to offer indisputable proof the folly of the way the country had been managed. This was especially the view among many agrarians in the Storting, who were further radicalized in their views that drastic measures to "rebalance" the economy in favour of grain farming and domestic oriented small industry.[804] Supply problems also heightened pressure to replace foreign coal with hydroelectricity. All this would add up to further sharpen the conflict lines of Norwegian concession policy that had formed before the war.

As in practically all European countries, the war further increased the role of the state in the economy. As early as the autumn of 1914, the Storting instituted a national supplies committee charged with obtaining critical fuel and foodstuffs, which was also given wide powers to set maximum prices and export restrictions on these.[805] The borders between what had been the

[804] May-Brith Ohman Nielsen, "Jord og ord: En studie av forholdet mellom ideologi, politikk, strategi og mobilisering hos den tredje pol i det norske partisystemet : Bondepartiet 1915-1940 " (Universitetet i Bergen, 1997), pp. 23-24.
[805] Hodne, *Norges økonomiske historie*, pp. 442-43; Lie, *Norsk økonomisk politikk*, p. 33.

appropriate sphere of the state and private business was sharply altered, as it was in most of the rest of Europe.

Norwegian owned resources for Norwegian owned industry?

Another conflict line formed before the war that would be emphasized during the war was the precarious relationship between power suppliers and foreign energy intensive industry. In the years leading up to the war, the French electrochemical company *Société Générale des Nitrures* had established itself in Norway under the subsidiary *Det Norske Nitridaktieselskap* (DNN). The company had initially intended to produce nitrates through the Serpek-process, but switched to aluminium when their original patents proved to be less effective than anticipated.[806] DNN had not obtained its own hydroelectric generation capacity in Norway. Instead, the company obtained a power lease contract of 25,000 hp from Norwegian owned *Arendal Fossekompani A/S* in 1912, which received a government concession the year after. In addition to this, DNN intended to construct a second aluminium smelter in Odda, in Western Norway, based on a lease of 14,000 hp from another Norwegian owned company, *A/S Hardanger Elektriske Jern*.

All this abruptly changed when war broke out. On the same day as Austria-Hungary declared war on Serbia, all construction was halted, and shortly after all French citizens were called home, leaving the whole venture in limbo.[807] DNN informed Arendal Fossekompani that it would not able utilize the power it originally envisioned. Arendal Fossekompani had invested considerable sums to expand the generating capacity of its power plant to provide enough power for DNN. With no other immediate ways of recouping their costs, Arendal Fossekompani agreed to renegotiate the contract with DNN, where the French company would pay only half the price for parts of the power for the duration of the war. While this did provide some income to the Norwegian power company, the Norwegian management felt ill-used by its French customer.[808] A/S Hardanger fared even worse. The company did not possess its own generating capacity. Instead, A/S Hardanger had arranged to lease out its factory and to sublease the power it got from A/S Tyssefaldene to DNN, as a measure to recoup some of its losses after its own electric steel process had failed. When DNN pulled out

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[806] Espen Storli and David Brégaint, "The Ups and Downs of Family Life: Det Norske Nitridaktieselskap, 1912–1976," *Enterprise & Society* 10, no. 4 (2009): pp. 765-67.

[807] Egil Kollenborg, *Det norske nitridaktieselskap 1912-1962* (Oslo: DNN, 1962), pp. 20-44; Dannevig, *Aktieselskabet Arendals Fossekompani*, pp. 53-56.

[808] When DNN wanted to resume its operations in Norway later, the management of Arendal Fossekompani complained to the Ministry of Public Works about the conduct of the French company. See: A/S Arendal Fossekompagni to Expeditionschef Larssen, Arbeidsdepartementet 10.02.1916, NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42

completely, the company faced bankruptcy, leading A/S Hardanger to sue DNN for breach of contract.[809]

At the same time, the bargaining position of power companies vis-à-vis their industrial consumers was further illustrated to the government with the power lease contract between A/S Saudefaldene and Union Carbide. Seeking to expand their operations into Europe, the American carbide company had signed a power lease contract with A/S Saudefaldene in February 1914.[810] The contract, however, gave Union Carbide considerable power over its business partner. Union Carbide would lease all power produced by A/S Saudefaldene, and could also decide when expansions should take place. In addition, Union Carbide would lease plots from A/S Saudefaldene, who would also have to pay any future taxes on this land. In return, Union Carbide would pay A/S Saudefaldene no more than NOK 28.00 (£ 1.54) per horsepower yearly.[811]

However, when the Americans applied for a concession, the majority of the Watercourse Commission found the contract unacceptable in its present form.[812] In their eyes, it gave Union Carbide too much power, and left the Norwegian company with too little to show for it. The Commission also objected to Union Carbide's refusal to organize its operations in Norway as a Norwegian subsidiary. Instead, Union Carbide wanted to run all its non-US operations under its Canadian subsidiary, *Electric Furnace Products Co. Ltd*. The concession law did not require companies who only leased power to be registered in Norway, unlike companies who wanted to obtain their own hydropower resources. However, foreign registered companies were very rare, and given the size of Union Carbide's planned operations in Norway, the commission saw this as going against the spirit of the law. A branch of a foreign registered company would not have the same clear jurisdictional boundaries as a Norwegian subsidiary, making foreign entanglements more likely. Moreover, the Commission was concerned that a foreign registered branch would make tax evasion much easier, thus compounding the issue of resource rent flowing out of the country.[813]

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[809] Kollenborg, *Det norske nitridaktieselskap*, p. 50.. The details on the arrangement between A/S Hardanger and DNN can be found in *Meddelte Vasdragskoncessioner 1909-1914*, pp. 238-249

[810] Arvid Sandvik, *Saudakraft i femti år : aktieselskabet Saudefaldene 1913-1963* (Sauda: Norbok, 1963), pp. 34-35.

[811] Initially, the first half of the power would cost no more than NOK 26 per hp/year, while the power produced after the first expansion was set at NOK 30, but was later altered to NOK 28 for all of it. in *Meddelte Vasdragskoncessioner 1909-1914*, pp. 289

[812] See statements by Watercourse Commission, NRA, S-4570 Vassdragskommisjonen 1909-1921 Aa Forhandlingsprotokoller nr. 2, pp. 399-402, nr. 3, pp. 117ff, 199ff.

[813] *Meddelte Vasdragskoncessioner 1909-1914*, pp. 305. A later history on energy intensive industry in Sauda, describes the Canadian subsidiary as effectively a tax avoidance arrangement. See: Kjartan Fløgstad, *Arbeidets lys: tungindustrien i Sauda gjennom 75 år* (Oslo: Det norske samlaget, 1990), p. 21.

Consequently, when the Storting granted a concession to A/S Saudefaldene on June 30th, it was still up to the Norwegian government to grant a concession to Union Carbide's power lease contract. Yet, when Urbye, the Liberal Minister of Public Works, met with representatives of the American company a few weeks later, he quickly learned that they had no intention of acquiescing to the demands of the Watercourse Commissions majority. The Americans insisted that their Norwegian operations had to be part of their Canadian subsidiary. According to them, this arrangement was not only tidier and more practical for them, but was necessary due to possible future anti-trust legislation in the United States, which required them to organize all their non-US operations under one firm.[814] As a compromise, the Americans were willing to accept that disputes between the company and the Norwegian citizens would be settled in Norwegian courts. Otherwise, they upheld their demand that the contract should be accepted as it was, and that any meddling in the agreement between themselves and A/S Saudefaldene was beyond the purview of the Norwegian state. If the Norwegian authorities were unwilling to accept this, they would instead relocate to Canada, where they claimed they could obtain equally cheap power with less intrusive government regulation and taxation, if somewhat more expensive shipping. [815]

This put the Norwegian government in a tight spot. The Minister of Public Works was reluctant to set an ultimatum to the Americans, in fear that their threat to relocate to Canada was not a bluff.[816] As the Storting had approved the concession to A/S Saudefaldene knowing that it intended to lease power to foreign owned companies. Even if it had not known the specifics of the power lease arrangement, torpedoing the deal between A/S Saudefaldene and Union Carbide could lend credence to the conservatives' argument that the liberals' policies were preventing the establishment of Norwegian owned hydroelectric industry. A/S Saudefaldene had also made it clear that they would only accept their own concession. For the Norwegian government, the fact that the

[814] Negotiations between Union Carbide and Norwegian Minister of Public Works as summarized in: Electric Furnace Products Company Ltd. (Edgar F. Price) to Minister of Public Works, Andreas Urbye, dated 10.07.1914. NRA/PA-0626 Knudsen, Gunnar, I – Politisk Virksomhet, Box 56, Folder 9. Statements by Minister of Public Works, Andreas Urbye and Valentin Valentinsen, *Odelstingsforhanldingene* 1915, pp. 2332-2334

[815] Summary of negotiations between Union Carbide and Norwegian Minister of Public Works. Electric Furnace Products Company Ltd. (Edgar F. Price) to Minister of Public Works, Andreas Urbye, dated 10.07.1914. NRA/PA-0626 Knudsen, Gunnar, I – Politisk Virksomhet, Box 56, Folder 9

[816] *Meddelte Vasdragskoncessioner 1909-1914*, p. 302. It is not clear whether Union Carbide had other arrangements in Canada on offer, but by the cheapest Canadian hydroelectricity could be had at prices competitive with that produced in Norway. In 1915, the U.S tobacco tycoon J.B. Duke was offering to lease 120,000 hp for $8 per hp/year to Du Pont, from his planned hydropower development in Saguenay, Quebec. At the gold standard rate, this was roughly £1.64, just slightly above the £1.54 agreed on between Union Carbide and A/S Saudefaldene. See David Perera Massell, *Amassing power : J.B. Duke and the Saguenay River, 1897-1927* (Montreal & Durham, N.C.: McGill-Queen's University Press, 2000), p. 135. Duke's plans would were however initially thwarted, in part due to disagreements with the Province of Quebec over compensation fees for the water regulation works.

company was American did speak in its favour, as any political threat from the US was considered to be much more remote. Union Carbide was also willing to accept a clause suggested by the Minister of Public Works, that if the majority of the company's shares were sold to citizens outside the US or Canada, the Norwegian branch had to reorganize as a Norwegian registered subsidiary within 6 months.[817] The outbreak of the Great War shortly after made the situation even more precarious. The economic uncertainties it brought had halted many of the large hydroelectric developments on the west coast. Emphasizing the "desirability of, in these times, to establish a large undertaking and a large industrial venture" [818] the government gave a concession for Union Carbide's works in Sauda in December 1914.

Despite these provisions, the decision remained controversial. In granting the concession, the government had disregarded the recommendations from the Watercourse Commission, who remained unconvinced by final adjustments. [819] The widespread unemployment feared in the first month of the war failed to materialize. As the governments decisions of 1914 were reviewed by the parliamentary protocol committee in the summer of 1915, Knudsen's Liberal government was sharply criticised for being too lenient towards the Americans, both by the conservative opposition as well as representatives of their own party.[820]

The debate that followed was a telling manifestation of how much the political consensus had shifted towards a more restrictive policy towards foreign owned industry leasing Norwegian hydropower. Although only a few representatives advocated a complete ban on power lease concessions to foreign owned companies, there was an overall agreement that a stricter policy was necessary. The Liberal government itself went a long way to agree with the views of its critics. Minister Andreas Urbye defended his own actions, given the possibilities of unemployment and the signals given by the Storting in approving the concession to A/S Saudefaldene. Yet, he saw the country's concession policy as being in "a transitional state",[821] and that full Norwegian ownership of the industrial companies as well was "the right direction, in which the development hopefully would lead".[822] Prime Minister Knudsen went even further, taking the MPs disapproval as parliamentary sanction for a stricter government policy, stating, "the government must now be justified in saying

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[817] *Meddelte vasdragskoncessioner: II. Efter koncessionsloven 1909-1914*, p. 307-311
[818] «[…]ønskeligheten av i disse tider at faa i gang et stort anlæg og en stor industriel bedrift[…]» *Meddelte vasdragskoncessioner: II. Efter koncessionsloven 1909-1914*, p. 306
[819] NRA, S-4570 Vassdragskommisjonen 1909-1921 Aa Forhandlingsprotokoller nr. 3, 199ff
[820] "Protokoldebatten: Sterk kritik over Saude-koncessionen» Aftenposten 18.08.1915. The full debate can be found in *Odelstingsforhanldingene* 1915, pp. 2327-2338 and
[821] «[…]et overgangsstadium». *Odelstingsforhanldingene* 1915, p. 2329
[822] «[…]den rigtige retning, hvori utviklingen forhaabentlig vil gaa.» *Odelstingsforhanldingene* 1915, p. 2334

'no' for some time".[823] Knudsen repeated this sentiment later the same year in even less unambiguous terms:

> […] we have now come so far, that it seems, we can set conditions in such a way, that both the development of the waterfalls as well as the factories use of that power should be limited to Norwegian [owned] companies[824]

In less than a year after the first fully private Norwegian owed hydroelectric generating companies had come into being, there were clear signs that the very business model they had espoused was becoming politically unacceptable.

Increased ambitions among Norwegian capitalists

Criticism of the industrial power generation companies was not just restricted to the political sphere. In March 1915, Willy Eger, the director of Elkem, complained underbidding on power lease contracts by Norwegian producers as harmful to themselves, as well as more "serious" Norwegian companies:

> We should demand and expect by those who by and by form our waterpower affairs, that they have enough sense of responsibility and backbone to rather refrain from renting out power to prices which do not give full and absolute [economic] security, but that one is able to handle the surprises and difficulties which always occur sooner or later.[825]

In his view, the speculative nature of much of Norwegian private hydro related business had damaged its reputation both at home and abroad, leading to the perception that "waterfall industry is the same as waterfall speculation".[826] To counter this, he called for the establishment of "solid" Norwegian groups or companies, who primarily focused on the industrial link of the commodity chain, rather than just selling hydroelectricity.

> If Norwegian interests are represented by a company with strong capital [foundations], one will no longer risk that the power will lay in the hands of the foreigners. We should

[823] «[…]maa regjeringen være berettiget nu til at sige nei en tid utover[…]»*Odelstingsforhanldingene* 1915, p. 2338

[824] «[…]vi er kommet saa langt, at det ser ut til, at vi kan særre vilkaarene saaledes, at baade vandfaldenes utbygging og kraftens benyttelse av fabrikkerne skal forbeholdes norske selskaper.» "Statsminister Knudsens foredrag." Bergens Tidende 30.09.1915

[825] «Vi maa forlange og vente av de Folk som efterhvert danner nye Vandkraftaffærer, at de har Ansvarsfølelse og Rygrad nok til heller at holde sig tilbake ved at bortleie Kraften til Priser der ikke gir fuld og absolut Sikkerhet for, at man ogsaa kan ta imot d Overraskelser og Vanskeligheter der alltid intreffer før eller senere.» «Direktør C.W. Eger om vor Vandkraft og Vandkraftindustri.» *Morgenbladet* 13.03.1915

[826] «Vandfaldsindustri er det samme som Vandfaldsjobberi.» «Direktør C.W. Eger om vor Vandkraft og Vandkraftindustri.» *Morgenbladet* 13.03.1915

> be able to call on foreign capital, but we must organize us in such a way that it will be Norway and Norwegians who use it, and not it that uses us and Norway.[827]

Undoubtedly, Eger saw his own company as playing such a role.[828]

Elkem was not the only Norwegian owned company who had begun to broaden its ambitions. Until 1915, the Norwegian owned power company *Merager Brug* had leased its power and factory facilities to a joint venture enterprise with A.E. Barton's Alby United Carbide Co. When the contract expired, the Norwegian owners decided not to renew the lease, and instead take over production themselves, in an effort to gain a more independent "Norwegian" position within the Norwegian carbide production.[829]

Two of the Norwegian owned companies who were granted a concession in 1914, A/S Bremanger and A/S Høyangfaldene, also began to look beyond renting out their power and instead established their own energy intensive production. A/S Bremanger made plans to start their own production of calcium cyanamide.[830]

A/S Høyangfaldene's plans were even more ambitious. Just before the concession had been granted, A/S Høyangfaldene hinted that they wanted to found an iron and steel work, based on the processes being tried out in Tinfos. However, shortly after the outbreak of war these plans were abandoned, and the company instead switched to aluminium. Wartime demand for aluminium was increasing, and its production process was considered more tried and tested.[831] After the company secured bauxite claims in southern France in 1915, the recently renamed *A/S Høyangfaldene, Norsk Aluminium Company* (HF/Naco) was now poised to become a fully integrated aluminium company. Now a Norwegian company secured raw materials in a European country for processing in Norway, and not the other way around – an event that many newspapers (liberal as well as conservative) hailed as a national victory.[832]

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[827] «Er de norske Interesser repræsentert ved et kapitalsterkt Selskap risikerer man ikke at hele Magten kommer til at ligge I Utlændingernes Hender. Vi bør kunne tilkalde utenlandsk Kapital, men vi bør indrette os slik at det blir Norge og Nordmænd som benytter den, og ikke den som benytter os og Norge.» «Direktør C.W. Eger om vor Vandkraft og Vandkraftindustri.» *Morgenbladet* 13.03.1915

[828] Sogner, *Skaperkraft*, pp. 54-58, 71.

[829] Andreas Nybø, "Sammensmeltingen: Meraker, Hafslund og Odde i karbid- og ferrolegeringsindustrien 1918-1928" (NTNU, 2008), pp. 9-13.

[830] Gunnar Nerheim, "Elektrisitet, vannkraft og industrialisering. Utbyggingen av Svelgen 1917-1928," *Volund* (1979). See also the share offering advertised in *Norske Intelligensselder* 28.10.1916

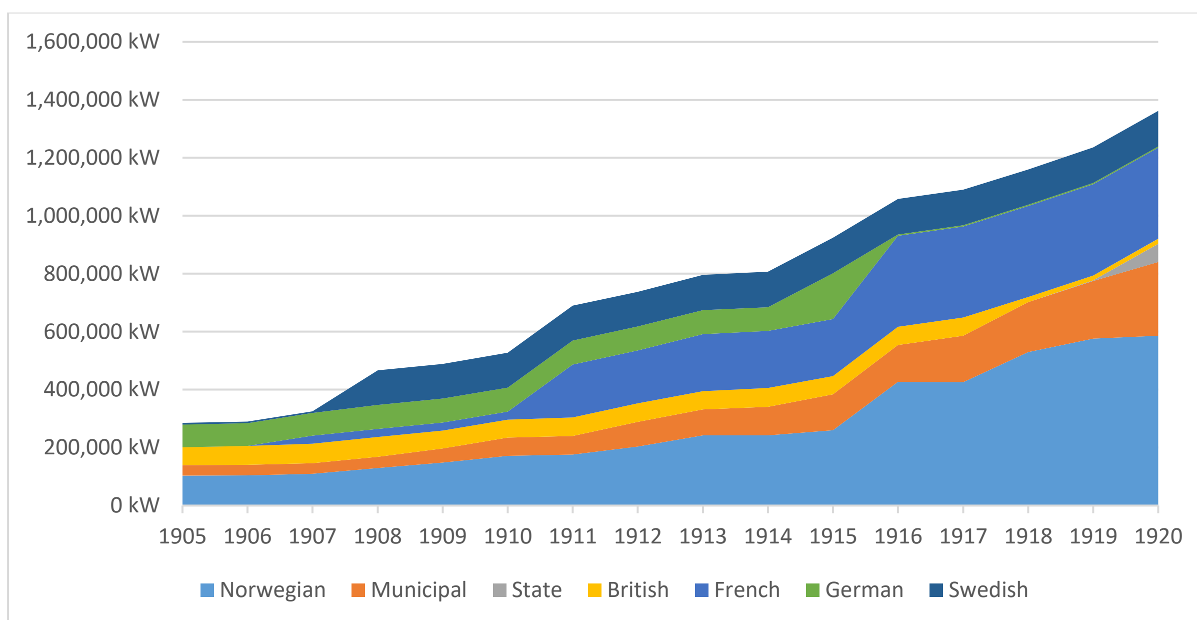
[831] Kåre Fasting, *Norsk aluminium gjennom 50 år: forhistorie og historikk 1915-1965 : Aktieselskapet Norsk aluminium company, A/S Nordisk aluminiumindustri* (Oslo: Høyang, 1965), pp. 32, 53-54, 56-60.

[832] «Høiangfaldene» Bergens Tidende 27.11.1915, 08.12.1915. «Norsk storindustri i Sogn» Aftenposten 19.11.1915

The wartime situation did not only lead Norwegian businesses to pursue more ambitious plans, but also opened the possibility for Norwegian investors to "repatriate" foreign owned companies in Norway. The German co-owners of Arendal Smelteverk sold their stake in the company as early as 1915.[833] Then, in the spring of 1916, a Norwegian consortium, which included the principal owners of Merager Brug, bought Siemens-Schuckert's remaining 2/3 ownership share of Hafslund A/S for NOK 18.7 million.[834] Hafslund was the largest private power company near the capital region, with an installed capacity in 1916 of over 95,000 hp, with the potential of considerably more.[835] At the same time, another group of Norwegians bought Vittingfoss Brug A/S from Edw. Lloyds for £ 150,000 (NOK 2.55 million).[836] The most spectacular purchase came when Kellner-Partington was bought for over £ 6.8 million in 1918.[837] Norwegian investors also bought substantial shares in Alby Utd. Carbide and Nitrogen Products & Carbide Company Ltd.[838] and Norsk Hydro, but there would be no Norwegian shareholder majority in neither company.[839]

[833] Birger Dannevig, *A/S Arendal smelteverk : 1912 - 1962* (Arendal: Arendal smelteverk, 1962), p. 43.
[834] The remaining 1/3 was already on Norwegian hands. See: Knut Sogner and Sverre A. Christensen, *Plankeadel : Kiær- og Solberg-familien under den 2. industrielle revolusjon* (Oslo: Andresen & Butenschøn for Handelshøyskolen BI, 2001), pp. 170-75.
[835] Just, *Aktieselskabet Hafslund: 1898-1948*, p. 171.
[836] Kittilsen, *Vittingfossen*, pp. 87-95.
[837] The price is quoted in: Bergh and Lange, *Foredlet virke*, p. 84.. At the time, The Economist concluded that this was a good price for the British owners. "Norway. The Kellner-Partington Purchase—Food difficulties—Exchanges" The Economist 10.11.1917.
[838] A meeting of Norwegian NPCC shareholders in April 1918 had reviled that £ 260,000 out of a £ 2,000,000 share capital was on Norwegian hands. The exact share of Norwegian ownership in Alby remained unknown, but according to Alby it was "significant". *Meddelte Vassdragskonsesjoner 1919*, p. 105
[839] In the case of Norsk Hydro, this was partially due to the French governments allow the sale of BASFs shares which had been sequestrated by the French government after the outbreak of the war. Historian Kjetil Gjølme Andersen interprets this mainly as an act set to keep Norsk Hydro on French hands when the war ended, after the French ownership had considerably declined during the war. Andersen, *Hydro 1905-1945*, pp. 178-88.

Figure 11: Estimated ownership of developed Norwegian hydropower based on installed capacity in 1946[840]



III. A new compromise: Abrahamsen's concession law proposal of 1915

Despite what appeared to be the coming of age of Norwegian owned industries ready to take a full role in the technologically advanced and capital-intensive industries, the fraught relationship with the Norwegian government over resource policy continued, especially concerning hydropower. As Prime Minister Knudsen had proclaimed after the Aura concession, a change in policy towards foreign owned companies would not be accompanied by a concurrent softening of the demands set to Norwegian owned companies. This would become readily apparent when the first large hydropower concessions were decided in the summer of 1914, and was later followed up when the government presented its proposal for a revised law in February 1915.

The new proposal presented by Minister of Justice Lars Abrahamsen sought to further bolster the ability of the state to regulate the natural resource industries, and in particular the hydroelectric industries. The key concrete proposals can broadly be summarized as such: First of all, the new law would make it possible to increase the public take by introducing concession taxes on all power concessions, not just on hydropower regulation or power leased from power plants built before the concession law came into being. The new proposal also removed the minimum length,

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[840] The graph is based on the overview of individual power plants with an installed capacity of over 500 kW with the nationality of shareholder majority taken from a number of different sources listed in this thesis. There is no stastistical material available which shows the installed capacity of individual power plants each year. Consequently, as this graph is based on an overview of installed capacity from 1946 it underestimates the growth curve of installed hydroelectric capacity in Norway. See:Norges vassdrags- og elektrisitetsvesen., *Utbygd vannkraft i Norge* (Oslo: H. Aschehoug, 1946).

and reduced the maximum length from 80 to 60 years, or 70 years if approved by the Storting. Secondly, the new law was to further strengthen the power of preventing private monopolization of hydropower resources. The clause allowing the state to redeem the power plant after 40 years, as introduced in the four concessions of 1914 would now formally be taken into the law. Moreover, the state and local municipalities would be given a right of first refusal in any sale of riparian rights. [841]

Finally, the new proposal also sought to make it much harder to circumvent the laws and its regulations. A number of companies had avoided being made subject to the concession laws, through buying shareholder majorities in other companies who had obtained their riparian rights before the introduction of the first concession laws.[842] In the new proposal, acquisition of a shareholder majority in a company that owned natural resources covered by the concession law, would also be subject to a concession.[843] In order to prevent companies from obtaining concessions on false premises, the proposal also included the option of adding restrictions as to what a concessionaire could produce with its power. In addition, the proposal also demanded that private citizens obtain a concession when acquiring riparian rights, if they, or together with their immediate family, already controlled rights which could yield more than 50,000 hp.[844]

Besides the concrete steps to increase government take, and widen the application of the concession laws, much of the effect of the new laws would come down to how they were applied. Despite all the talk of a stricter policy towards foreign owned companies, the Liberal government had found it impractical to categorically prohibit further hydropower acquisitions. Instead, a restrictive concession policy towards foreigners should be made at the discretion of government and the Storting. Such a case-by-case differentiation had been suggested already back when the first permanent concession laws were passed in 1909, but had – as we have seen – little consequence for actual policy. Thus, the new proposal sought to formalise a differentiation in the implementation, by adding the caveat that foreign owned companies should only be granted concessions "under singular circumstances."[845] This however, only concerned concessions to obtain and develop watercourses. Despite the discussions on foreign ownership, particularly concerning energy intensive companies leasing power, no similar proviso was made with regards to the lease of hydroelectric power or the acquisition of mineral rights.

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[841] Ot. prp. nr. 15, 1915. For the specific terms, see: pp. 34-52
[842] See for instance footnote 625 on p. 146
[843] Ot. prp. nr. 15, 1915, pp. 12-13
[844] This limit did however not apply if the acquisitions were made in the same watercourse, and could developed as one. Ot. prp. Nr. 15, 1915, p. 37 (§1.2)
[845] "under særlige omstændigheter" Ot. prp. nr. 15, 1915, p. 7

Yet, beyond underlining a stricter policy towards foreign ownership, Abrahamsen's law proposal also put forward other policy considerations that could have wide consequences for future private hydropower concessions. In the accompanying justification for the revised law, the Minister of Justice adopted a language much in line with much of the agrarian wing of the Liberal party.[846] Hydroelectric industry was likely to demand "enormous sums"[847] compared to the available capital in the country, and "lay claim to labour to an extent to which we until now have not seen an equal to in our country".[848] Abrahamsen thus went a long way to suggest that it might be necessary to regulate the growth of the energy intensive industry overall – regardless of who owned it.

> In any society, as in the life of any individual, any headlong development is dangerous. [Our] society must have time to bit after bit absorb the new. The many industrial centres must have time to settle down and learn to govern and develop their municipal and private affairs. The transition from the even rural state of affairs to the more intricate social conditions of industrial life must be given more time to adjust itself. Agriculture, which until now has been the chief livelihood of this country, must be given time to catch up with this development and the new market conditions it will undoubtedly bring about.[849]

Yet, Abrahamsen did not only suggest that the concession laws might be used for the sake of making power and labour available to small industry and rural agriculture. Abrahamsen also warned of the dangers of the country becoming over reliant on a few electrochemical products – nitrates, carbide and aluminium, which would make large parts of Norway vulnerable to fluctuations in the international demand. The Minister thus mused that it might be necessary to use the concession law to reserve some of the better-situated waterfalls for new industrial processes likely to come about in the near future – electric ore smelting in particular.

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[846] Lars Abrahamsen himself represented Voss in the Storting (before entering in government), an agrarian municipality on the Norwegian west coast – where such views were comparatively more prevalent.
[847] "uhyre summer" Ot. prp. nr. 15, 1915, p. 3
[848] «[…]vil lægge beslag paa arbeidskraft i en utstrækning hvortil vi hittil ikke har hat noget sidestykke i vort land[…]» Ot. prp. nr. 15, 1915, p. 3
[849] "I ethvert samfund, som I den enkeltes liv, er enhver hovedkulds utvikling farlig. Samfundt maa faa tid til litt efter litt at opta det nye. De mange nye fabrkcentrer maa faa tid til at komme i ro og lære at styre og utvikle sine kommunale og private forhold. Overgangen fra de jevne landsens forhold til industrilivets mere indviklede samfundsforhold maa faa tid til at fæstne sig. Landbonæringen, som hittil har været landets hovednring, maa fa tid til at følge med i den utvikling som de nye omsætningsforhold utvilsomt vil skape.» Ot. prp. nr. 15, 1915, p. 3

> […] nothing can be imagined to be of greater importance to our country's economic development than just the kind of enterprises that open the way to profitably utilize the enormous deposits of low-grade ores hidden in our mountains.[850]

Consequently, the new law outlined a wide set of concerns which could or should be taken into account, some of which indeed could easily be mutually exclusive. Once again, much of the actual impact of the concession law would come down to how it was applied.

In stark contrast to the previous bitterly divisive concession debates, Abrahamsen's proposed revisions were not met with the same level of political controversy – at least initially. There were remarkably few objections in parliament to the broad objectives presented by the Liberal government, something that was also remarked upon at the time. Noting the absence of any vitriolic condemnation of the new law in the conservative press, *Dagbladet*[851] triumphantly remarked, "this silence proves more than anything else that the Liberals concession policy has followed the right paths, and that it has now conquered all serious opposition".[852] Along similar lines, Gunnar Knudsen himself confidently declared:

> It is remarkable, that when we come to the concession question, it is as if it does not rouse any greater interest anymore. […] In 1909, we the Liberals were accused of both theft and robbery. […] We do not hear any more such talk now. In 6 years, the Liberals view on the concession laws has practically become the view of the entire people.[853]

Knudsen and his political companions could perhaps be accused of a little hyperbole. Indeed, the captains of Norwegian industry were, unsurprisingly, not kindly inclined to a further tightening of the concession law. The director of Elkem, C.W. Eger, accused the Liberal party of having "lost its footing" and were "working to diminish, yes nearly destroying these [natural] riches for our country".[854] Brugseiernes Landsforening followed up with an angry letter to the Storting later that year, warning that the new law would lead to "Norwegian waterfall owners suffering considerable damage to the benefit of foreigners".[855] The interest groups were also doing their best to keep the

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[850] «[…] intet kan tænkes at faa større betydning for vort lands økonomiske utvikling end netop den slags bedrifter som aapner adgangen til med fordel at kunne tnytte de uhyre forraad av fattige malmer som gjemmes i vore fjelde.» Ot. prp. nr. 15, 1915, p. 3

[851] A leading radical Liberal newspaper

[852] "Denne taushet er mer end noget andet et sterkt talende vidnesbyrd om, at venstres koncessionspolitik fulgte de rigtige linjer, og nu har beseiret al virkelig motstand". «Tiderne forandres» Dagbladet 20.02.1915

[853] «Det er jo det merkelige, at naar vi er kommet ind paa koncessionsspørsmaalet, saa er det likso det ikke vækker større interese længer. […]I 1909 blev vi venstre beskyldt for baade røveri og ran. […] Vi hører ikke mer tale om det nu. Paa 6 aar er venstres syn paa koncessionslovgivingen blit det hele folks praktisk talt.» "Statsminister Knudsens foredrag." Bergens Tidende 30.09.1915

[854] «mistet Fotfæstet», «Direktør C. W. Eger om vor Vandkraft og Vandkraftindustri" Morgenbladet 13.03.1915

[855] "[…]vil bevirke at norske vandfaldseiere vil lide betydelig skade til fordel for utlændinger" Brugseiernes Landsforening (Kristen Faye, Hjalmar Johansen) to Odelstinget, 27.05.1915. Indst. O. XXXIII 1915, p. 37

fight against the Right of Reversion alive, publishing in 1914 a book on the ongoing constitutional dispute that could act as "a handbook for the many, who now or in the future will come into contact with the state's demand to curtail private property through concession terms".[856]

Yet in comparison, the response from the Conservative alliance was more muted. Rather than engage in a fiery debate on the freedom of Norwegian enterprise and confiscation of property, the conservatives mostly confined themselves to arguing for the legal status quo, while holding on for decision on the Right of Reversion in the Supreme Court.[857]

On the other hand, the left wing of the Norwegian parliament was more on the offensive. A fraction mainly[858] consisting of the now out of office Castberg, and the rising Labour party, formed a minority opposition in favour of a stricter concession law. However, they shied away from proposing legislation to reserve natural resources for public ownership. This did not form a clear ideological dividing line between the minority and the government, as the original proposal from the Liberal government gave clear priority to public ownership. Instead, Labour and Castberg's Labour Democrats made their mark by suggesting terms that were stricter than those proposed by the government.

In summary, the Liberal government's suggested revisions to the concession laws did not in its letter signal a fundamental shift in policy direction. The scope of the laws was expanded, and the revised law opened for stricter terms. However, the proposal outlined a law that would still allowed for a flexible implementation by government and parliament. However, outside what was actually mandated in the revision proposal, there was a clear shift in the rhetoric of the government which now included clear allusions to a stricter policy on foreigners, and indeed the possibility of using the concession law to regulate the growth of the resource intensive industries overall.

IV. Foreign direct investments and concession policy 1914-1920

A central question to examine thus becomes to see whether the Liberal government intended to follow up the rhetoric of a more restrictive concession policy towards new foreign direct

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[856] "[…]en haandbog for de mange, der nu eller i fremtiden kommer i berørelse med kravet om statens ubegrænsee ret til ved koncessionsbetingelser at indskrenke de privates eiendomsret." «Furubergsagen» Aftenposten 25.11.1914

[857] See statements by Halvorsen and Jahren, Indst. O. XXXIII, 1915, p. 5 and Indst. O. V. 1917, pp. 4-5

[858] In the parliamentary committee, this faction was joined by Valentin Valentinsen, the Liberal Party representative of Haugesund, in 1915, and by Svend Lindø in 1917 – Valentinsens successor in Haugesund.

investments in practice. Whereas the government's new concession law outlined a stricter policy towards all private investment, it also signalled a stricter practice regarding concessions on acquisitions of hydropower by foreign owned companies. Moreover, following the controversy over the Union Carbide concession, Prime Minister Knudsen signalled that the government might take a more restrictive line towards foreign owned companies leasing power as well. As the coming of fully Norwegian owned power companies made it easier for the Norwegian government to anticipate a stricter policy towards foreign owned ones, fully Norwegian owned industrial companies made it easier for Norwegian policy makers to take a harder line for power lease concessions.

Yet, the First World War also created an almost complete halt to inward foreign direct investments in Norway, primarily due to the enormous capital requirements of the war. Thus, there are only a few concession cases on which to assess whether Knudsen's Liberal government had abandoned the harnessing policy for hydropower in practice. In fact, during the First World War, there was only one instance of a foreign owned company seeking a hydropower concession. This concession case would however come to show that the outbreak of war had created new circumstances for Norwegian owned industry, but that the new intermixing of business and politics created by total war had significantly altered the "rules of the game" in international commerce.

The DNN concession and French bauxite

As previously mentioned, the outbreak of World War One abruptly brought DNNs aluminium plans in Norway to a halt. Aluminium had initially not been considered to be of immediate strategic importance, but this soon changed as the light metal found numerous new uses.[859] In order to supply the Entente's growing demand, the French government instigated *Pechiney*[860] to revive DNN and its Norwegian expansion plans in 1915.[861] There were no legal barriers to resuming and expanding production near Arendal, for which it still had a concession. The planned smelter in Tyssedal was another matter. DNN had cancelled its contract with A/S Hardanger, who then sued DNN for breach of contract. Rather than settling and renegotiating the contact, Pechiney contacted the director of A/S Tyssefaldene, Ragnvald Blakstad, and agreed on a new power lease contract

[859] Storli, "Out of Norway falls aluminium," pp. 75-81.
[860] Pechiney had obtained a majority stake in DNN from SGN in July 1914. David Brégaint, "Det "uønskede barnet": Pechineys norske datterselskap DNN 1913-1958," in *Globalisering gjennom et århundre: Norsk aluminiumindustri 1908-2008*, ed. Johan Henden, Hans Otto Frøland, and Asbjørn Karlsen (Bergen: Fagbokforlaget, 2008), p. 110.. At the time, the company was named *Compagnie des Produits chimiques d'Alais et Camargue* – and only later officially renamed itself to the more famous – and much shorter – "Pechiney".
[861] The following account of DNNs relationship with Pechiney, the French State and A/S Tyssefaldene is based on: Kollenborg, *Det norske nitridaktieselskap*, pp. 41-62; Brégaint, "Det "uønskede barnet"," pp. 101-14; Storli and Brégaint, "The Ups and Downs."; Storli, "Out of Norway falls aluminium," pp. .

directly with the power producer, cutting out A/S Hardanger as an intermediary.[862] As part of the arrangement, Blakstad had agreed to solve DNNs legal troubles with A/S Hardanger, which he did by simply buying the bankrupt A/S Hardanger from its creditors, and then sell it on to DNN.

This seemed to offer a quick, easy and profitable solution for the DNN, Tyssefaldene and Blakstad. There was only one snag – this broke the contract on which the DNNs concession from 1914 was based on. DNN had ignored this issue, and had begun construction in March 1916 under the assumption that the 1914 concession was still valid, even taking an advance payment of 5 million F from the Russian government.[863] However, on April 6th 1916, the Ministry of Public Works issued a declaration to the contrary, and that DNN would have to apply for completely new concession for its smelter in Tyssedal.[864]

While DNN acquiesced, and submitted a new application for its new power lease on June 27th 1916, it soon became clear to DNN that it could not expect to have a new concession ready by the time the new smelter in Tyssedal was ready. Desperate to fulfil its aluminium orders to the Entente, DNN contacted the Norwegian government again in November 1916, asking for a provisional permission to lease 4,000kw. The Norwegian government was at the time under considerable pressure from Britain, due to its continued shipments of pyrites and fish to Germany.[865] Seeing as the aluminium smelter in Tyssedal was of vital importance for the Entente, the government agreed to a temporary permit on December 14, while at the same time underlining that this permission was in no way a decision on the application for a long-term concession.[866]

Such a concession had no shortage of opponents. The Watercourse Commission opposed the concession on the same ground as it had opposed the Union Carbide concession in 1914, that a foreign owned industrial company would reap all the benefits of cheap Norwegian hydropower, leaving no more than a meagre rent. In no uncertain terms, the Commission;

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[862] In the new power lease contract, DNN would pay NOK 34 per horsepower/year, instead of the NOK 37.50 it had agreed to pay A/S Hardanger, while A/S Tyssefaldene would receive NOK 34 rather than the NOK 30 from the original contract with A/S Hardanger. The new contract also allowed for a larger smelter, as it allowed DNN to lease up to 30,000 hp. See: «Meddelte vasdragskoncessioner, 1909-1914», p. 239. "Out of Norway falls aluminium," p. 98.

[863] Brégaint, "Det "uønskede barnet"," p. 112.

[864] Ministry of Public Works to A/S Hardanger, dated 06.04.1916, and Ministry of Public Works to DNN, dated 06.04.1916, NRA, S-1428 Industridepartementet, Avdelingen for vassdrags- og elektrisitetsvesen, *Kopibøker* H 1916 1-1000: pp. 900-903

[865] Patrick Salmon, *Scandinavia and the Great Powers: 1890-1940* (Cambridge: Cambridge Univserity Press, 2004), p. 138.

[866] Ministry of Public Works to Tilsynsmanden i Elektricitetsvæsenet i 4de distrikt, dated 14.12.1916. NRA, S-5946, Dc, Box 42

> had come of the opinion that the reasons, which have led to refuse companies with fully or partial foreign ownership from obtaining waterfalls, also as a rule leads to refusing such companies from leasing power. Consequently, such lease permits such not be the rule, but the exception.[867]

The fact that the company was a member of an international aluminium cartel, along with BACo – the other foreign aluminium producer in Norway – did not speak in its favour. Moreover, the Norwegian government was also in a dispute with A/S Tyssefaldene, over whether a recent regulation work put up by the company required a concession, and did not want to sanction any further power lease contracts by the company before the matter had been resolved.

DNN had also gained its share of opponents among Norwegian capitalists. In February 1916, Willy Eger of A/S Arendal Fossekompani contacted Ministry of Public Works to urge it to insist that DNN fulfilled its obligations to A/S Arendal, before entering into any new arrangements.[868] Even more importantly, the concession to DNN was challenged by HF/Naco, the recently founded Norwegian owned aluminium company.[869]

In attempting to influence the Norwegian government's decision, HF/Naco was not trying to keep out a competitor from Norway, but rather attempting to use the Norwegian hydropower concession as leverage against the French government's own nascent restrictive resource policy. France did not have any formal restrictions on foreign share ownership of mining companies, and it had initially been fairly straightforward for HF/Naco to acquire a bauxite claim in France.[870] Bauxite, and the alumina made from it, were strategic raw materials for the Entente. France had previously restricted exports of alumina, and also sequestrated the Swiss aluminium company AIAGs bauxite mines, in fear that they would export to Germany. However, the HF/Naco directors were optimistic that this could be overcome by agreeing with the French to sell the finished aluminium exclusively to the Entente. Yet, the Norwegians soon discovered that the French aluminium industry did not look favourably on a newcomer, and actively tried to hamper HF/Naco's efforts. When the French

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[867] "[…]kommet til den opfating, at de grunde, som har ført til at negte selskaper med hel eller delvis fremmed kapital at erhverve fosser, ogsaa i regelen fører til at negte saadanne selskaper at leie kraft. Derfor bør saadan leietilladele ikke bli regelen, men undtagelsen." Watercourse Commission to the Ministry of Public Works, dated 19.01.1917. NRA, S-5946, Dc, Box 42

[868] A/S Arendal Fossekompagni to Expeditionschef Larssen, Arbeidsdepartementet 10.02.1916, NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42. These complaints were repeated in April 1917, even after DNN had resumed production in its Arendal smelter. A/S Arendal Fossekompagni (C.W. Eger) to the Ministry of Public Works, 14.04.1917, NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42.

[869] See note titled «Det Norske Nitridaktieselskab», marked «Levert statsraaden underhaande av Ing. (Emil) Collet (co-director of HF/Naco)», dated 19.09.1916. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42

[870] The French concession laws did not include bauxite in 1915, as it was not considered to be a metal. Fasting, *Norsk aluminium gjennom 50 år*, pp. 59-60.

government abruptly withdrew an offer of an agreement with HF/Naco, the Norwegian directors put the blame squarely on the French aluminium industry and whom they claimed was "their man" in the French government, Louis Loucheur.[871]

Both the French company and the French government strenuously denied the accusations that HF/Naco's difficulties stemmed from influence from the French aluminium industry. DNN instead stressed the general disruptions caused by the war as the chief culprit.[872] Loucheur on the other hand claimed that the arrangement between the French government and HF/Naco was abandoned as the French government did not want to be responsible for foreign capital becoming owners of French natural resources after the war, and that "in this regard, France would follow Norway's example".[873] This was not only Loucheur's assessment. Paul Dutasta, who was later appointed by HF/Naco as the French chairman of their bauxite subsidiary, stressed in a memo to the HF/Naco board that the French government was under pressure to heed French public opinion and the "extraordinarily strong and at times unfair movement against foreigners and foreign companies",[874] which had risen since the outbreak of the war.

HF/Naco attempted to accommodate French hostility towards Norwegian ownership, by gradually introducing French co-owners into their bauxite subsidiary. In September 1917, the company agreed to make rise the French ownership component to 51%, but key strategic control remained in Norway. Loucheur and the French government remained unsatisfied, and in 1918 stated that the company would not be given the necessary import licences for American made capital equipment unless they had a 2/3 French ownership, with named shares, a majority of French nationals on the board, including a French chairman, managing director and technical director.[875] In addition, the French government wanted to retain the right to requisition bauxite and alumina produced by the company. HF/Naco were willing to accept 2/3 French ownership of its bauxite and alumina producer, but considered the demands unacceptable without further guarantees that their

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[871] Storli, "Out of Norway falls aluminium," pp. 92-94.. Louis Loucheur was undersecretary of Munitions from December 1916, and later Minister of Armaments and War Production from September 1917.
[872] French Ambassador (Minister) to Norway to the Norwegian government, 30.3.1917. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42
[873] «Frankrige vile i saa henseende fölge Norges exempel.» This statement is relayed second hand from the Norwegian diplomat Fritz Wedel Jarlsberg. Transcript of telegram from Wedel-Jarlsberg 29.01.1917. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42
[874] "Note for direktonen i Høyangfaldene", sign. Dutasta and Albert Clemenceau 30.05.1917. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42
[875] Translated letter from Le Ministre de l'Armement to Credit Mobilier Francais, 26.01.1918. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42

operations would not be further disrupted – particularly as the French government wanted to reserve the right to ban alumina exports.[876]

It is impossible from the sources available to this thesis to give a definite answer to whether HF/Naco were right in their interpretation that the French aluminium industry was the chief cause for their problems with the French governments, or whether French demands were rather part of a larger ambition for more French control over its domestic natural resources. Regardless of the true state of involvement by the French aluminium industry, what is clear is that it did at least hold enough sway within the French government to resolve the issue when it wanted to. The Norwegian government had proved reluctant to grant DNN a permanent concession for the new smelter in Tyssedal, which Pechiney had sunk large sums in to meet wartime aluminium demands.

One of the government's sticking points in the concession negotiations remained HF/Naco's complaints about unfair treatment in France. When HF/Naco approached Pechiney with an offer to aid in its negotiations with the Norwegian government, Pechiney agreed to do the same vis-à-vis the French government.[877] In May 1918, the Norwegian government concluded a comprehensive deal with Pechiney's new general director Louis Marlio, after two years of on and off negotiations. DNN would be given a 40-year concession for its aluminium smelter in Tyssedal, made contingent on a number of guarantees for fair treatment of HF/Naco in France, as well as alumina supplies from Pechiney in case of sequestration by the French government.[878] The next month, HF/Naco finally received the necessary import licences for the American made materiel, which had been ready to be shipped for more than a year and a half.[879]

What the case illustrates quite clearly is how the war had changed the sphere of government in the economy, compared to the more liberal pre-war era. Moreover, the amalgamation of business and political power intensified by the running of a total war and opened new avenues for overlap business interests and political regulation. The Norwegian government and Norwegian business had come to know that exertion of political power over natural resource extraction and export was not just a "peripheral" phenomenon. It could now also applied be applied by the resource importing industrialized countries of Europe, and not only as a countermeasure to policies in other countries, but rather as a measure to increase domestic control over the economy.

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[876] HF/Naco (Kloumann & Collett) to the Ministry of Public Works and Ministry of Foreign Affairs 11.03.1918.
[877] Storli, "Out of Norway falls aluminium," p. 102.
[878] Ministry of Public Works to D.N.N. 14.05.1918. Draft of telegram from the Minsitry of Foreign Affairs to Wedel Jarlsberg, undated (contains copy of statement from Marlio to Louceur). NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42
[879] Fasting, *Norsk aluminium gjennom 50 år*, p. 113.

In this difficult case, the Norwegian government was willing to align its concession policy with Norwegian business interests. Yet, when the DNN met with "une opposition décisive" [880] in its concession negotiations with the Norwegian government, it's reluctance to grant a permanent concession was not necessarily just playing hard on behalf of HF/Naco, despite the company's incessant lobbying. A government memo does indeed list the problems of HF/Naco and A/S Arendal Fossekompani as important points to consider, and also confronted the French company with these accusations.[881] Nevertheless, when a representative of Pechiney met with Prime Minister Knudsen and the French ambassador to discuss the matter in April 1917, Prime Minister Knudsen signalled to the French delegation that there was now a new policy norm in Norway. According to the account given by DNNs representative, Knudsen flatly stated that "the Norwegian Government would not give any sort of concession to the British, nor to the Germans, nor to the Swiss, and especially, not to the French".[882] This seems to indicate that Knudsen intended to follow through with a stricter policy towards foreign owned companies wishing to lease power, as he had advertised in 1915.[883] However, if the French company could sort out its issues with HF/Naco and A/S Arendal Fossekompani, Knudsen would be willing to offer DNN a concession on its Tyssefaldene plant. This would however only be a 10-year concession, and initially dismissed Pechiney's demand for a 30-year concession, which they regarded as minimum.[884]

When the Norwegian government rescinded in 1918, and eventually agreed offer DNN a 40-year concession, the continued plight was not the Norwegian government's only consideration. The Norwegian government had also decided that it needed its own stockpile of at least 500 tons of aluminium to prevent a shortage from hampering a potential mobilization for war, but French and British aluminium providers had been unwilling to sell the necessary quantities. Moreover, the Norwegian government also wanted to buy the large pyrite claims owned by A/S Grong Gruber, a sister company of DNN, which the French company had initially been reluctant to sell. In return for the 40-year concession, the French would accommodate both these demands.

Exactly to what extent the experiences over the DNN concession influenced Norwegian resource policy is hard to say for certain. However, HF/Naco's problem in France did certainly not

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[880] Quoted from Storli, "Out of Norway falls aluminium," p. 98.
[881] P.M. marked "Svar paa arbeidsdep.tets P.M. angaande Nitridaktieselskapet – leveret av Franske minister» dated 20.03.1917. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42
[882] «[…]le Gouvernement Norvégien entendait ne plus accorder aucune espèce de concession ni aux Anglais, ni aux Allemands, ni aux Suisses surtout et non plus aux Français.» Michel-Cote to Robert Pitval dated 27.04.1917. Pechiney archives, SNN 1912-1925, Box 001-14-20486
[883] See p. 181
[884] Note marked «Møte hos statsministeren 16.04.1917» and «Nitridselskaps kraftleie fra Tyssefaldene» 17.04.1917. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 42

strengthen the idea of reserving energy resources for Norwegian owned export oriented industry – especially if it relied on imports of raw materials. Just as the war had seemed to make it possible to form an internationally competitive Norwegian owned export industry, the very foundations for such businesses to integrate successfully across borders looked more uncertain than ever. While Norway was rich in many resources, it was also a small trade dependent economy, and was also vulnerable to breaks in the international commodity flows. This point would be made in the starkest terms in the winter of 1916-17, when the country had come under a British coal blockade.[885] These experiences helped undermine some of the central assumptions of Norwegian concession policy as it had been practiced up until this point. Rather than regulate and reap an "appropriate" benefit of economic globalization of Norwegian resources, the war instead lent weight to the argument that concession policy should rather be used to promote import substitution.

Blocking expansion or rolling back?

From what is possible to gather from the sources, it seems that the Liberal government did not intend for foreign owned companies to play any large role in key import substitution ventures. In June 1919, a group of British investors led by Yorkshireman J.F.P. Lewis filed an application for a concession to lease 20,000 kW (approx. 27,000 hp) from A/S Tyssefaldene, with the intention of building a pig iron smelter. Electric iron smelting had so far proved commercially unsuccessful, and the applicant stressed how the establishment of a successful iron smelter would be in Norway's national interest.[886] The planned company, *A/S Stocks Elektriske Jern*, intended to use Norwegian mined iron ore from Sydvaranger, and was willing to reserve part of its production for the Norwegian industry, which would thus be "be liberated from its dependence on the Swedish pig iron".[887] Nevertheless, the Watercourse Commission remained unenthusiastic and repeated their view that power lease to foreigners concessions should be given as restrictively as concessions to obtain and develop hydropower.[888]

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[885] Salmon, *Scandinavia and the Great Powers*, p. 138.

[886] Lundh and Rygh to the Norwegian King/government, dated 07.06.1919, NVE archives, Box 67e, file 6

[887] «[…]frigjøres for avhengighet av de svenske rujernsmarked.» Lundh and Rygh to the Norwegian King/government, dated 07.06.1919, NVE archives, Box 67e, file 6. The power lease contract the company had agreed with A/S Tyssefaldene paid NOK 56 per kW/year (41 per hp/year), which was considerably more than for instance Union Carbide had agreed to pay. See: Contract between J.F.P Lewis and A/S Tyssefaldene, dated 31.03.1919, NRA, S-1428 Industridepartementet, Avdelingen for vassdrags- og elektrisitetsvesen, Eh Box 4, file 3

[888] The Commission also highlighted the ongoing disagreements between the State and the Tyssefaldene over whether some of the acquisitions and water regulations made by the company were illegal, which had been going on for year. However, this controversy did not prevent the Liberal government from approving a power

> The development of recent years have taken a strong turn in the direction that both capital and board should be exclusively Norwegian, also with regards to power lease concessions, and the commission is not of the understanding that there are singularly strong reasons for relaxing these demands in the present case.[889]

The Commission agreed that an electric iron smelter would be of great importance to the country's industry, but felt confident that "one must assume that it will not be long until such works will come about," presumably with Norwegian capital.[890] The Liberal government did not override the Commission's decision, but the case was left open up to reconsideration after Knudsen's government fell in June 1920. Yet, despite pleading from Sydvaranger, the concession was left in limbo until the company abandoned the venture in April 1921.[891]

Both statements and actions of Knudsen's government point to a policy where foreign owned companies as a rule would be limited from establishing new energy-intensive ventures in Norway. However, when it came to pre-existing enterprises the government took a more lenient approach. During the Liberal government's time in office, a number of large foreign owned hydropower companies applied for extensions to the time limits set in their concessions. Such extensions were as a rule granted on the same terms as Norwegian owned companies, with no added reservations beyond a demand to maintain a certain level of activity. Yet, while extensions were generally forthcoming, the extensions themselves were usually short. Thus, even if the Knudsen government did not actively use the time limits against the companies who had obtained concessions, uncertainty that this might change if the political winds turned might have been a contributing factor for non-Norwegian investors to divest from their Norwegian holdings.

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lease concession for A/S Elektrotermisk, a 2/3 Norwegian owned company, leasing 15,000hp from the same company in May 1920. See: Meddelte Vassdragskoncessjoner 1920, pp. 23-34

[889] «Utviklingen har I den senere tid gått sterkt I retning av også når det gjelder leiekonssjoner å kreve at såvel kapital som styre skal være utelukkende norsk, og kommisjonen kan ikke skjønne at der i nærværende tilfelle foreligger særlig sterke grunner for at man skulde slappe på denne betingelse.» Watercourse Commission to the Ministry of Public Works, dated 05.25.1920 NVE archives, Box 67e, file 6

[890] «[…]må man anta det det[sic] nu ikke vil hengå lang tid før sådanne anlegg kommer istand.» Watercourse Commission to the Ministry of Public Works, dated 05.25.1920, NVE archives, Box 67e, file 6

[891] A/S Sydvaranger to the lawyers Lundh, Rygh and Corneliussen 08.11.1920. Lundh, Rygh and Corneliussen to the Ministry of Public Works, dated 14.04.1921, NVE archives, Box 67e, file 6

Table 4: Time limit extensions granted by the Knudsen's second government (1913-1920)

Date granted	Applicant company	Processing time (days)	Extension asked for (years)	Extension received (years)	Majority shareholder nationality	Time limit type
04/09/1914	A/S Glomfjord	18	1	1	**SWE**	Compl.
25/09/1914	Randsfjord Træmasse- og Papir-fabrik m. fl. bruk	50	1	1	NOR	Start
19/02/1915	A/S Lysefjord	155	1	1	NOR	Start
10/09/1915	A/S Aura	191	1	1	**UK**	Compl.
12/11/1915	A/S Lysefjord	66	1[892]	1	NOR	Start
08/03/1916	A/S Tyinfaldene	294	2	1	**FRA**	Compl.
08/03/1916	A/S Matrefaldene	294	2	1	**FRA**	Compl.
04/08/1916	A/S Birtavarre Gruber	164	1	1	**SWE**	Compl.
02/11/1916	Norsk Elektrokemisk Aktieselskap	132	1	1	**GER**	Compl.
26/01/1917	A/S Lysefjord	113	1	1	NOR	Compl.
04/05/1917	A/S Bremanger	470	2	2	NOR	Start
24/08/1917	A/S Birtavarre Gruber	196	1	1	**SWE**	Start/Comp.
02/08/1918	A/S Birtavarre Gruber	206	1	1	**SWE**	Start/Comp.
16/08/1918	Norsk Elektrokemisk Aktieselskap	175	1	1	**GER**	Compl.
22/11/1918	A/S Kinservik	611	5	5	NOR	Compl.
13/12/1918	A/S Skrankefoss Træsliperi	58	*	2	NOR	Start
12/05/1919	Norsk Elektrokemisk Aktieselskap	53	1	1	**GER**	Compl.
12/09/1919	A/S Saudefaldene	39	3	3	NOR	Compl.
04/06/1920	A/S Skrankefos Træsliperi	126	5	2	NOR	Start/Comp.

V. No place for national champions? Concession policy and Norwegian owned companies (1915-1916)

The DNN case seem to indicate that the Liberal government was moving towards a policy of denying new establishment of foreign owned energy intensive industries. Yet, as it looked as energy intensive industry would be reserved for an increasingly ambitious domestic owned industry, this did not quiet the growing opposition from the left and parts of the agrarian wing of the Liberal party

[892] Lysefjord also applied for an extention of its completion time limit, which was not granted at the time.

against the continued rapid expansion of the energy intensive industries. Instead, the Liberal government found it more and more difficult to use the powers of regulation and taxation vested in the concession laws to strike a compromise acceptable by the party at large. Hostility towards big export oriented industry in general continued to grow during the war, along with a growing anxiety over the available supplies of cheap electricity for general electrification. Under these circumstances the flexible negotiation approach of the harnessing strategy, even limited to Norwegian owned companies, would also face growing criticism for being too business friendly.

The system of negotiation over concessions lay at the heart of the controversy surrounding the 1915 concession to A/S Bjølvefossen. In 1913, Elkem had bought A/S Bjølvefossen, essentially a speculative hydropower company that had obtained the river Bjølvo on the Norwegian west coast.[893] By buying this company, Elkem had not only acquired riparian rights with the potential of yielding 45,000 effective hp of electrical power. It had also acquired a company that had owned its riparian rights before the first concession law was passed, which meant it was not subject to the Right of Reversion, in a similar fashion to A/S Arendal Fossekompani.[894] However, the rather blatant circumvention of the concession law stirred the ire of the local municipality, who began to lobby the Minister of Public Works to do what it could do to bring the company into the purview of the concession law.[895] Moreover, the previous owners of Bjølvefossen also had a longstanding dispute with the Ministry over whether water regulation that it had tentatively commenced needed a concession.

When the company wanted a permission to construct a provisional power plant in the summer of 1914, the Ministry of Public Works decided to put its foot down. No such permission would be granted before the concession question had been settled. Moreover, the Ministry insisted that Elkem's acquisition of Bjølvefossen should be treated as an acquisition of riparian rights. This would not only make it subject to a regulation concession, but also an acquisition concession, which would make the company subject to the Right of Reversion for the full plant. The legal case for this was at best unclear, and Elkem insisted that Bjølvefossen's riparian rights were not covered by the concession law. However, Elkem also knew that a long legal dispute would be likely to put the whole development on hold for some time, and it was unlikely that they could proceed without at least a

[893] The historical account of Bjølvefossen is greatly indebted to Martin Byrkjelands extensive *hovedfagsoppgave* (MA-thesis) on the creation and early development of the company and his later book chapter on the same subject. See: Byrkjeland, "A/S Bjølvefossen 1905-1931."; "Spelet om Bjølvefossen," in *Ferrofolket ved fjorden*, ed. Erik Fosskaret and Frode Storås (Ålvik: Norbok, 1999).
[894] See p. 146
[895] The leaders of the local municipal council was dominated by farmers beholding to the Liberal Party, who were outspoken critics of industrialization. Byrkjeland, "A/S Bjølvefossen 1905-1931," pp. 150-51.

regulation concession. Thus, company offered to settle with the Ministry, provided they were given lenient terms.

This set of a long series of haggling between Elkem and the Ministry of Public Works from the autumn of 1914 to the summer of 1915. At the same time, Elkem reached out to *Felleskjøpet*,[896] an agrarian producing equipment cooperative, who had long been trying to find a source for cheap nitrate fertilizer.[897] For Elkem, who was considering using the power at Bjølvefossen to make a calcium cyanimide and ammonium sulphate, Felleskjøpet was a useful partner in more than one way. First, it could provide a domestic outlet for its products, but it was also offered a way of putting pressure on the Norwegian government and parliament to grant it a concession on good terms.[898]

The agreement between the Ministry of Public Works and Elkem was not vastly different from those set to the four Norwegian power companies the year before. The concession was set to 65 years, and the company concession tax to both the municipality and the state, gradually rising from NOK 1.00 per hp to 2.00. However, there were also some notable differences, which in part also diverged from the concession terms suggested by the majority of the Watercourse Commission, and the local municipal council. The concession tax to the state would be reduced by the amount of nitrates sold to Felleskjøpet.[899] Moreover, Elkem managed to avoid the Redemption clause of 40 years, as well as having to set aside a fund of NOK 30,000,- to aid local agriculture.

The Ministry also made a notable adjustment to the shareholder's requirement. In the four Norwegian owned power companies from 1914, shares could only be owned or mortgaged to "the state, Norwegian municipalities, Norwegian citizens or – with the relevant Ministry's permission – Norwegian banks".[900] The Bjølvefossen concession also allowed shares to be held by Norwegian corporations, if given expressed permission by the government. This allowed Elkem to keep its ownership of the company. However, as Elkem itself did not have capital restrictions in its company charter, this did open the possibility that the company could end up in foreign hands at some point in the future, if Elkem itself was sold. Elkem had thus obtained some leniency for its agreement with

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[896] It's full name at the time was *Landbrugshusholdningernes Fælleskjøp*
[897] Byrkjeland, "A/S Bjølvefossen 1905-1931," pp. 128-32.
[898] Indeed, the a favourable concession was a precondition for the agreement between Elektrokemisk and Felleskjøpet. See Landbrukshusholdingsselskapernes Fælleskjøp to Ministry of Public Works, dated 03.07.1915, quoted in St. prp. nr. 135 1915, p. 10
[899] If Felleskjøpet bought the full 6000 t quota of ammonium sulphate (or the equivalent in other nitrates), the tax to the state would be reduced to NOK 0.00 for the state for the first 10 years (from NOK 0.50 per hp.), and then increasing by NOK 0.25 every 10 years until it reached NOK 1.00. St. prp. nr. 135 1915, p. 29
[900] See for instance A/S Osa, St. prp. nr. 142, p. 16

Felleskjøpet and willingness to settle its dispute with the state, even if the terms ended up being a lot stricter than it had initially offered.[901]

On the face of it, the Elkem's new venture in Bjølvefossen presented just the kind of national compromise between Norwegian capitalists and "common interests" that the concession policy after A/S Aura had been moving towards. Bjølvefossen would be the first (almost) [902] exclusively Norwegian owned, fully integrated, nitrate company, a fact that was greeted with elation in much of the country's press.[903] Furthermore, the company would be covered by the regulations of the concession laws, including concession taxes, Right of Reversion, reserved power to the municipality, as well as some regulations on workers' rights. Prime Minister Knudsen lauded the development at Bjølvefossen as a major victory, as it was his party's "goal that also Norwegian capital and Norwegian technical insight should achieve this next step [in the value chain]."[904] If this was accomplished, Knudsen concluded: "Then we've come far. Then we've conquered the natural resources completely for Norway."[905]

However, this positive view of Bjølvefossen was far from universal; not least within the Prime Ministers own party. Following a similar pattern from the year before, a number MPs from the agrarian wing of the Liberal party opposed the concession when it was presented to the Storting in the summer of 1915. Joined, as the year before, by Valentin Valentinsen, and most of Castberg's Labour Democrats, they argued that the Ministry of Public Works had been too conciliatory, and let itself be threatened into accepting the terms dictated to it by Elkem, by the company's threat to take the concession issue to court. Moreover, this opposing coalition also disputed how beneficial the deal between Elkem and Felleskjøpet really was. Elkem would take on the construction of the factory and the power plant for its subsidiary, and according to the contract charge significantly higher than

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[901] The company had initially asked for 80 years concession time, and no more than NOK 0.40 per hp. in taxes. In addition, Elektrokemisk did not want named shares for Bjølvefossen, and allow 25% of the shares to be held by foreigners. Despite this, Martin Byrkjeland in his *hovedfagsoppgave* (MA-thesis) on the creation of A/S Bjølvefossen writes that the board of A/S Bjølvefossen considered the terms "favourable". However, the endnote following this statement has had its source removed, for unknown reason. Byrkjeland, "A/S Bjølvefossen 1905-1931," pp. 151, 65, 428.

[902] Elektrokemisk had one Swedish minority shareholder. "A/S Bjølvefossen 1905-1931," p. 161.

[903] «Den store kvælstoffabrik i Hardanger» Stavanger Aftenblad 29.11.1915, «Norsk storindustri» Stavanger Aftenblad 27.12.1915, «'Den døde haand'. Storindustri paa vestlandet» Den 17de Mai 11.25.1915. Even the radical Dagbladet published a mildly positive article on the subject, emphasising the company's Norwegian ownership. «Bjølvefosanlægget. Et norsk millionforetagnde. Skal dække vort behov for kvælstofgjødning» Dagbladet 23.11.1915

[904] «[…]maal, at ogsaa norsk kapital og norsk teknisk indsigt skal kunne greie det næste skridt. Da er vi kommet langt. Da har vi erobret naturherlighetene helt ut for Norge.» «Statsminister Knudsens foredrag» Bergens Tidende 30.09.1915

[905] "Da er vi komme langt. Da har vi erobret naturherligheterne helt ut for Norge." «Statsminister Knudsens foredrag» Bergens Tidende 30.09.1915

the calculated cost price.[906] In this way, the critics argued, Elkem was drawing funds out of its subsidiary and driving up the production costs, and consequently the price Felleskjøpet was set to pay. While this argument was not without merit, it played down the fact that the maximum price to Felleskjøpet was capped at NOK 950.00 per ton nitrogen, which at least historically was a fairly low price.[907]

More importantly however, was the opposition's lack of faith in the Ministry of Pubic Works' ability to uphold the broader "common interests". With a revision of the concession law on the cards, the agrarians and the radicals would not accept compromise in the interest of continued rapid growth – even for a Norwegian owned company with full control over the value chain. To prove a point, the opponents went further than they had in the Aura case in 1913 or the four Norwegian owned companies in 1914. Instead of only voting for stricter terms or to defer the case until a later date, they now proposed to reject it completely.[908]

This act of defiance was not enough to bring the concession down. Even when bolstered by 17 Labour Party MPs who voted on principle for public ownership of hydropower, the concession was passed by 68 to 33. However, of the 57 Liberal MPs in parliament that day, 10 voted against.[909] This was indeed a clear signal of discontent, which likely played a part in how the Liberal Party chose to act in the next big Norwegian owned hydropower concession.

On the same day as Lars Abrahamsen presented his first proposals for a revised concession law, another Norwegian owned company applied for a concession for a major industrial size hydropower development.[910] The company, *A/S Blaafaldene* owned riparian rights capable of yielding over 110,000 electric hp. calculated to cost about NOK 200.00 each. This made Blaafaldene the company with the highest power potential of all private Norwegian owned power companies thus far.[911] The company did not have fully developed plans on what to do with the power they generated, but outlined that they were in negotiations to lease power to *A/S Norsk Elektron*, a

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[906] This point had already been raised by the radical majority (Watercourse Deputy Hugo-Sørensen, Valentin Valentinsen and Grivi) of the Watercourse Commission. See also statements by Valentin Valentisen, David Olsen Bakke, Johan Castberg and Lasse Trædal: Stortingsforhandlingene 1915, pp. 2434-2462

[907] Bjølvefossens prospectus gives the price of ammonium sulphate in Norway as varying between NOK 1,075 and NOK 1,315 between 1908 and 1913. Bergens tidende 18.12.1915. The deal did allow prices to go above 950,- if the price of coal rose beyond the normal price.

[908] This was put forward in the parliamentary committee by Valentin Valentinsen and David Olsen Bakke, both members of the Liberal Party. Indst. S. LVII 1915, p. 10

[909] The vote against the concession consisted of 17 Labour MPs, 10 Liberals, four Labour Democrats, one National Liberal and one Conservative. Stortingsforhandlingene 1915, p. 2480

[910] Ing. Jørgn M. Hals to The King (government), dated 19.02.1915. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 40, Folder 4.

[911] Watercourse Director (Ingvar Kristiansen) to Ministry of Public Works, dated 08.01.1916. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 40, Folder 4.

recently formed Norwegian owned company looking to enter the carbide business.[912] The venture could thus be seen as yet another example of Norwegian owned industry coming of age. Unlike the Bjølvefossen-concession from the summer of 1915, there was no serious objections from the Watercourse Commission or the local municipalities.[913] After some unclear technical issues with the regulation plan had delayed the process for much of 1915, the government hurried the process along to make it ready for the Storting in the summer of 1916 as the company had stressed time was of the essence to land its power lease contracts.

The Storting proved to be less accommodating to the company than the Minister of Public Works had been. Compared with the large concessions passed the previous years, the terms presented to Blaafaldene were somewhat stricter, as they included a redemption clause of 40 years, a NOK 1.00 tax per hp to both the state and the municipality, and a Right of Reversion after 60 years.[914] However, in the parliamentary committee (the same one set to look at the concession law) all but the two conservative MPs voted to defer the proposal to after the revised concession law had passed, citing that the new law could allow increased taxes and more power reserved for public use.[915]

In doing so, the Storting had taken a step that had often been discussed before, namely letting the formal law making process trump ad-hoc administrative improvisation. Previously, the government had introduced or adjusted new terms both as a precursor and in response to adjustments proposed in the law making process. Concession applications had not been deliberately kept on hold to await the law making process before this point. As long as investors were willing to submit to the concession laws, and the terms set to it by the government, the government tried to keep delays to a minimum to make the process as smooth and predictable as possible.

However, with the Blaafaldene concession, the government had practically exhausted the flexibility set in the 1909-laws. While the government had new elements, such as a redemption clause and the fertilizer subsidy clause, which were not specifically mentioned in the 1909-law, the same law limited concession taxes to 1.00 per hp and the reserved power to 5% to both the state and the local municipality. The total concession time could also be set no lower than 60 years.[916] In other words, on these key points, the government could not go any further even if it wanted to.

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[912] C.F. Holmboe to Ministry of Public Works, dated 30.12.1915. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 40, Folder 4. The information on Norsk Elektron is taken from “Nationaliseringen av vor industry. Ny karbidfabrik paa vestlandet” Bergens tidende 22.11.1915

[913] NRA, S-4570 Vassdragskommisjonen 1909-1921, Aa, Forhandlingsprotokoller nr. 4, pp. 266-303

[914] St. prp. nr. 148, 1916

[915] Indst. S. nr. 251, 1916

[916] To recap, see: Chapter 3: VI pp. 140-145

Thus, even though the proposed concession to Blaafaldene had the strictest terms so far, if parliament wanted stricter terms it had no other mean of achieving this than deferring the proposition. The Minister of Public Works publicly lamented the parliamentary committee's decision, but refrained from proposing to overturn it.[917]

Concessions for acquisitions and regulation of watercourses were not the only concessions were the terms set by the government was moving towards the maximum allowed by law. The Liberal government had initially continued the practice established by the Konow (SB)-government by exempting Norwegian companies from taxes on power lease concessions, in return for clauses restricting share ownership to Norwegians. However, when the Norwegian owned *Fredrikstad Elektrokemiske Fabriker A/S* applied to lease 2,000 hp from a non-concessioned power company in 1914, the majority of the Watercourse Commission[918] demanded both concession taxes and restrictions on share ownership.[919]

The company protested against this new practice, but while the Ministry of Public Works allowed the percentage of named shares on Norwegian hands to be lowered from 100% to 67%, the company still had to accept concession taxes. This concession, finally granted in February 1916 would set precedence for similar concessions to come. Practically all future power lease concessions would demand shareholder restrictions between 67% and 100%, while at the same time applying concession taxes.[920] In other words, concession policy for power lease concessions were both set to *preserve national ownership*, while at the same time adding an across the board public rent capture element. For Fredrikstad Elektrokemiske Farbiker, this tax was set to NOK 1.00 per hp. to the state, but this was raised from the next concession and on to NOK 1.25 per hp. – the maximum allowed by the law (see table XYZ).

In a similar fashion, terms set to mining concessions were also getting stricter. Shortly after the second Knudsen-cabinet had come into office, the new Minister of Trade, Johan Castberg, set the concession time for *A/S Rødfjeldets Kisgruber*, a pyrite mine with mainly Swedish capital, to 50 years. This was a sharp reduction from the 80 years, proposed by the Mining Commission, and 20 years shorter than the shortest mining concession granted thus far. Castberg also increased the

[917] Stortingsforhandlingene 1916, p. 2128
[918] The Watercourse Deputy, Hugo-Sørensen, and the two Liberal Party members, Grivi and Valentinsen.
[919] *Meddelte vasdragskoncessioner. IV, 1916 og 1917,* pp.10-21
[920] There were two exceptions to this rule before the passing of the 1917-laws. The first was A/S Kristianssands Nikkelraffineringsverk, a Norwegian owned company which sought to lease smaller addition to their pre-existing power lease (CHECK). The second was the power lease contract granted to Edw. Lloyds, which was allowed to lease the paper mill as part of an arrangement to sell of its power resources to a Norwegian company – A/S Vittingfoss. *Meddelte vasdragskoncessioner. IV, 1916 og 1917,* pp. 58-61, 78-98

amount of ore the mining company had to sell to domestic producers who wanted to buy it from 25% to 50%.[921] This again would come to form a precedent for future concessions, albeit often with the caveat that the amount of ore that could be made available to Norwegian downstream processing was reduced beyond a certain amount of output.[922]

Norwegian owned companies were initially partially exempted from this tightening. *A/S Kvina Grube*, a Norwegian owned molybdenum mine, was granted a concession for 80 years in 1914. This concession also included a clause that demanded that 50% of the company's shares were on Norwegian hands, which matched the company's own charter.[923] The year after, another Norwegian owned mining company, *A/S Vigsnæs Kobberverk*, owned by former Norwegian Prime Minister Christian Michelsen, was similarly granted a concession for 80 years. This time however, the government had initially wanted to set the time limit to 50 years in accordance to recent practice.[924] However, the former Prime Minister protested that he had been given assurances by the former Conservative Minister of Trade, Bernhard Brænne, that his company would receive a more lenient treatment when they had held confidential negotiations on the subject in 1911. Castberg, and his successor Kristian Friis Petersen, decided to accommodate the former Prime Minister, in return for a clause that restricted all share ownership to Norwegian citizens.[925] Concession taxes were also reduced from 3% to 2% of net output. Another mining concession, also involving former Prime Minister Michelsen, was awarded on similar terms in 1916.[926] These cases show that the Norwegian concession system was certainly not immune to bias towards actors with good political connections. However, this was to be the last concession with a time limit of over 50 years. When *A/S Søftesdal*

[921] For information about the concession to A/S Rødfjeldets Kisgruber, see: "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913". Appendix to St. Prp. Nr. 1, Hovedpost VII, kap. 2. 1914, pp. 278-302

[922] The concession to Grong Gruber in 1913 stipulated that the company could be compelled to sell 50% of all production up to 20,000 tons, 30% of all output between 20,000 and 50,000 tons, and then 10% of all ore above 50,000 tons. This meant that if the mines produced at the maximum output planned at the time (180,000 tons), the company could at most be compelled to sell 31,000 tons, or 17.2%. "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913". Appendix to St. Prp. Nr. 1, Hovedpost VII, kap. 2. 1914, pp. 313-318

[923] "Fortegnelse over Meddelte Bergverkskoncessioner 1914". Appendix to St. Prp. Nr. 1, Hovedpost VII, kap. 2. 1915, pp. 27-39

[924] "Fortegnelse over Meddelte Bergverkskoncessioner 1915". Appendix to St. Prp. Nr. 1, Hovedpost VII, kap. 2. 1916, pp. 11-13

[925] In a curious side note, this arrangement was dressed up by the Castberg as his Ministry upholding the promises made by his Conservative predecessor. In response to Michelsens protests, Castberg questioned Michelsen whether the term Brænne outlined had been made on the precondition that the company should be restricted to Norwegian ownership. Michelsen denied that any such precondition had been made. However, when Brænne was later contacted and asked whether he had *intended* such restrictions a pre-requisite, Brænne declared that this had been the case. "Fortegnelse over Meddelte Bergverkskoncessioner 1915". Appendix to St. Prp. Nr. 1, Hovedpost VII, kap. 2. 1916, pp. 11-13

[926] This time the company in question was the copper mining company *A/S Porsa Kobbergruber*. "Fortegnelse over Meddelte Bergverkskoncessioner 1916". Appendix to St. Prp. Nr. 1, Hovedpost VIII, kap. 4. 1917, pp. 25-39

Gruber, a Norwegian owned mining company, was given a concession to exploit phosphorous iron ore deposits in Southern Norway, the concession was limited to 50 years, while at the same time restricting all shares to Norwegian citizens.[927]

Nevertheless, while the terms for concessions were becoming stricter, the government itself had so far not made the need to control the pace of growth into a decisive variable for how the concession policy was applied in practice. The guiding principle for the Liberal government remained that if a company was willing to accept the regulations and taxation set to it by the government, the government would not refuse them. This would all change in 1917.

VI. Applying the breaks: The Ministry of Public Works puts a temporary halt to new private, industry oriented hydroelectric developments (1917)

From the autumn of 1916, the everyday effects of the World War on the Norwegian population would intensify dramatically. The event that undoubtedly was most widely felt came when the Entente denied coal exports to Norway for two months in the middle of the winter of 1916-17, in order to pressure the country to end pyrite exports to Germany. While the export ban was lifted in February 1917, this was just preceded by Germany's resumption of unrestricted submarine warfare, which also complicated the supply situation. In the capital Kristiania (now Oslo), the average price of coal paid by the local gasworks had increased from NOK 18.20 per ton in 1914 to over NOK 200.00 in 1917. Even considering the wartime inflation, this was over six times the pre-war price.[928]

The shortages also exacerbated the divergence between how the war impacted the different social classes. While unemployment was low and wages were rising in nominal terms, living costs increased even faster, causing a decline in wages in real terms (see Figure 12 below). In June 1917, large labour demonstrations broke all over the country due to the rising price.[929] On the other hand, the war had led to extraordinary profits, particularly in the shipping sector. High earnings from abroad and the increased volume of money in circulation coupled with a few safe investments opportunities helped fuel a speculative boom on the stock markets.

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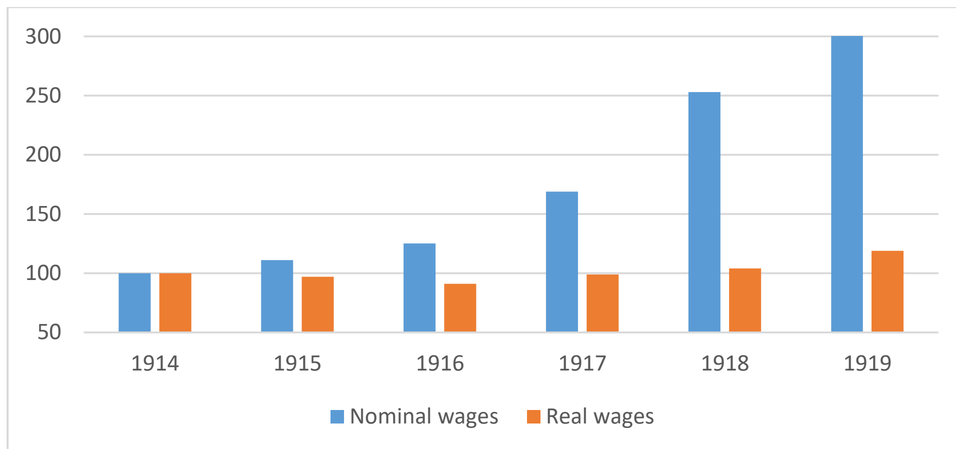
[927] "Fortegnelse over Meddelte Bergverkskoncessioner 1916". Appendix to St. Prp. Nr. 1, Hovedpost VIII, kap. 4. 1917, pp. 39-48

[928] Fredrik Schreiner, *Oslo gassverk 1848-1978: et stykke byhistorie* (Oslo: Universitetsforlaget, 1984), pp. 64-65.

[929] Fuglum, *Én skute - én skipper*, 319-20.

Figure 12: Industrial wages in Norway 1914-1919 (1914=100)[930]



It was undoubtedly with these booming stock markets in mind that no less than three new fully Norwegian owned companies applied for concessions for large hydroelectric developments in 1916.[931] The three companies, *A/S Follafaldene*, *A/S Kvina kraftselskap* and *A/S Mauranger* sought concessions that could potentially yield roughly 34,000, 91,000 and 88,000 electric horsepower costing between NOK 160 and 220.[932] Put together, this represented an investment of just over NOK 36 million – 1.3% of GDP in 1915.[933]

By the time the Watercourse Commission got around to make a recommendation on the three cases in September 1917, a very definite shift in priorities had taken place since the year before. In all three cases, the Commission advised against the Ministry awarding a concession, with the exact same justification:

> In recent times, considerations of the situation in the labour market has taken an increasing role in the processing of concessions. It is commonly known, that the need for labour has been increasing sharply and at the time is so great, it cannot even be

[930] Furre, *Norsk historie 1905-1940* p. 96.
[931] 1. A/S Follafaldene (FIND) 2. Kvina: J.A. Rubach to The King (government), dated 17.10.1916. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 10. 3. Mauranger: Interessentskapet Mauranger to The King (government), dated 10.04.1916. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Db, Box 128
[932] This information is taken from, 1. *A/S Follafaldene*: NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, Aa, Forhandlingsprotokoll 6 (1917-1918), pp. 23-30. 2. *A/S Kvina kraftselskap*: NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 10, Watercourse Commission to Minsitry of Public Works, dated 08.09.1917. 3. *A/S Mauranger:* NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 16, Watercourse Commission to Minsitry of Public Works, dated 10.09.1917.
[933] GDP is taken from *Historisk statistikk 1994*, Table 22.1.. It should be noted that the GDP figure is not adjusted for the significant inflation following the start of the Great War, while the price calculations are made from pre-war prices. With this taken into account, the total investment in the three developments would be closer to 1.6% of Norway's GDP in 1915.

> approximately covered. The competition and the business cycle in general have thus led to wages that far exceed what one would have previously believed possible. Prices for tools and materiel have moved in a similar way. This had led to serious difficulties for pre-existing forms of economic activity and extraordinary price increases everywhere, to the extent that the situation is such, that one is in danger of having to shut down large and important works. It is without further elaboration obvious that any new development contributes to increasing these difficulties more, the larger these developments are.[934]

The contrast from the Commission's recommendation on the Blaafaldene concession, just shy of a year and a half earlier, is striking. Whereas the situation on the labour market was not mentioned with one word in the Blaafaldene case, the Commission now considered it decisive. Moreover, whereas the Watercourse Commission had previously split down the middle with the two Liberal Party members on the restrictive side, often joined by the Watercourse Director, this decision was now unanimous.

Thus, the Watercourse Commission concluded:

> […] when the conditions are such, the general rule must be that one for the time being will not grant new concessions, especially when it comes to larger industrial [electrical] developments. If this rule is to be waived, it must be for singular reasons.[935]

The Ministry of Public Works did not challenge this unanimous recommendation from the Watercourse Commission. Instead, the Ministry informed the applicants of the Commission's view, and concluded that the Ministry "could not for the time being take the matter up to a decision on merits (Norw. Realitetsavgjørelse)",[936] but "welcomed further inquiries in the matter in its time".[937]

[934] «Ved behandling av koncessioner har I den senere tid hensyn til stillingen paa arbeidsmarkedet indtat en stadig bredere plads. Det er en kjendt sak, at behovet for arbeidskraft har været i sterkt stignde og fo tidn er saa stort, at det ikke endog tilnærmelssvis kan dækkes. Konkurransen og konjunkturene for øvrig har derfor ført til at arbeidslønninger som langt overstiger, hvad man tidligere vilde anset mulig. Paa lignende maate har det gaat med priser paa redskaperog materiel av enhver art. Dette har medført betydelige vanskligheter for bestaaende næringer samt en overordentlig fordyrelse paa alle hold, saa stillingen nu til dels senddog er den, at man staar i fare for at maate stoppe store og vigtige anlæg. Det er uten nærmere paavisning klart, at ethvvert nyanlæg bidrar til at øke vanskeligheterne og jo mere jo større anlægget er.» NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, Aa, Forhandlingsprotokoll 6 (1917-1918), pp. 27-28

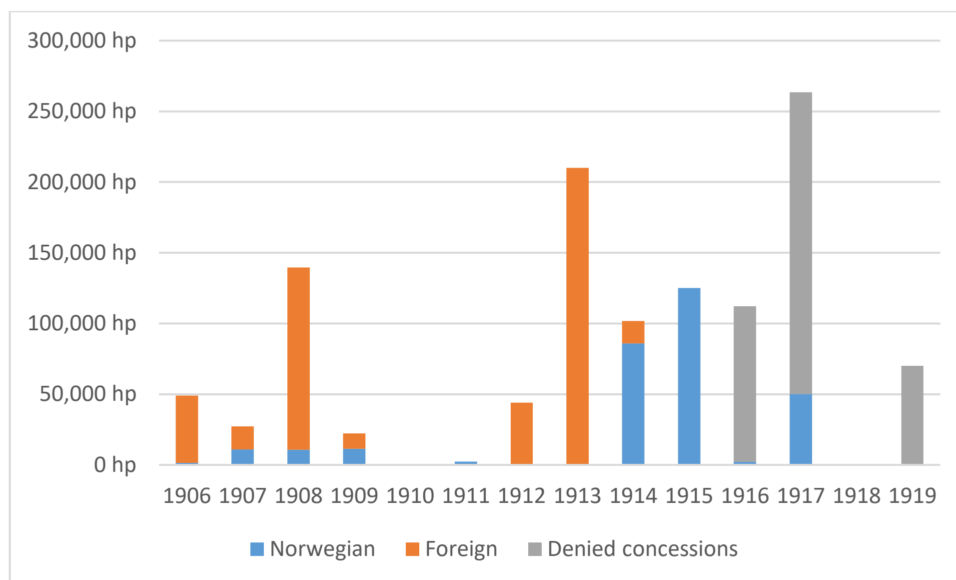
[935] «Naar forholdene ligger saaledes an, […] at den almindelige regel maa bli den, at man foreløbig ikke meddeler nye koncessioner, særlig når det gjælder større anlæg. Skal denne regel fravikes, maa der foreligge specielle grunde.» NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, Aa, Forhandlingsprotokoll 6 (1917-1918), p. 28

[936] «[…]ikke for tiden at kunne opta saken til realitetsavgjørelse.» Ministry of Public Works to J.A. Rubach, dated 26.09.1917. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 10, Folder 4

[937] "[…]imøteser I sin tid fornyet henvendelse i saken". Ministry of Public Works to J.A. Rubach, dated 26.09.1917. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 10, Folder 4

In other words, the Ministry did not outright reject the concession application. Instead, it deferred a decision to some unspecified point in the future when the situation might have changed.

Figure 13: Power potential of concessions for private hydropower acquisition (1906-1919)[938]



There is little doubt that the problems of rising wages for Norwegian agriculture played a part in this verdict. As we have seen, the issue had been underlined numerous times in the preparatory work for the revised concession laws, including by the Watercourse Commission, and was clearly an important part of what the Commission alluded to in the phrase "pre-existing forms of economic activity" (Norw. *bestaaende næringer*).

However, as the Commission noted, shortages and inflation were a problem for other "large and important works" as well. This category included municipal and state undertakings as well as other ongoing private hydroelectric undertakings. Complaints about shortages and cost overruns had become pervasive, not only from farmers on the west coast, but also from the hydroelectric industry. In the two first years following the outbreak of the war, a number of companies with large ongoing hydropower developments applied and received extensions on the building completion dates in their concession, citing mainly problems obtaining financing abroad due to the war.[939] By the time A/S Lysefjord applied for yet another extension in October 1916, the greatest problem facing the company was no longer financing, but labour shortage:

[938] The power potential in this figure is based on the calculations made at the time the concession was considered by the government. Actual power potential was in most cases higher.

[939] This included A/S Glomfjord, A/S Lysefjord (Elkem), A/S Aura, A/S Tyinfaldene and A/S Matrefaldene (the latter two both owned by Norsk Hydro). *Meddelte Vasdragskoncessioner II. 1909-1914*, pp. 249-251, *Meddelte Vasdragskoncessioner III. 1915*, pp. 4-6, 20-22, 34-36. *Meddelte Vasdragskoncessioner IV. 1916-1917*, pp. 21-27

> We hear from all sides industry and agricultural, which is also a commonly known fact, that no enterprise has a full workforce anymore. Most places has to carry on with limited effort due to lack of workers. This has also led to competition in obtaining workers, which in certain areas has developed into a straightforward disloyal competition over labour. As is to be expected, the price of labour has also had to increase to hitherto unknown heights.[940]

Labour shortages, rising prices and lack of key materiel were also cited as the main reasons for seeking a time extension when A/S Kinsarvik, A/S Høyangfaldene and A/S Birtavarre Gruber applied for the same in the first half of 1917.[941]

In addition to a new concession bringing pressure on the labour market, the Watercourse Commission was also critical to the three new companies because they had exclusively presented themselves as power companies. None of the companies had set plans of what to do with the power they would generate, except for leasing it out. The Commission noted that there were at the time six large hydropower concessions that had yet to be utilized, listing Lysefaldene, Kinsarvik, Osa, Bremanger, Aura and Glomfjord. Further concessions would in the eyes of the Commission lead to a further glut in the market for industrial quantities of power, which would add to the troubles of the pre-existing ventures who were already going over budget due to the wartime difficulties.

VII. The revised concession law of 1917

The growing disparity between shortages and capitalist affluence was also making its mark on the legislative process of the revised concession laws. When the Parliamentary Committee assigned to advice on the government's revised proposal presented their recommendations in January 1917, the committee had taken a significant shift towards a more restrictive policy compared with its position a year and a half before. A majority on the committee, dominated by the Liberal Party, had now lowered the maximum time limit for hydro and mining concessions to 60 and 50 years respectively,

[940] "Vi hører fra alle industry- og landsbukshold, hvilket jo ogsaa ere n almindelig kjent ting, at man I ingen bedrifter lngre har fuld arbeidsstok. De fleste steder maa man gaa med indskrænket drift som følge av mangel paa arbeidere. Dette har da ogsaa ledet til en konkurrance om at skaffe sig arbeidere, der efterhvert paa enkelte omraader har utviklet sig til en ren illoyal konkurrance om arbeidskraften. Som rimelig kan være, har da ogsaa priserne paa arbeidskraft maattet stige i en hittil ukjendt maalestok.»

[941] *Meddelte Vasdragskoncessioner IV. 1916-1917*, pp. 130-132, 173-174. *Meddelte Vasdragskoncessioner V. 1918*, pp. 72-80

increased the range of normal range of concession taxes to NOK 0.20-4.00 and removed the provisions for an absolute cap on both hydro and concession taxes. In other words, the majority had taken up a position much more in line with the radical minority's of the previous round, including allowing concessions to set limits to profits on products set aside for the domestic market.

The most notable alteration between the first proposal and the final law concerned the right of private Norwegians to obtain riparian resources. The first proposal only limited individual Norwegian citizens to obtain riparian rights in multiple watercourses if with these rights held the potential of yielding over to 50,000 hp. After the parliamentary committee found these limits inadequate, the government itself decided to alter the proposal. Acquisitions by individuals were only exempted from the concession laws in cases where the concerned waterfalls held less than 5,000 hp of potential power, and if the individual and his/her immediate family held did not hold greater riparian rights calculated to yield more than 25,000 hp in total – regardless of whether this was in the same watercourse.[942] While it was not expressly stated, it is likely that this change in opinion was influenced by the government's ongoing row with the managing director of A/S Tyssefaldene, Ragnvald Blakstad, who had acquired riparian rights for the company in his own name.[943]

The radical minority in the committee, consisting of Castberg, Valentinsen's successor and the socialist Labour Party took an even more offensive position. In principle, they stated, they were of the opinion that "acquisition and industrial exploitation of the natural wealth of our waterfalls should no longer be left to big private capital."[944] However, rather than proposing legislation to this effect, they limited themselves to "recommend a greater tightening of a number of those measures, which aim at safeguarding societal interests".[945] In addition to reiterating their recommendations on 50 years maximum concession time and only 35 years for the redemption clause, the radical minority also proposed to increase the range for hydro concession taxes to NOK 0.20-8.00 and to increase the amount of power a hydroelectric producer could be made to reserve for the public from 10% to 15%. The radical minority in the committee also sought to further reduce the exemption for acquisitions of riparian rights by private Norwegians to only waterfalls set to yield no more than

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[942] Indst. O. V, 1917, pp. 6-8
[943] This row is discussed in Svein Ivar Angell, "Aktieselskabet Tyssefaldene og konsesjonsspørsmålet," in *Tyssefaldene – Krafttak i 100 år 1906-2006*, ed. Jan Gravdal and Vidar Våde (Tyssedal: 2006), pp. 201-02.
[944] "[…]erhvervelse og utnyttelse i industrielt øiemed av de naturværdier, som ligger I vorde vandfald, ikke længer burde være overlatt til den private storkapital." Indst. O. V, 1917, p. 3
[945] "anbefale en større skjærpelse av flere av de bestemmelser som tar sigte paa varetagelse av samfundsmæssige interesser". Indst. O. V, 1917, p. 3

1,000 hp. Similarly, a private Norwegian would also have to obtain a concession if the person and his or her immediate family owned riparian rights with a combined potential of over 5,000 hp.

Castberg justified his position through a by now familiar critique that the current concession practice was too liberal, too sympathetic to the needs of big industry and disregarded the plight and needs of the rural population. The fact that three large concessions for Norwegian owned hydroelectric developments had been put on hold two months before had not done much to alter this perception, and was hardly mentioned in the debates. On the first day, the proposal was set to be decided in the Storting on November 8th, 1917, Castberg won a significant victory on the issue of concession exemptions for individual Norwegian citizen. When the clause came to the vote, as one of the first points to be decided, Castberg's faction managed to sway the majority of the Liberal MPs. Castberg's proposal won the vote 59-30, leaving only a small handful of Liberal MPs voting with the committee members.[946]

While the details surrounding what followed are a little unclear, it seems that this defeat may have led the Liberal majority of the parliamentary committee to worry about losing the initiative in the whole legislative process to Castberg's radical minority. Thus, when it came to decide on the crucial points of concession taxes and how much power a concessionaire had to set aside for the state and the local municipality, the spokesperson for the committee, Ivar Sundet, asked for a deferment for further deliberation in the committee.[947] This was accepted, and the committee reconvened the day after, on November the 9th. The compromise forged on this meeting underlined the strong assumption within the Liberal dominated majority, that the Storting was likely leaning towards Castberg's proposals on key issues.[948] The Liberal majority of the committee took a decisive step towards Castberg's position on both the issue of concession taxes, concession power to be set aside, concession time and the redemption clause time (see Table 5, below). In addition, the compromise also included a provision that companies set to provide housing to their workers would not be allowed to evict workers as part of labour disputes.[949]

This manoeuvre by the Liberal MPs of the parliamentary committee does not seem to have been done in clear coordination with the Liberal government. Following the presentation of the altered committee proposal, the Minister of Justice asked for a further deferment so his government could have the time to examine the altered proposal on November 12th.[950] The day after,

[946] Stortingstidende 1917 p. 876
[947] Stortingstidende 1917 p. 924
[948] Tillæg til indst. O. V. 1917
[949] Tillæg til indst. O. V. 1917, p.2: §2, post 7
[950] Stortingstidende 1917 p. 928-

government and the Liberal Parliamentary Group met to discuss the issue.[951] The protocol does not record what was decided, but when the government agreed to continue the decision process on the revised concession laws in the Storting on November the 21th, the Minister of Justice proposed to make some alterations to the committee's revised proposal. Most prominently among these alterations was allowing the time limit for the redemption clause to be raised to 40 years in concessions approved in the Storting.[952]

Table 5: Evolution of key clauses in the 1917 concession law

Clauses	Govt. prp.	Committee proposal		2nd Committee propsal
	16.02.1916	17.01.1917		14.12.1917
		Liberal Majority	Radical Minority	
Limit on individual ownership per family	25,000 hp†	25,000 hp	**5,000** hp	5,000 hp
Relinquish power to state and municipality	5%/5% (=<20%)	5%/5%[3] (=<20%/25%)	**5%/10%**	5%/10%
Tax to state / municipality (Hydro)	0,10-2,00 / 0,10-1,00 (<4,00)	0,10-2,00 / 0,10-2,00	**0,10-4,00 / 0,10-4,00**	0,10-3,00 / 0,10-4,00
Tax to state (power lease)	0,10-2,00 / 0,10-1,00 (<4,00)	0,10-2,00 / 0,10-2,00	0,10-4,00 / 0,10-4,00	0,10-3,00 / 0,10-4,00
Right of Reversion (Hydro)	<60y (<70y)	<60y	<50y	<50y (<60y) | <50y
Redemption clause (Hydro)	40y	40y	35y	<35y (<40y)

With the altered committee recommendation, the Liberal party succeeded in taking some of the wind out of the opposition to the left. The rest of the bill was steered through the Storting without any further humiliating upsets for the government. However, the radical minority had managed to pull the governing Liberal party in an even further restrictive direction than it had initially proposed.

The Liberal ready willingness to accept a somewhat more restrictive concession law in 1917 can in part be explained by the intensification of the conflict between agriculture, industrialization and the demand for general electrification during the war. The coal shortages had now transformed electricity from a luxury to a necessity. Conservative estimates of the hydroelectric potential in Norwegian watercourses seemed to indicate that the watercourses in the most populous eastern Norway could only yield as much as two hp per inhabitant, which might not be very much if electricity should replace coal for heating, railways and smaller industry.[953] At the same time,

[951] Rolf Danielsen, ed. *1883-1924*, 3 vols., vol. 1, Protokoll for Venstres stortingsgruppe 1883-1940 (Oslo: Forlagsentralen, 1975), p. 151.
[952] See statements by Minister of Justice, Otto Blehr: Stortingstidende 1917, pp. 1140-1141
[953] This calculation cited by Castbergs minority, was based on an estimate of a countrywide hydroelectric potential of about 8 million hp, given in Teknisk Ukeskrift of December 1916. Higher estimates were not uncommon, but it was considerably higher than the estimates of 1906.

competition for labour continued to increase, to the outrage of the Norwegian farmers. In this tense political climate, the Liberal party was loath to appear 'soft' on big industry.

Yet, from the very beginning, the Liberal government's revised law had outlined a stricter regulatory regime for natural resources in favour of public ownership. Despite the terms becoming tougher over the course of the law making progress, in large part due to pressure from the left and the agrarians, what passed into law in December 1917 was fundamentally just a stricter version of the law the Liberal party had outlined in 1915.

This brings us to the question of whether the stricter law was not just intended to regulate and tax – i.e. harness – big business ventures in natural resources, but also to discourage them in order to slow the industrialization process. As we have seen, the Liberal Minister of Public Works had by this time come to accept that – at least for the time being –concessions to even fully domestic owned hydropower companies had to put on hold. Indeed, the argument that it might be necessary to use the concession law to regulate the pace of industrial expansion had become widespread by 1917, and was expressed at several points in the proposition and following debates. However, what remains less clear is whether the stricter conditions *themselves* were intended to discourage investments. Keilhau's hypothesis that the 1917-law scared away investors is in part based on his view that in contrast to the 1909-law, the 1917-law actually came with a considerable economic burden for investors.[954]

So should the 1917-law be interpreted as the tipping point where those most sceptical to industrialization had finally won through and established a bulwark against the rapid expansion of big industry in Norway? Given the stated principle of public ownership by the radical minority, and the often vitriolic condemnation of big industry by the agrarian wing of the Liberal party, it is not unreasonable to assume that a number of MPs saw no harm in making the concession law prohibitive to private industrial developments.[955] Yet, Abrahamsen's statements in the presentation of the first proposal to a revised law in 1915 can be interpreted as an indication that the 1917-law was indeed intended as a "slow-down" law:

> If the proposed tightened concession terms should lead demand for concessions to acquire waterfalls in the immediate future to decline somewhat, this would, in the opinion of this ministry, not do any harm. On the contrary, this ministry assumes […] that

[954] Keilhau, *I vår egen tid*, p.157.

[955] This was an accusation not only restricted to Conservatives. During the final debates in November 1917, Andreas Hansson, the Liberal MP from Risør, went a long way of accusing the hardliners nonchalance to the question of the consequences of the law as being a disguised attempt at stopping future industrial investments, and dared them to raise the question directly. Stortingsforhandlingene 1917, pp. 1146-1147

> in many regards it might be beneficial that the private acquisition and development of our larger waterfalls provisionally will commence in a somewhat slower tempo.[956]

Here, Abrahamsen echoed the Watercourse Commissions statement from 1913, were the majority made the same argument over the consequences of a stricter policy towards foreign investors.[957]

However, Abrahamsen statement was preceded by his making the case that the increased economic "burdens" were not unreasonable when the price of Norwegian hydropower was taken into consideration. To underpin his argument, the Minister of Justice compared the price for coal fired electricity in England, which could hardly be obtained in large quantities for much less than NOK 100.00 pr. hp. year, while power in Norway could be leased for anywhere between 28.00 and 45.00 pr. hp. year.[958] He also noted an example were a middleman had obtained a NOK 5.00 pr. hp. year fee for his work in gathering riparian rights. Following Abrahamsen's reasoning, these fees could instead replace the "unearned" rent obtained by waterfall speculators, while the power itself would remain competitive.

Other Liberal party MPs also stressed the importance that the laws should not be as strict as to stifle industrial growth in the future. In parliamentary committee, the Liberal majority had included the caveat that restrictions against big industry obtaining too much hydropower should be achieved "without on the other hand putting such strong ties on the country's citizen's private initiative, that it inhibits balanced development".[959] During the debate, a number of Liberals also warned against making the terms too strict.[960] One of them were Abrahamsen's successor as Minister of Justice, Otto Blehr, who argued strongly against Castberg's proposal set the maximum concession time to 50 years in all circumstances.[961] Blehr also proposed to raise the time limit for redeeming hydropower works back up to 40 years. In both cases, Blehr's partially won though, as his preferred time limits included in the final law, but only for concessions given with parliamentary consent.[962]

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[956] «Om de foreslaaede kjærpede koncessionsvilkaar skulde medføre, at efterspørselen efter koncession til erhvervelse av vandfald i den nærmeste fremtid blev noget svakere, vilde dette efter departementets mening ikke gjøre nogen skade. Tvertom antar departementet […] at det i flere henseender vil frembyde fordele, at den private erhvervelse og utbygning av vore større vandfald freløbig kommer til at ske i et noget langsommere tempo.» Ot. prp. nr. 15 1915, p. 4

[957] See p. 169

[958] Ot. prp. nr. 15 1915, p. 4

[959] «[…] uten at der paa den anden side lægges saa sterke baand paa landets borgeres private initiativ, at den jevne utvikling derved hemmes.» Indst. O. V. 1917, p. 3

[960] See for instance statements by Ivar Olaus Sundet, Olaf Amundsen, Andreas Hansson, Gunnuf Jakobsen Eiesland, Wollert Konow (H) pp. 1143-1150

[961] See statements of Otto Blehr, Stortingstidende 1917, pp. 1140-1141, 1152-1153, 1154, 1158

[962] Stortingstidende 1917, pp. 1155-1156.

All this paints a picture of the governing Liberal party attempting to strike a balance between greater public control and take, with a continued role for private industrial investments. In other words, the law was designed to still include a future "harnessing strategy", at least for Norwegian industrial investments. A striking, and perhaps telling sign, is the way the conditions were arrived at. The Norwegian concession system and the "harnessing-strategy" had to a large extent been created in an evolutionary sequence of negotiations between the government and various private investors. New precedents had been established over time as needs or demands arose, either at the administration's request, the Watercourse Commission or the Storting. However, outside a few important turning points – such as the introduction of the Right of Reversion to Norwegian owned companies in 1908-1909 – there was a constant interaction between the application of the law and legal reform of the concession terms, implicitly based on the principle that terms should be *generally* acceptable to *serious* private investors. As a case in point, the first Right of Reversion had not first been established as a legal principle, and then introduced in practice, but the other way around.

When the underlying assumption that regulated resource intensive investments were beneficial overall came under serious questioning, so did the whole evolutionary concession system that had followed from it. One of Castberg's key claims was that this system favoured investors, as their bargaining skills tended to push the industry friendly Ministry of Public Works to its maximum limits.[963] Consequently, Castberg argued, it was necessary to set much lower maximum limits. However, Castberg did not base these new demands on any calculation of what a private investor should reasonably be expected to bear. As previously mentioned, this could indeed have been intentional. What is perhaps more striking, is that neither did those who emphasised that the concession laws should not go too far. Instead, their arguments of what could be anticipated to be reasonable or counterproductive rested on experiences of whether companies in recent years had accepted similar terms or not. This general absence of reliable information was crucial in making the final settlement of the 1917-law into a combination of a bidding war, and a vote of confidence of the ability of the Ministry of Public Works to uphold the broad national interests in its application of the concession law.

The passing of the revised concession law did not end the controversy over future big private hydropower concessions to big industry. When the Liberal Party was preparing the election programme for the parliamentary elections of the autumn 1918, the several local chapters voted to include a passage stating that no hydropower concessions would be forthcoming to privately owned developments, foreign or domestic owned – at least until a national plan for power supply had been

[963] Stortingstidende 1917 pp. 1141-1143, 1150, 1153-1154, 1213-1214

completed.[964] The line was not included in the final programme of the Liberal Party, but was included in the programme of the *Farmers Association* (Landsmandsforbundet).[965] Even the possibility of placing much tougher regulations and higher taxation on future concessions with the new laws, the "harnessing strategy" was still a deeply divisive issue.

Yet, the new law had not turned Norwegian investors off from seeking to develop new hydroelectric industrial ventures. However, even with increased possibilities of taxation and regulation in the new laws, the government was not necessarily forthcoming with concessions. In 1918, a Norwegian consortium applied for a concession to obtain and lease 13 500 electric hp. from *Høgefossene*, a hydroelectric development that had not been made subject to the Right of Reversion, to power a steel plant near Risør.[966] Despite domestic steel production being highly sought after import substitution, the Watercourse Commission unanimously recommended turning down the application due to the relative lack of alternative sources of hydroelectric power in the area. The power produced at Høgefossene should be reserved for general electrification rather than industry.[967] The Ministry of Public Works made no final verdict on the matter, leaving the matter unresolved in anticipation of some arrangement between the owner of Høgefossene, Ragnvald Blakstad, and the local municipality. Yet, it is reasonable to assume that this negative response from the Watercourse Commission was one of the factors that induced the owner of Høgefossene, Ragnvald Blakstad, to sell the power plant to the local county of Aust-Agder in 1919.[968]

Labour shortages also continued to be a weighty argument even after the end of the war. Just as the revised concession law was passed into law in late 1917, another Norwegian consortium sought a concession to develop the Arnefjord-watercourse in western Norway. This development

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964 "Fra venstreforeningernne" Norske Intelligenssedler 02.05.1918, "Fra venstreforeningernne" Norske Intelligenssedler 04.06.1918.

965 Olav Rovde, *I kamp for jamstelling 1896-1945*, 2 vols., vol. 1, Hundre år for bygd og bonde: Norges Bondelag 1896-1996 (Oslo: Landbruksforlaget, 1995), pp. 168-70.

966 NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, Aa, Forhandlingsprotokoll nr. 7, pp. 223-226

967 Watercourse Commission to the Ministry of Public Works, 07.10.1918. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 1, Folder 9.

968 Blakstad had initially offered to sell Høgefossene for NOK 11 million, which the county rejected. After negotiations had broke down between Blakstad and the county in February 1919, the county governor (the Norwegian state's county representative) urged the Ministry of Public Works not to make any decision which would "cut the county of from securing electric power for general (borgerlige) needs". In any case, after being asked by the Ministry of Public Works to provide a draft concession terms, the Commission unanimously concluded that if the county would not be able to come to an agreement with the county the government should seek to obtain it itself. In other words, it was clear to Blakstad that no concession would be forthcoming in the immediate future without the Ministry of Public Works overruling the recommendation of the Commission. Blakstad in the end accepted the county's counter offer of NOK 8.5 million. Aust-Agder County to Ministry of Public Works, 06.03.1919, Ministry of Public Works to Watercourse Commission 25.04.1919, Watercourse Commission to Ministry of Public Works 05.05.1919. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 1, Folder 9. See also: Birger Dannevig, *Aust-Agder kraftverk: En 30-års beretning* (Arendal1952), pp.18-29; *Fra ved til vannkraft: Aust-Agder kraftverk 1919-1969* (Arendal1969), pp. 49-60.

was in many ways similar in size and scope to the three applications that had been put on hold in the autumn of 1917. The finished power plant was estimated to yield approximately 70,000 electric hp. calculated to cost NOK 188 each, but with no concrete plans for what the power should be used for besides renting it out to Norwegian owned industry. Unlike at Høgefossene, the power was not deemed to be needed for the county's electrification. Instead, the central issue was competition for labour and the rising labour costs. The county governor of *Sogn og Fjordande* argued that a new private development was likely to outbid public works programmes in addition to drawing labour away from agriculture. The Watercourse Commission concurred, and recommended turning the concession in the summer of 1919, quoting the exact same reasoning that it had used two years before.[969]

VIII. State capitalism

Towards the end of the First World War, the Liberal government decided take a more direct role in the exploitation of the country's natural resources. In 1918, the Norwegian state bought both the French owned pyrite mining, of *A/S Grong Gruber* and *A/S Glomfjord*, a half-finished Swedish owned hydropower plant in northern Norway.

These two undertakings, which were bought at inflated wartime prices, would turn out to be financial disasters for the Norwegian state, and would later become a large blemish on the legacy of the premiership of Gunnar Knudsen. Lars Thue notes in his comprehensive work on the Norwegian state's power undertakings that the purchase of Glomfjord "is difficult to understand",[970] both because it broke with the pre-established notions of what the role of public ownership should be. In addition, there were many at the time who were worried about the economic risks associated with the project. Until that point, the Norwegian government had largely refrained from nationalizations or developing state owned resources. Whereas the Swedish state held a direct stake in LKAB, and was directly involved in industrial hydroelectric works, the successive Norwegian governments had instead largely relied on the concession law.

Given that these purchases were carried out just after the introduction of a new and much tougher concession law in 1917, the timing of these purchases can seem a bit odd. However, viewed in the context of the wider evolution of Norwegian natural resource policy during the war, it is easier

[969] Watercourse Commission to Ministry of Public Works, 29.07.1919. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 56, Folder 2.
[970] «[…] vanskelig å forstå». Thue, *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, p. 310.

to explain the rationale for these purchases, even if some of the economic predictions underlying them turned out to be wrong.

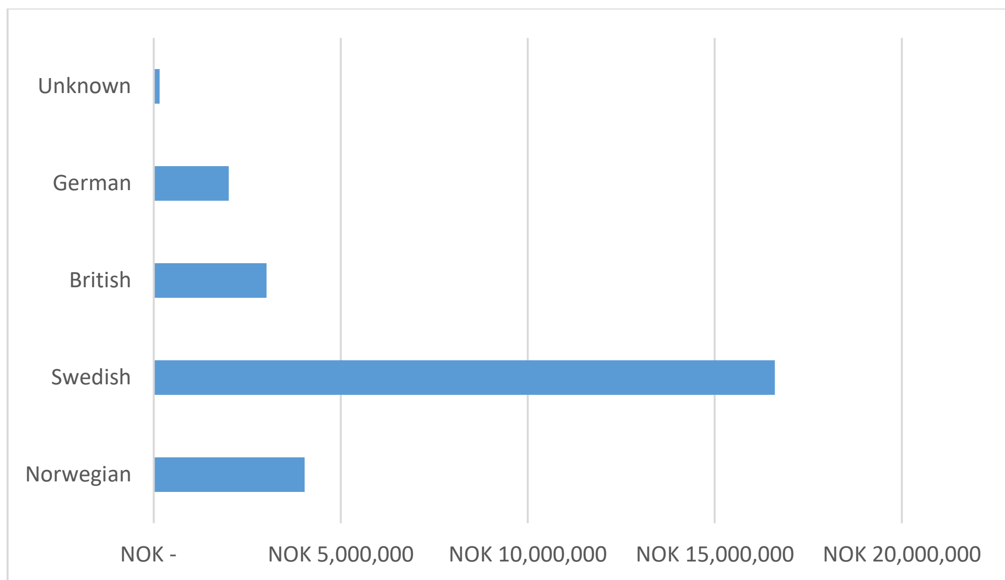
Nationalization of Grong Gruber

As we have seen, Norwegian mining, and pyrites especially saw a large boom during the war. The price of Norwegian pyrites nearly doubled between 1914 and 1916 even when inflation is taken into account, with even higher increases for pyrites with copper content.[971] The overwhelming majority of this industry remained foreign owned (see Figure 14 below).

Of the known, but yet undeveloped, pyrite claims, the ones controlled by *A/S Grong Gruber* were by far the richest. When the company had sought a concession to develop them in late 1911, it reckoned that the deposits were large enough to support an output of 200,000 tons of pyrites a year.[972] Subsequent exploration showed that the deposits were large enough to support twice the amount.[973] This was the equivalent of over 70% of the current extraction of pyrites, which in 1915 totalled 569,432 tons. With 1915 prices for pyrites, this represented an output value of roughly NOK 14 million a year.[974]

[971] *Norges bergverksdrift 1914-1916* (SSB, Kristiania 1915-1917): Tabell 1 & 4. The nationality of the companies are not stated in this source, but is instead pieced together by the author from various sources.
[972] "Fortegnelse over Meddelte Bergverkskoncessioner 1903-1913". Appendix to St. Prp. Nr. 1, Hovedpost VII, kap. 2. 1914, p. 303
[973] "Indberetning fra den av Socialdepartementets under 19de august 1916 nedsatte komite[…]" Appendix to St. prp. 111, 1918, p. 17.
[974] These numbers are calculated from: *Norges bergverksdrift 1915* (SSB, Kristiania 1916): Tabell 4. This 1915 output number includes both pyrites and copper ore.

Figure 14: Output value of Norwegian pyrite mines by nationality of shareholder majority (1915)[975]



A/S Grong Gruber had been established in 1911 as a joint venture between Elkem and Société Générale des Nitrures (SGN) – the parent company of DNN. The pyrite mines would provide raw material for sulphuric acid, which was a key input for the Serpek-process. However, as the Serpek-process was abandoned, the French company was less interested in the project, and the whole development was put on hold at the outbreak of the war. Elkem had secured an additional nearby pyrite deposit at Skorovas, where it held sole ownership, which proved rich enough to support extraction of 100,000 tons a year.[976] Eager to gain full control of the pyrite deposits in the area, Elkem reached out to SGN, who was willing to part with its shares in Grong Gruber for NOK 7.5 million (approx. £450,000).[977]

The Norwegian state first got involved when Elkem approached the government for aid in the acquisition. The claims were located in a remote area and any large-scale extraction would require large infrastructure investments. Elkem anticipated that the purchase and subsequent development would cost around NOK 20 million and that it would only be possible to raise NOK 8 million. Thus, Elkem asked the state to either provide or stand as guarantor for a NOK 12 million

[975] The output and value is calculated from *Norges bergverksdrift 1915* (SSB, Kristiania 1916). The shareholder nationality of the various company is pieced together by the author from a wide variety of sources. Except for Røstvangen Gruber which was joint Swedish/Norwegian owned, only one nationality is counted per mining company.
[976] Petersen, *Elektrokemisk*, p. 64.
[977] Storli, "Out of Norway falls aluminium," p. 99.

loan. The government decided to set up a committee to look at the matter.[978] The committee agreed unanimously that the state should try to bring the company on Norwegian hands. However, a three out of five majority concluded in September 1916 that the state should buy it on its own, rather than support Elkem. The remaining two members only supported government ownership as a "last resort"[979] if no other form of "repatriation" was possible. The majority's reasoning was twofold. First, government ownership would provide a full guarantee that the company was actually Norwegian owned. While this was not emphasised by the committee, Elkem's share ownership was not restricted to Norwegian citizens.

The second point was that government ownership would make it easier to coordinate the interests of the mining operation with the state's *Northern Railway* (Nordlandsbanen), which would pass through the region when it was finished. Transportation of large amounts of ore on the track would increase its profitability. Elkem's proposal also outlined building a private railway that would link up with the state trunk line. However, the committee was concerned that if the state supported Elkem's acquisition, it might be forced to accelerate the railway construction at a time of labour shortage and high prices.[980]

The prospect of a state acquisition did not sit well with the French owners, who initially refused to sell to the state.[981] Instead, SGN tried to sell its stake to other French investors, but with no success. Meanwhile, Elkem attempted to put together a larger Norwegian consortium to raise the necessary capital privately. However, after this consortium collapsed in February 1918, Elkem once again turned to government, asking it to either provide a guarantee that the necessary railways would be completed in time, or for the state to buy the whole company – including Elkem's shares. It was after this, that the purchase of Grong Gruber was included in the ongoing DNN concession negotiations and the French owners reconsidered and agreed to sell the mining company to the Norwegian state.[982]

When the Liberal government decided to go ahead with the nationalization of Grong Gruber, they emphasised their desire for national control over the resource more than the economic

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[978] This was headed by the same Amund Helland who adviced the government ahead of the 1903 change in the mining law. See p. 48, footnote 243
[979] "[…]sidste utvei". Indberetning fra den av Socialdepartementets under 19de august 1916 nedsatte komite[…]" Appendix to St. prp. 111, 1918, p. 23.
[980] Ibid pp. 22-23
[981] I have unfortunately not been able to find an explanation for this. The refusal to sell to the state predates the concession conflict over the DNN smelter in Tyssedal.
[982] St. prp. 111, 1918. Storli, "Out of Norway falls aluminium," pp. 101-02.

benefits.[983] The government did anticipate that the mines would be very profitable, at least in the long term, but Prime Minister Knudsen insisted, “if it had only been a question of whether the state would make money, then the case would have been much more dubious”.[984] The war had also made it very clear that pyrites were a strategic raw material, or as the Minister of Trade Friis Petersen put it:

> [Pyrites] has become for the chemical industry what iron is for the mechanical industry. It is a raw material that forms the basis of a row of chemical industries and is now regarded as practically irreplaceable for all chemical mass industry the world over.[985]

In face of growing interconnectedness of big business and political power during the war, having foreign ownership over of the richest undeveloped claim risked foreign political entanglements and complications. Conversely, in state hands the pyrite deposits might be a useful bargaining piece in a complicated post-war international economic order.

More than the French keeping on to the shares, the government was worried that the French would sell it to a larger and more powerful company – especially Rio Tinto.[986] Rio Tinto had two years previously been the intermediary between Norway and the British Empire in the pyrite negotiations of 1916. The resulting agreement gave Rio Tinto a right of first refusal on all Norwegian pyrite exports outside Denmark, Sweden and the Netherlands. Rio Tinto used its powerful position to press down the prices for pyrites, which left a bitter memory within the Norwegian pyrite mining industry.[987] Rio Tinto was thus in many ways the epitome of the monopolistic multinational company backed by a Great Power that had always stirred anxiety in the young kingdom.

Thus, the acquisition of A/S Grong Gruber was in part an admission that the regulatory powers provided by the concession law were inadequate to ensure the level of control the government wanted. The 1917-concession law included a paragraph (§36) requiring a new government concession whenever the shareholder majority of a company that owned waterfalls,

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[983] See statements by Gunnar Knudsen and Kristian Friis Petersen, Stortingstidende 1918, pp. 1787-1793, 1807-1812

[984] «[…]hvis det bare hadde været det spørsmaal, hvorvidt staten tjente penger, da hadde saken været meget betænkeligere[…]». Stortingstidende 1918, p. 1808

[985] “Den er for den kemiske industry blit hvad jernet er for den mekaniske industri. Den er et raaprodukt, som danner utangspunktet for en række kemiske industrier og ansees nu praktisk talt for uundværlig ved al kemisk masseindustri hele verden over“. Stortingstidende 1918, p. 1788

[986] Knudsen and Friis Petersen did not specify any company in particular, but Liberal MP, and later Prime Minister, Johan Ludwig Mowinkel mentioned the British mining giant by name. Stortingstidende 1918, p. 1816

[987] According to one of the managers at Orkla, the price Rio Tinto offered Norwegian pyrite exporters were 20% below market price. Kristian Lillerovde, "Krig, kis og eksport: Foreningen for eksport av norsk kobberholdig svovlkis 1916-1924" (NTNU, 2012), pp. 30-32. See also: Olav Riste, *The neutral ally : Norway's relations with belligerent powers in the First World War* (Oslo: Universitetsforlaget, 1965), pp. 116-18; Berg, *Norge på egen hånd*, pp. 205-06.

mines or forests shifted hands. However, the fact that A/S Grong Gruber did not have registered shares made sales hard to monitor and verify, which had also been acknowledged as a major week point in the law making process.[988] Moreover, according to Friis Petersen, paragraph §36 could not be used to prevent one foreigner selling shares to another foreigner according to the Minister of Trade.[989] The law itself made no such reservation. Yet, as was pointed out by the leader of the opposing Conservative Party, Otto B. Halvorsen, during the law making process, there was a danger that this law could act as a retroactive law, which would be difficult to use towards foreigners as:

> if one tries to do these things applicable towards the large foreign companies, one will find no understanding abroad for rules of this kind.[990]

The increased politicisation of the international economy brought on by the war had thus increased the impetus to obtain full national ownership. And the increased spending power of the Norwegian state had given it the ability to do so. Ironically, while the Liberal government was drawing the conclusion that the concession law was not enough to provide the necessary control, the French owners of Grong Gruber had concluded that the very same concession laws would make it impossible to envision a future in the country, and thus motivated them to sell the mining company.[991]

Yet, given that national ownership was a stated priority, why was the Liberal government so reluctant to enter into a partnership with private Norwegian capital? The sources do not give a full clear account of precisely why the government rejected cooperation with Elkem, and instead wanted to make it a full state acquisition. However, as the 1916 committee emphasised, and the government also reiterated in 1918, the terms that Elkem offered to the state were simply not good enough for the government. Moreover, given the scepticism of parts of the Liberal party towards big industry in general, a deal seemingly favouring Elkem might not have been well received. Even if a pure state acquisition increased the financial risk, it also left the state free to proceed according to its wider interests in the area. Moreover, it had not closed the door on a future joint venture with Norwegian private capital. Along with the nationalization of Grong Gruber, the Storting passed a law

[988] See for instance: Ot. prp. nr. 15 1916, p. 17
[989] Stortingstidende 1918, p. 1791
[990] «[…]hvis man vil forsøke at gjøre disse ting gjældende likeoverfor de store utenlandske selskaper, saa vil man ingen forstaaelse finde i utlandet for regler av denne art.» Odelstingstidende 1917, p. 1229. This interpretation was not challenged by the other MPs, and was later referred to in Liberal MP and Supreme Court lawyer Olaf Amundsen in his legal overview of the 1917 law. See: Olaf Amundsen, *Lov om erhvervelse av vandfald, bergverk og anden fast eiendom : koncessions-loven av 14 december 1917 : med kommentar* (Kristiania: Aschehoug, 1918), pp. 206-11.
[991] PM by Louis Mario, June 1918. Pechiney archives

that gave the Norwegian state a monopoly on staking new mineral claims in the area. However, the law included the option to lease the claims to companies with "fully Norwegian base capital".[992]

Nationalization of Glomfjord

Unlike the sale of Grong Gruber, the Glomfjord purchase was not initiated by the Norwegian state, but instead by its Swedish owner. Yet, like the sale of Grong Gruber, the decision of the Swedish company to sell the company was in part brought on by the tightening of the concession law. The river regulation concession the company had obtained in 1912 was granted on the assumption that the watercourse could yield 44,000 hp. However, further measurements and calculations revealed that by expanding the regulation works it would be possible to greatly increase the capacity to around 125,000 hp. The Ministry of Public Works insisted that this would require a new regulation concession. As the costs of the development mounted during the war, and anxious to avoid stricter concession terms, Knut Tillberg, the chief investor behind A/S Glomfjord, instead looked to sell off the power if he could at the same time secure power for his zinc-smelter for a reasonable price. In early 1917, Tillberg conveyed an offer to the government through one of his engineers, Ragnvald Lie. Lie was also a personal friend of the Prime Minister, who became immediately enthusiastic about the prospect.[993]

The first concession law was accompanied by a wave of state acquisition of undeveloped riparian rights. One of the first of these large purchases was the Nore watercourse, which had also played an important part of the "panic" preceding the introduction of the first concession law. Between 1907 and 1920, the Storting granted nearly NOK 6.8 million for such purchases, and had in the process secured ownership of a hydropower potential of 1.3 million hp.[994] While these purchases had wide political support, and were often voted through the Storting unanimously, they were to little extent made with any coherent plan as to what they should be used for.[995] Publicly owned electrification was generally carried out by municipalities, which was also the preferred solution for

[992] «[…]helt norsk grundkapital. Ot. prp. nr. 35, 1918

[993] This paragraph is based on: St. prp. nr. 109 1918, p. 2, Thue, *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, p. 312-14.

[994] The numbers are taken from: Vogt, *Elektrisitetslandet Norge*, pp. 62-63; Thue, *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, pp. 88-89. In addition, Thue writes that the state assumed it controlled another 1 million hp. on its pre-existing properties.

[995] *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, pp. 89-91.

the parliamentary *Waterfall Commission*[996] of 1914 (not to be confused with the Watercourse Commission).

Only as demand for electricity increased during the war did the state get directly involved in power generation. In 1916, the Storting approved a plan for the state to develop Hakavik, which would power the Drammen railway. In the same year, the state and the municipality of Kristiania (now Oslo) agreed to a joint development of Mørkfoss-Solbergfoss in the Glomma River. Two years later, the Storting also agreed to fund the development of Nore after years of debates. One of the key questions regarding the Nore-development had been whether there was really demand for the amounts of power it could yield. One solution proposed by the Waterfall Commission in early 1914 was to lease out part of the power to electrochemical industry in order to secure a steady income upon completion. This however was soon discarded, as rising demand for general electrification in the future might create a situation where too much of the power generated would be reserved for industry. Instead, following the fuel crisis of 1917, the Storting granted NOK 21 million to develop Nore, with the intention of using the power for general electrification.

All these state developments were located in the more populous and less hydropower abundant east. So why were the motivations for the Liberal government to break this mould and acquire Glomfjord, a power plant located in the far north, with next to no local market for general electrification?

When the Nalum, the Minister of Public Works proposed the acquisition to the Storting, he noted that the decision was "[...]to a large extent based on the desire to bring the plant on to Norwegian hands",[997] and can thus be seen as a state initiated continuation of the "repatriation" process that was taking place at the same time. Indeed, several local chapters of the Liberal party in the anticipation of the 1918 election had proposed that the state should take an active role in nationalizing foreign owned hydropower plants.[998] Yet as critics noted, the Glomfjord development was covered by the Right of Reversion. This made Glomfjord an odd priority, as it was set to become state property in the end. However, unlike other foreign owned hydropower plants such as Tyssefaldene or the plants owned by Norsk Hydro, Glomfjord was actually for sale.

Whereas the acquisition of Grong Gruber was motivated by economic sovereignty first and profits second, the situation was exactly the opposite for the case of Glomfjord. The Liberal

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[996] No: *Vandfaldskommission*

[997] "[...]for en væsentlig del begrundet i ønsket om at bringe anlægget over paa norske hænder" St. prp. 109 1918, p. 17

[998] «Stortingsvalget 1918: Et forslag til program for Venstre» Norske Intelligenssedler 12.09.1917

government also strongly underlined that the Glomfjord acquisition would be a profitable undertaking for the state. After a year of negotiation, the deal presented to the Storting entailed that the state would lease out 45,000 hp to Tillberg's zinc smelter for NOK 34.00 per hp for 30 years.[999] This was practically all the power generated at the initial development stage. The purchase and the completion was estimated to cost NOK 15 million. This in itself was not a very lucrative investment. However, according to the calculations provided by Ragnvald Lie, the state could expand the generating capacity of the plant to 125,000 hp. for only an additional NOK 6 million. If the state leased out all the power Glomfjord could generate for an average price of NOK 38.00 per hp., Lie estimated that the Norwegian state would make an annual profit of almost NOK 2.7 million a year.[1000]

These estimates of course depended on the assumption that the state would be able to find companies willing to lease all this power. Moreover, there were considerable uncertainties related to building costs, which kept rising due to the overall wartime inflation. Thus, the Glomfjord acquisition was met with scepticism both by a number of civil servants in the Ministry of Public Works and by the Watercourse Commission.[1001] However, opinions were divided. Valentin Valentinsen, who had been one of the leading spokesperson for a more radical concession policy fully supported the initiative. If the Glomfjord development turned out to be a success, the revenue from it could be used to pay for state developments of general electrification, like Nore, which were considered to be much more uncertain.[1002]

More than anything, the purchase of Glomfjord shows that Prime Minister Knudsen and his government was optimistic about future demand for cheap electricity for industry. Even though many hydroelectric companies had found it difficult to find solid industrial customers, much of the delays could be chalked up to the extraordinary wartime circumstances. Moreover, the large number of Norwegian investors willing to invest large sums for new hydroelectric capacity also showed that he was far from alone in this assessment. When the acquisition was presented to the

[999] NOK 36 for the first 5 years.
[1000] Forenede Ingeniørkontorer to Ministry of Public Works, 29.10.1917. Quoted in: St. prp. nr. 23 1918, pp. 9-10
[1001] Watercourse Commission to the Ministry of Public Works, 04.06.1917 and 16.04.1918. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 1, Folder 9.
19.04.1917, See also: One quoted in St. prpp.
[1002] Watercourse Commission to the Ministry of Public Works 16.04.1918. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 1, Folder 9.

Storting, a wide majority of the parliamentary committee agreed, and "entertains no worry that the power should not find an outlet in the near future."[1003]

As previously mentioned, there was not a unanimous agreement that the Grong and Glomfjord acquisitions were sound investments for the state. The core of this opposition came from a solid front of the Conservatives, who argued that the decision was rushed and underlined the economic risk involved in these large projects – as well as the numerous other ties on the public purse. Here they were also joined by a few Liberals. Yet, despite some scepticism, there was solid political support for both acquisitions with an 84-31 vote in favour for Grong, and 77-39 vote in favour for Glomfjord.[1004] Indeed, given the problems the owners of Grong Gruber had with selling off their company to other private investors, there is little doubt that they were given a good deal given the circumstances. The owners of both companies were able to sell their shares at a solid mark-up, leaving with more money than they had invested.

Knudsen's optimistic notions of the profitability of Glomfjord has been noted by other historians.[1005] However, what has previously been less clear is how the concurrent political controversy over new private hydropower concessions also favoured a state acquisition of Glomfjord. As no new concessions for new hydropower developments aimed at industry had been granted since 1915, this would give a considerable advantage to the companies who had obtained concessions before the war. In addition, it was not clear that this policy would change after the war. Indeed, Prime Minister Knudsen himself acknowledged the government's new position on the concession question during the Grong-debates:

> […]I dare say, that now there will not be given a single concession to a foreign company, unless it is subject to singular circumstances – not even to a private Norwegian company, unless it is subject to singular circumstances.[1006]

Glomfjord's location might also have made the venture more appealing to the Liberal government. It allowed for industrial expansion outside western Norway were opposition to big industry was much stronger.

[1003] «[…]nærer ingen bekymrng for, at kraften ikke skulde kunne finde anvendelse i en nær fremtid». Indst. S. LIV 1918, p. 14

[1004] Stortingstidende pp. 1851, 2588. The major difference between the two votes was that Castbergs Labour Democrats supported the Grong acquisition, but opposed the acquisition of Glomfjord.

[1005] See especially: Thue, *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, pp. 310-23.

[1006] […]jeg tør si, at der vil ikke nu bli git en eneste koncession til utenlandsk selskap, med mindre der knytter sig særlige hensyn til det – ikke engang til privat norsk selskap, undtagen der knytter sig særlige hensyn til det.» Stortingstidende 1918, p. 1808

There is also some indication that the Liberal government did consider the option of relaxing the concession policy somewhat in order to make Glomfjord a profitable venture. During the negotiations between Tillberg and the government, the government had long insisted that the zinc smelting company should at least be 50% Norwegian owned, as "one would under normal circumstances demand exclusively Norwegian [share ownership] for power lease concessions of this kind".[1007] This was unacceptable for Tilberg, and instead share ownership was limited to private Norwegians and Swedish citizens. During the parliamentary debates on the Glomfjord acquisition, the Minister of Public Works, Martin Nalum, insisted that "the state of course does not think about leasing [the remaining power] out to foreign companies".[1008]

This categorical denial of new foreign leaseholders does not seem to have been followed in practice. When the British owners of Dunderland Iron mines approached the government in early 1920 for a concession to acquire A/S Tyssefaldene and use its power to establish a large electric steel mill,[1009] the Ministry of Public Works took a different approach. As the new steel work would demand power beyond what was currently being generated at Tyssefaldene, the concession would require further regulations and acquisition of riparian rights. This the Commission advised against, in large parts due to it being foreign owned.[1010] However, as the Commission was considering the case, the Ministry of Public Works notified the Commission that the board of the now nationalized Glomfjord had "led the applicants' attention to the question of leasing power from Glomfjord".[1011] The Glomfjord proposal was taken into consideration, but shortly after the Commission had submitted its recommendation on the Tyssefaldene concession in the summer of 1920, the company reconsidered and abandoned the project.[1012]

[1007] «[…]ved leiekoncessioner av denne art underalmindelig omstændigheter kræve skulde være utelukkende norsk.» Undated note, marked 'B. Leiekoncessionen'. See also: Note marked 'Betingelser for salg av aktierne i Glomfjord Aktieselskap', undated, lists proposed terms from Ministry of Public Works set 07.03.1918. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 1, Folder 9.
[1008] «[…]staten selvfølgelig ikke tænker paa at leie ut til utenlandske selskaper». Stortingstidende 1918, p. 2569
[1009] The plans outlined in the concession application anticipated that it might need as much as 150,000 hp. Nansen to the Ministry of Public Works, 12.02.1920. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 15, Folder 11.
[1010] Watercourse Commission to the Ministry of Public Works, 07.06.1920. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 15, Folder 11.
[1011] Ministry of Public Works to the Watercourse Commission, 28.04.1920. NRA, RA/S-4670 Vassdragskommisjonen 1909-1921, D, Box 15, Folder 11.
[1012] Nansen to the Ministry of Public Works, 24.08.1920. NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Db, Box 121, Folder 1.

IX. Summary and conclusions

The acquisition of Grong Gruber and Glomfjord thus marked the culmination of a remarkable transformation of Norwegian natural resource policy from 1913. The time separating Prime Minister Knudsen's principled defence in 1913 of granting a large concession to a British company closely linked to a leading arms manufacturer, to him ruling out any private hydropower concessions to private companies except in singular circumstances was only 5 years. Over those few years, the "harnessing strategy" as it had been developed since 1906 had been significantly curtailed. Instead of a policy where foreign direct investments would be welcomed if it adhered to a set of regulations designed to cover a wide variety of "common interests", foreign direct investments in natural resource intensive industries would be seriously curtailed. Even fully Norwegian-owned private companies would be barred from taking on new hydroelectric developments in most circumstances. This close examination of Norwegian resource policy challenges the view in Norwegian historiography that the concession law was as a rule implemented in a liberal fashion.

This policy shift occurred for a number of coinciding reasons. First, the ostensibly equal treatment of foreign and domestic owned companies became harder to justify as Norwegian owned companies began to take up the competition. Even when using the flexibility of the concession laws to grant more lenient terms to domestic owned companies in return for share ownership restrictions, it would not necessarily be enough to give Norwegian owned companies a significant advantage over their foreign owned competitors. If the government wanted to maintain its protectionist credentials in its concession policy, sooner or later it might have to restrict resources to domestic owned companies.

Secondly, there was the ongoing conflict over the expansion of big industry, and how it was seen as a detriment to the position of agriculture in Norway. In particular, the issue of rising competition for labour costs for agriculture came to be a sensitive issue. The challenges of agriculture was also partially related to the criticism that energy intensive industry would lay claim to too much of the cheapest hydropower, and thus limit or raise the costs for power "general" electrification.

These conflict lines, which had already begun to undermine the "harnessing strategy" compromise before 1914, intensified over the course of the war. Domestically, the wealth and ambitions of Norwegian investors increased dramatically, but so did uncertainties over future supplies of hydropower for general electrification and dissatisfaction among farmers. Internationally, the outbreak of a total war also changed the "rules of the game" of the international economy. Ownership nationality took on a new importance in the warring countries as the waging of a total

war brought about closer cooperation between business and government. As the war seemed to underline multinational companies were ultimately beholden to their home countries, this created an added impetus for the Norwegian government to prevent widespread foreign ownership – also in the short term.

Despite a tightening of the concession law, and a more restrictive policy towards foreign direct investments, there is no evidence that the laws were used to actively "roll back" foreign ownership of companies already operating in the country. Such foreign owned enterprises might be prevented from expanding, but were generally granted extensions on their construction time limits when they applied for them, in much the same way as Norwegian owned companies. In this regard, the Norwegian government followed a similar line as the way the Swedish Restriction Act was implemented. And while the Norwegian government supported "repatriation" of foreign owned property, foreign owned companies were not pushed by regulatory means to sell their property. However, as seen in the sale of Grong Gruber and Glomfjord, the concession law in itself did play a role in the owner's decision to divest.

Despite the government taking a tougher stand on foreign ownership, the ability of Norwegian owned industry to achieve preferential claim on Norwegian natural resources would be significantly curtailed. New foreign direct investments in hydroelectric related resources would, to all appearances, be restricted, and "repatriation" of foreign owned resource industries was encouraged, and in the end even carried out by the government itself. However, new investments by Norwegian owned companies would have to accept tougher regulations than those that had been given previously, to mainly foreign owned companies. Yet, even in this restricted form, the Liberal government of Gunnar Knudsen faced increasing opposition from within their own party, as well as the left wing of the Storting, for allowing too relaxed a concession policy.

The culmination of these conflicts came with the fuel crisis of the winter of 1916-1917. Rising labour costs and demands that general electrification should be prioritized, led the Norwegian authorities to put a halt to any new concessions to large new private industrial hydropower developments from 1917 onwards. Moreover, faced with growing opposition in the Storting, the Liberal government also acceded to take on board many of the stricter terms fronted by the left wing opposition when a revised concession law was passed in 1917. Compared to the situation in Sweden, the Norwegian fuel crisis led to an opposite policy response towards private hydroelectric companies. The shortages in Sweden added on the pressure to liberalize the rules in order to increase hydroelectric generation. In Norway, where hydroelectric development was already proceeding rapidly, the shortages led the government to take a harder line on private developments

for industry, in order to free more resources and labour for public owned developments aimed at general electrification.

This revised concession law cemented of a three tier system divided by ownership. Public ownership were given significant advantages with regards to both access and regulation. Private domestic ownership would be subject to a wide set of regulation and taxation, while foreign ownership would in most cases be discouraged. In this way, the concession laws for mining and hydropower came to reflect a similar outline to the concession laws governing forests.

As the definition of the broader public good was ultimately left to the discretion of the ruling government, this opened a possible space for specific interest groups to try to claim and define these public needs to suit themselves. In this regard, it is clear that the political weight of the agrarian wing of the Liberal party was influential in making the concession law – as well as the application of it – stricter. In this sense, the Trond Nordby's view that the Norwegian concession laws held the imprint of agrarian interests holds truer for this period, than the one preceding it.[1013] However, the influence of the agrarian wing should not be overstated. When the government began to stop granting new large private hydropower concessions in 1917, labour shortages and rising costs were no longer just a complaint fronted by Norwegian farmers, but also by pre-existing industrial firms. It is also unclear whether there really was a political majority for shaping the concession laws in a way that would actively deter private investments through prohibitive taxation and short concession times.

Underpinning the many domestic forces pushing for a stricter concession law was a bullish vision of future demand for Norwegian resources, particularly hydropower. The demand for new hydropower concessions seemed to wipe away the argument that the concession law had scared away investors from Norwegian resources, and instead the general impression of the parliamentary majority was that there was room for a much more significant public take. This rosy outlook was at times disputed by Norwegian big business interests, as well as by some conservative politicians. However, given the continued willingness of Norwegian investors to plough large sums into resource based industries seem at least to indicate that this general optimism was not just restricted to the political classes.

[1013] Nordby notes that the concession laws pushed forward by the agrarians were subverted by the industry friendly wing of the Liberal party. However, by tracing the implementation of the concession laws over time, it is just as possible to turn the argument on its head. Nordby, *Det moderne gjennombruddet*, p. 156.

The disruptions to international commerce and trade created by the war made it difficult for both Norwegian politicians and investors to assess the value Norwegian resources (and the products made from them) would have in the world market after the war. Unlike the years leading up to the First World War, the rapid changes to Norwegian resource policy that took place in an environment where it was overall very difficult to gauge the consequences of these changes. Moreover, as the post war downturn hit the Scandinavian countries hard from 1920, it would soon become clear that the profitability of Norwegian natural resources would not turn out to be as rosy as predicted.

Chapter 6: Resource nationalism in the interwar era (1918-1936)

Resource nationalism in the two Scandinavian monarchies had been fostered by a long period of increased economic globalization and high demand for raw materials. The war initially broke with the first part of this trajectory, but not the latter. However, the new international order established after the war would was not to be a return to the "normalcy" before the war. The war had substantially altered the economic strength of the European Great powers. Moreover, the war itself had shown how vulnerable the combating countries could be to disruptions of outside supplies of key raw materials. This in turn led to new policies in these countries aiming to reduce their import dependency.

The Scandinavian resource nationalist institutions built up in the previous two decades were thus faced with a somewhat different political and economic reality. This final chapter sets out to study how these systems evolved, and to what extent they were challenged by these changing circumstances.

I. A new world order? Economic nationalism after World War I

If the First World War for the most part only had an indirect effect on natural resource policy in the two Scandinavian kingdoms, the shocks of war brought about even more substantial transformation internationally. Company nationality and the nationality of owners became more vital than it had been before in living memory. All waring governments quickly carried out investigations into the ownership of companies operating within its territory. Properties owned by nationals of enemy nations were sequestrated, but the freedom of companies owned by neutral nations would become more restricted. As we have seen in the last chapter, this did also effect natural resources.

The large demand for many raw materials triggered by the war also led to an increase of export restrictions or export tariffs, both for strategic and fiscal purposes. Argentina, a key grain supplier to Europe introduced an export tariff on grain in January 1918, as a way of securing a larger share of the profits from the grain export to the state.[1014]

While the end of the war did eventually bring a resumption of international commerce, it did not return to the way the world had been before the outbreak of the war. Some of the restrictions

[1014] Provisional economic and financial committee and Corrado Gini, "Report on certain aspects of the raw materials problem," (Geneva: League of Nations, 1921), p. 24.

introduced during the war were continued. Australia's War Precaution regulations of 1916, which demanded written consent from the Attorney-General for all share acquisitions in mineral or metallurgical companies by non-British (and Dominions) subjects, was passed into law permanently in 1920.[1015] In the United States, the Mineral Lands Leasing Law of 1920 barred citizens of foreign countries from leases of public land, if American citizens were similarly restricted in theirs.[1016]

Other challenges to a liberal, free market perception of natural resources was also taking place at the same time. Besides the newly established Soviet Union's nationalizations, the Mexican revolutionary constitution of 1917 declared that the country's mineral resources were inalienable properties of the nation, and could only be leased for limited concessions.[1017] The full extent of these changes have never been fully documented, but by 1925, *Foreign Affairs* reported that "the tendency toward public control [of natural resources in the world] has grown so steadily and so widely, and under so many different conditions", citing "withdrawal of mineral lands from public entry, the participation of governments in commercial operation, exploration, and selling arrangements, measures for the restriction of exploration by extra-nationals, and levies of special taxes".[1018]

There were attempts to roll back these restrictions and re-establish a more liberal international order, including by the recently established League of Nations. As early as October 1920, the Council of the League of Nations commissioned a report on the "Raw Materials problem", i.e. the challenges of countries dependant on the import of raw materials. Yet, when the report was published the year after, the post-war slump in raw material prices and shipping costs had reduced the most immediate problem, and thus dampened the impetus for any urgent action. The report itself, compiled by the Italian statistician Corrado Gini, gives some indication on the complexities of the new economic order. While the report noted that "the increasing economic interdependence […] might well justify an eventual regulation of the exercise of sovereignty by states", it also problematized a free-trade solution through a classic protectionist argument of relatively unequal gains from free trade, stating:

> […] economic interdependence presupposes and accentuates a certain professional specialization by means of which the best-endowed nations devote themselves to the activities which are most remunerative, and which, as a rule, are also the most important

[1015] Statutory Rules 1916. No. 323, War Precautions (Mining) Regulations 1916. War Precautions Act Repeal, No. 54 of 1920.
[1016] Mira Wilkins, *The History of Foreign Investment in the United States, 1914–1945* (Cambridge MA: Harvard University Press, 2005).
[1017] Frederick F. Barker, "New Laws and Nationalism in Mexico," *Foreign Affairs* 5, no. 4 (1927).
[1018] C. K. Leith, "The Political Control of Mineral Resources," *Foreign Affairs* 3, no. 4 (1925).

> from a social point of view, while the less profitable activities are relegates to the other nations, which are already poorer, and tend to become more so, as compared to the first.[1019]

The move to liberalize trade in raw materials did not end with Gini's somewhat inconclusive report. The World Economic Conference in 1927 condemned export duties on raw materials, arguing, "free circulation of raw material is one of the essential conditions for the healthy industrial and commercial development of the world". Yet, here as well the Conference would not go as far as recommending an outright discontinuation of all export tariffs, but that instead "export duties should only be resorted to meet the *essential* needs of revenue" or more diffusely "to safeguard the *vital interests* of the country".[1020] In October of that year, the League convened a follow-up conference where the signatories would agree to "abolish within a period of time of six months […] all import and export prohibitions or restrictions and not thereafter to impose any such […]".[1021] However, the signatories added a number of exceptions, including tariffs "the purpose of protecting, in extraordinary and abnormal circumstances, the *vital interests* of the country".[1022] These exceptions granted much leeway and room for interpretation, rendering the agreement largely toothless.[1023]

A parallel and related initiative was also attempted regarding the status and regulations of foreigners and foreign owned companies. The World Economic Conference in 1927 adopted a resolution that the League should organize a convention to determine the best methods of "abolishing unjust distinctions between them [foreigners] and nationals" including "conditions of carrying on trade, industry and all other activities by foreign persons and enterprises". [1024] A draft was subsequently prepared by the League's Economic Committee. However, this draft also shied away from advocating full access for investors, regardless of nationality. Instead, the document included the reservation that states would have the right to prohibit or regulate foreign acquisitions for "reasons of security or national defence" or "if such acquisitions is likely to result in the obtaining

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[1019] Provisional economic and financial committee and Corrado Gini, "Report on certain aspects of the raw materials problem," (Geneva: League of Nations, 1921), p. 40.
[1020] All quotes in this paragraph above this footnote is from: "Report of the World Economic Conference adopted on May 23, 1927," *The Annals of the American Academy of Political and Social Science* 134 (1927): pp. 188-89.. My emphasis.
[1021] Article 2. "Convention for the Abolition of Import and Export Prohibitions and Restrictions," *The American Journal of International Law* 25, no. 3 (1931): p. 122.
[1022] Article 5. "Convention for the Abolition of Import and Export Prohibitions and Restrictions," p. 123.
[1023] See: Karl W. Kapp, "The League of Nations and Raw Materials 1919-1939," *Geneva Studies* XII, no. 3 (1941).
[1024] "Report of the World Economic Conference adopted on May 23, 1927," p. 181.

of *undue command* of the *vital economic resources* of the country”.[1025] The proposal also specifically accepted restrictions on foreigners working in “the exploitation of mineral and hydraulic power”.[1026]

It was nevertheless still an open question whether the Swedish and Norwegian laws were covered by this exception. At the international conference on the treatment of foreigners in Paris in late 1929, the Swedish delegation, supported by the Norwegian and the Polish, proposed to include a clause that clearly accepted such regulations carried out in the “public interest”. This idea was opposed by the western European delegations, who saw this as too much watering down of the principle of equal treatment of foreigners and opening up possibilities for arbitrary implementation. However, as a compromise solution, the drafting committee agreed to incorporate such a clause, but with the reservation that “the conditions under which the authorisations are granted are defined by the laws or regulations of the country”, which only partially clarified the issue.[1027]

In the end, the attempts to liberalize foreign direct investments fared even worse than the attempts to liberalize trade. The push towards liberalization of foreign ownership was primarily pushed by the larger European economies. Sweden and Norway were far from the only countries who held reservations about aspects of the initiative. Through resistance and foot-dragging from Latin America, Eastern Europe, South Africa and Australia, no agreement could be reached and the process was permanently put on ice in 1930.

What these processes reveal, however, is that there was no easy way back to the more liberal international regime before the Great War. Moreover, the attempts to liberalize trade and investment regulations also show that applying protectionist or rent-capture measures on raw material exports and valuable natural resources was an accepted part of an independent state’s prerogative. However, in the more politicised world economy, it was also clear that importing countries would be more selective on their sources for supply. This, as we shall see, would have significant consequences for Norway’s role as a chemical raw material exporter.

II. The Norwegian post war crisis

[1025] Article 10.3 and 10.4. "International Conference on the Treatment of Foreigners: Preparatory Documents," (Geneva: League of Nations, 1929).. My emphasis.
[1026] Article 7.2d. "International Conference on the Treatment of Foreigners: Preparatory Documents," p. 4.
[1027] "Proceedings of the International Conference on the Treatment of Foreigners," (Geneva: League of Nations, 1930), pp. 228-29, 38, 43, 433-37.. Quote is lifted from p. 437.

The post war depression was international, but the Norwegian economy was hit especially hard. The long growth period of Norwegian resource intensive industries that began after the turn of the 20th century came to an abrupt halt, severely punishing the companies that had overextended themselves in the inflationary wartime economy. Nearly all the Norwegian owned hydroelectric companies came under severe financial strain, including Høyangfaldene, Saudefaldene, and Bremanger. Elkem, which were perhaps been the most ambitious of the Norwegian owned companies, suffered spectacular losses on an ill-advised trade scheme in the later stages of the war, sold of much of its assets and was effectively reduced to a small technology company in the interwar years.[1028] These problems were not restricted to Norwegian owned companies. The British owned Alby United Carbide and the Nitrogen Products Co. also crumbled and went bankrupt in 1922 after a number of poor investments and unfortunate long terms sale contracts.[1029] Similarly, the Swedish zinc smelter that at the time was the only consumer of electricity from the state owned Glomfjord-plant also faced ruin. The mining industry also suffered from the collapse in prices. Production in Sydvaranger, the country's largest iron mine had been severely limited after exports to Germany were halted, and a number of pyrite mines either reduced or ceased production. Some, like Swedish Birtavarre Gruber and the once highly anticipated Røstvangen Gruber, would never reopen.[1030]

The post-war depression turned the whole labour question on its head. Whereas labour shortages had been a recurring theme in Norwegian politics since before the outbreak of the war, unemployment became widespread. From 1920 to 1921, unemployment among mining and industrial workers rose from 4% to 16%.[1031] The enclave nature of mining and the energy intensive industries of Norway meant that some localities were hit exceptionally hard. As all the factories connected to Tyssefaldene shut down at the same time, around 1500 workers were suddenly left without a job in a community of no more than 6500 inhabitants.[1032]

The crisis was nevertheless felt far outside the export sector, as it also triggered a dramatic crisis in the Norwegian banking sector. From the autumn of 1920 to the spring of 1923, 34 commercial banks and 12 savings banks faced severe liquidity problems. Among these were Handelsbanken, Centralbanken and Foreningsbanken, which were the three largest commercial

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[1028] Sogner, *Skaperkraft*, pp. 66-73.
[1029] Asbjørn Andersen and Ivar Haug, *Smeltedigelen: - en industrisaga : Odda smelteverk gjennom 80 år* (Odda: NORD 4 bokforlag og Smelteverket, 1989), pp. 122-28.
[1030] Bjørn Ivar Berg et al., eds., *Bergverk i Norge: Kulturminner og historie* (Bergen: Fagbokforlaget, 2016), pp. 75, 145-46, 81-84, 229-35. For an account of the beginings of Rustvangen, see this thesis, pp. 98-106
[1031] Tore Jørgen Hanisch, Espen Søilen, and Gunhild Ecklund, *Norsk økonomisk politikk i det 20. århundre: Verdivalg i en åpen økonomi* (Kristiansand: Høyskoleforlaget, 1999), p. 63.
[1032] Lasse Trædal, *Odda : arbeidsfolk fortel : glimt frå soga til ein industrikommune* (Odda: Odda kommune, 1988), p. 60; Andersen and Haug, *Smeltedigelen*, pp. 124-26.

banks in the country. The governments improvised several arrangements to save the banks and in 1923, the Norwegian Central Bank lent the distressed banks NOK 437 million, approximately 5% of the country's GNP. However, the problems did not dissipate. That same year Parliament passed a new administration law, and Foreningsbanken, Centralbanken as well as several other smaller commercial banks and savings banks were placed under receivership by the Norwegian Central Bank.[1033]

The financial problems of Norway was also exacerbated by the Norwegian Central Bank's decision to bring the Norwegian currency back to parity of the pre-war gold standard. This was not unique to Norway, and a similar policy was also carried out in Britain, the United States, Sweden and Denmark. The policy initially had strong political support. However, inflation in Norway had been particularly high during the war, and the way back to the pre-war gold standard became more protracted than in its neighbouring countries. The Norwegian kroner did not return to its pre-war gold parity before 1928.[1034]

The Norwegian resource intensive industries were not only faced with a shortage of investments, but also a sharp change in the market situation for key commodities. Among these, the changes in the nitrate industries were the most profound. The strategic importance of nitrates for high explosives had led the warring governments to support increased production capacity within their own country, which continued after the war ended. The most dramatic expansion took place in Germany, where fixation of nitrogen was increased from around 11,000 tons N in 1913 to 131,000 tons N in 1918, but with a joint production capacity of 270,000 tons N.[1035] In comparison, Norwegian fixation capacity in Norway at the same time was roughly 55,000 tons N.[1036]

For the future of the Norwegian nitrogen fixation industry, the challenge was not just the increase in production capacity in its former markets, but also a change in technology that would radically alter the competitive advantage of Norwegian hydropower. The new Haber-Bosch process for nitrogen fixation through high-pressure ammonia synthesis had just been put into production before the outbreak of World War One by BASF, and was vastly expanded with German state support during the war. By the last year of the war, the Haber-Bosch process was responsible for

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[1033] Sverre Knutsen, *Staten og kapitalen i det 20.århundre: Regulering, kriser og endring i det norske finanssystemet 1900-2005* (Oslo: Unipub, 2007), pp.170ff.,

[1034] For a short overview of this, see: C. H. Feinstein, Peter Temin, and Gianni Toniolo, *The European economy between the wars* (Oxford: Oxford University Press, 1997), pp. 39, 45-49.

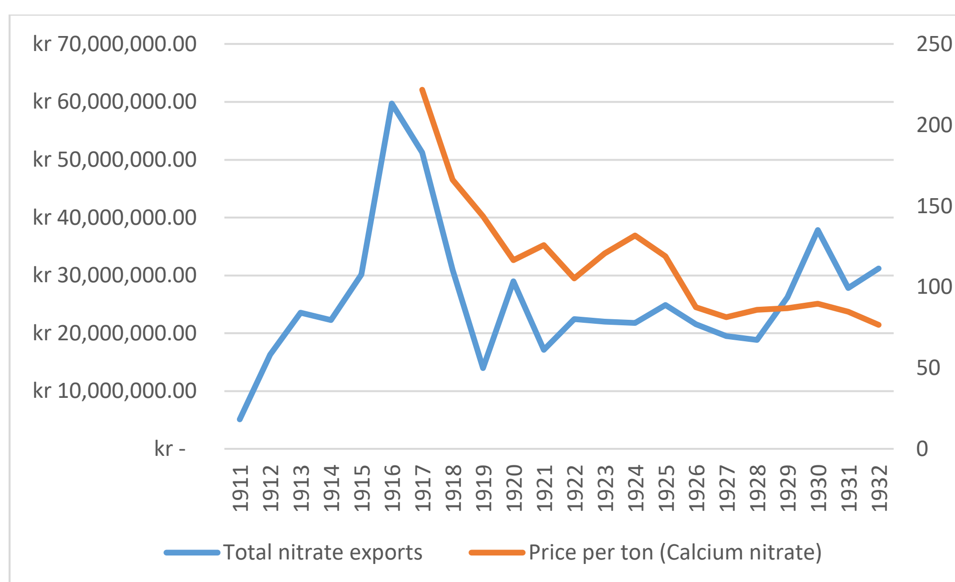
[1035] Number taken from Haber, *The chemical industry*, p. 200, Table 7.1. These numbers exclude the amount of ammonium sulphate nitrogen produced as a by product from gasworks. Part of the reason why production was so much lower than the capacity, was that German cyanamide works were constantly plagued with electricity supply problems.

[1036] Rokne, *Odda smelteverk*, p. 17; Haber, *The chemical industry*, p. 204.

51% of German nitrogen fixation. The process was very capital intensive and had required an enormous amount of technical fine-tuning. However, in the end it could produce ammonia at a low price, and crucially – much less dependent on abundant sources of cheap hydropower. Similar ammonia processes were also developed with government support in France and Britain.[1037]

The success of the ammonia process did not immediately spell an end for the other alternatives. And as we shall see, cheap power was still attractive for producers using the ammonia process, but it would not be as all-decisive as it had been. This undoubtedly had an effect on the growth of the electrochemical industry in Norway. Out of the 11 hydropower concessions granted to private developments before the end of the war with an electricity potential higher than 20,000 hp., eight had either stated their intention to produce nitrates at the time the concession was given, or developed plans to that effect later.[1038] Faced with sharp competition, the cyanamide plans of Bremanger and Bjølvefossen were abandoned. Instead of continuing to grow, the total value of Norwegian nitrate exports in the in the 1920s would remain below the level of 1913, when adjusted for inflation (see Figure 15, below). Germany, which in the year before the outbreak of the war constituted about half the market for Norwegian nitrates, had shrunk to an insignificant 0.20% by 1925.

Figure 15: Value of Norwegian nitrate exports 1911-1932 (in 1913-NOK)[1039]



[1037] Leigh, *The world's greatest fix : a history of nitrogen and agriculture*, pp. 147-51; J.R. Partington and L.H. Parker, *The Nitrogen Industry* (London: Constable & Company Ltd., 1922), pp. 175-81.
[1038] Høyangfaldene, Saudefaldene and Osa Fossekompani did not.
[1039] Norges Handel 1911-1932. The statistics for nitrates exports include, calcium nitrate, cyanamide, ammonium nitrate, sodium nitrate, sodium nitrite and nitric acid.

A similar development was also taking place for another key energy intensive staple, aluminium. In both France and Britain, the realization that aluminium was a metal of key strategic importance led both governments to support increased production within their own borders. The United States also raised tariffs on aluminium in 1921. According to aluminium historian Espen Storli, the comparative advantage of cheap Norwegian power for aluminium was "largely negated by the public policies of the major countries". [1040] Despite this, demand for aluminium would still increase significantly and the total value of Norwegian aluminium exports increased to new heights by the mid-1920s.

NVE replaces the Watercourse Commission

Concerning hydropower, there was not just a change in circumstance, but also a reorganization of the body set to advice on these issues. In an attempt to improve coordination between the different government institutions engaged in hydrology, hydropower and electricity, the Storting had passed a reform in 1920 to unite these into a single organization, named *Norway's Watercourse and Electricity Agency (NVE).*[1041] This new unit would be headed by an Executive Board,[1042] which among other duties would replace the Watercourse Commission in its advisory role on hydropower concession.

There is no sign that the replacement of the Watercourse Commission was motivated by a dissatisfaction with the Commission, or the policy it had adopted. Nor did the establishment of the Executive Board represent an attempt to turn the advisory role over to a body of non-political technocrats. Instead, the new Executive Committee consisted of a combination of four civil servants, the head of NVE and five appointees by the Storting. Here the Storting decided to appoint four MPs, two Liberal, one Conservative and one from the Labour party as well as one unaffiliated engineer. Thus the new Executive would explicitly come to replicate the combination of political and technocratic input that the Watercourse Commission came to contain in practice.

Beyond creating a new institution, the new Executive Board of NVE would bring about some significant change in the way hydropower concessions were handled. Firstly, the Executive Board met far more frequently than the Watercourse Commission had, which sped up the processing time.[1043] Secondly, from September 1922 the Executive Board was charged with negotiating directly

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[1040] Storli, "Out of Norway falls aluminium," pp. 123, 44, 47-49, 57; Andrew Perchard, 2012. pp. 90-96.. The quote is from Storli 2010, p. 147.
[1041] No. *Norges Vassdrags- og Elektrisitetsvesen*
[1042] No. *Hovedstyre*
[1043] Hovedstyrets møteprotokoll 1: pp. 370-371, NVE Archives

with the applicant. In contrast, the Watercourse Commission had as a rule only advised on concessions and proposed terms, while the Ministry of Public Works would handle the negotiations. The new system meant that applicant would effectively go through a two-stage negotiation. The applicant would first negotiate directly with the Executive Board, and then the case would pass to the Ministry who would make the final verdict.

III. Refinancing the Norwegian resource industries, 1923-1924

The altered circumstances of the first post-war years put the Norwegian authorities in a difficult dilemma. With high unemployment and falling output, should the government abandon some of the control and resource nationalist ambitions staked out since 1913 in order to help kick-start the export oriented resource sector? Or would this set an unfortunate precedence of "cheap" concessions that might bind future Norwegian governments? Alternatively, was the post-war crisis proof of the inherent danger of an economic strategy relying on international trade, which merited a further push towards a resource policy directed towards import substitution?

By examining the sources, it is clear that the post-war crisis did bring the government to reconsider some of the premises of the policy adopted during the war. One of the first signs that the Norwegian government was clearly reconsidering the hard-line approach set during the war can be found as early as 1921. After the Norwegian state struggled for three years to find a new industrial power leaser for its recently acquired Glomfjord plant, the Norwegian government unequivocally abandoned the policy of only leasing power to Norwegian owned companies, as outlined by Nalum, the Minister of Public Works in 1918. In August 1921, the director of Glomfjord wrote to the Norwegian legation in London, encouraging it to advertise the fact that the Norwegian had cheap electricity available.[1044]

An even more pressing question in the years following the crisis was not just deciding how to deal with new ventures, but also how to deal with the pre-existing ones that required refinancing. The 1917-law had introduced a paragraph requiring a new concession if the shareholder majority of a company changed hands. As we have seen in the last chapter, the Norwegian government assumed that this law was hard to implement effectively, especially if the company did not have registered shares or the company was foreign owned. However, as we shall see, some companies –

[1044] Glomfjords Direktion Formannen (Birger Stuevold-Hansen) to Den norske Legasjon i London, 30.08.1921, NRA, S-5946 Industridepartementet, Vassdragsavdelingen, Dc, Box 73, Folder 2.

especially Norwegian owned – did err on the side of caution and seek the government's permission. In addition, Norwegian owned companies who had concessions a share ownership clause also had to apply for a new concession if they wanted they wanted to sell the company to foreigners.

One of the first such cases concerned the sale of Arendal Smelteverk. Unstable demand and a plummeting German Mark had brought the company into severe financial strain, which had largely been borne by the local commercial bank, Agdesidens Bank. As the bank came into trouble itself, it sought a concession to sell its holdings to a foreign company and transfer the power lease to it. When it came up in the Executive Committee of the NVE, Ingvar Kristiansen, the former head of the Watercourse Commission, as well as the Labour MP voted against a concession on the ground that it was a foreign company. The remaining seven members of the Executive Committee voted in favour in consideration for the bank, and the municipality's expressed desire to see production restart. However, the Executive Committee demanded a tough increase in terms. The new foreign company should pay an annual concession tax of no less than NOK 4.41 per hp.[1045] This was a NOK 3.41 increase from the concession granted in 1913, which altogether added up to a 11.5% tax on the sum it paid for the lease. In addition, the Executive Board recommended giving the state the opportunity to redeem the company after 35 years.[1046] These terms did little to entice a potential buyer. Instead, the company was refinanced by Norwegian capital, mainly by its power supplier Arendal Fossekompani, but also by a number of individual Norwegian investors, including Gunnar Knudsen.[1047]

There is little doubt that there was much opposition to allowing foreign capital in, even if it could help restart failing Norwegian industries. This is the likely reason why A/S Høyangfaldene proposed a rather curious refinancing solution when it sought to sell part of the company to *Aluminum Company of America* (Alcoa). Høyangfaldene had finally managed to begin alumina production in France in 1920, but the plant was fraught with problems and never produced as much as expected, and Høyangfaldene was forced to abandon the venture in 1921. After a long search for new sources of alumina and an accumulated debt of NOK 35 million, the company finally managed to strike a deal with Alcoa.[1048] This deal entailed splitting the aluminium factory into a separate company, *Norsk Aluminium Company* (Naco) which would then lease all the power generated by Høyangfaldene. Alcoa and Høyangfaldene would each own 50% of the shares in the new company.

[1045] 6 per kW/year, divided between the state and the local municipality.
[1046] Hovedstyrets møteprotokoll 1: pp. 370-371, NVE Archives
[1047] Dannevig, *Arendal smelteverk*, pp. 55-59.
[1048] Fasting, *Norsk aluminium gjennom 50 år*, pp. 127-41; Storli, "Out of Norway falls aluminium," pp. 126-46. The amount of debt is taken from Høyangfaldene to the Executive Board of NVE, 11.12.1922, NVE archives, Box 71v, file 6

As this arrangement did not alter the ownership of the company generating the power, it did not require approval by the Storting, but only a power lease concession that was the purview of the government.

However, the deal was by no means a joint venture between equal partners. The "A-shares" owned by Alcoa held significant advantages over the "N-shares" owned by Høyangfaldene, as it gave Alcoa the right to appoint the majority of the board, and also held the right to veto the sale of N-shares to any third party. Most of what remained of Høyangfaldene's debt would be covered by new $ 2 million loan by Alcoa, which would be repaid by leasing out power to Naco for $6 per hp. At the exchange rate of late 1922, this amounted to roughly NOK 33, but at the future gold parity it would be no more than NOK 22.38 – which was much lower than the going market rate.[1049] This alone would not be enough to pay for Høyangfaldene's running costs and maintenance, let alone pay dividends to its shareholders. Høyangfaldene would ostensibly make up for this through dividend on its shares in Naco. However, as Alcoa supplied Naco with alumina, there was little preventing the Americans from drawing profits out of the company using transfer pricing.

That the reconstruction was more an acquisition than a joint venture was by no means lost on the Executive Board. However, it was also well aware that there was an overriding risk that without new capital the company was likely to go bankrupt. Moreover, Foreningsbanken, the main creditor of Høyangfaldene, was in dire straits. The latter point was heavily underlined by the Norwegian Central Bank, who had recently granted emergency aid to Foreningsbanken.[1050] Despite this, the Executive Board pushed to limit Alcoa's power over the company. In an attempt to open the possibility that the Norwegian position in the company might recover at some point in the future, the executive board argued for an increase in the power lease price and that the Norwegian shareholder position should be reserved for Norwegians. However, Alcoa and Høyangfaldene's negotiators ruled out any increase in the lease rate and ownership restrictions. They also opposed a number of the Executive Boards proposed terms, such as a small power lease tax, a clause making part of the finished product available to the home market and restrictions on producing other products than aluminium without the permission of the government.[1051] These terms were common practice in the 1917-law, but Alcoa and Høyangfaldene were adamant to push for as low terms as

[1049] Exchange rates are taken from Jan Tore Klovland, "Historical exchange rate data 1819–2003," in *Historical monetary statistics for Norway*, ed. Øyvind Eitrheim, Jan T. Klovland , and Jan F. Qvigstad (Oslo: Norges Bank, 2004).

[1050] The Executive Board of NVE to the Ministry of Public Works, 21.09.1922, NVE archives, Box 71v, file 6. See also: Meddelte Vassdragskonsesjoner 1923: pp. 24-25. Knutsen, *Staten og kapitalen*, p. 179.

[1051] A/S Høyangfaldene, Norsk Aluminium Co. to the Ministry of Public Works, 09.01.1923. NRA, S-5946, Industridepartementet, Vassdragsavdelingen, Dc Box 52

possible. In an ironic turn of events, Sigurd Kloumann, the Director of Høyangfaldene tried to use the fact that DNNs controversial concession from 1918 had no shareholder restrictions as a precedent, ignoring the irony that the concession had been granted in part to help his own company with its French problems.

As the deadline for the deal approached, the Norwegian government took over the negotiations. The government was willing to accommodate most of the negotiation team's objections, but still did not want to leave the Norwegian shares open to be sold out of the country. However, Alcoa was adamant that it would not accept any solution that would prevent future capital expansion, and wanted to be free to buy the shares if they were sold as they would not risk the Norwegian shares ending up in the hands of anyone "whose interests are at odds with ours".[1052] In the end, Alcoa accepted a clause where the N-shares could not be sold without the Norwegian government's permission and that for any capital expansion the Norwegian shareholders would be allowed to participate with up to 50% of the new capital.[1053]

The Norwegian government's need to refinance Høyangfaldene and its failing creditor, and lack of other obvious options meant that Alcoa clearly held the best cards in the negotiation. This situation opened a space for the applicant to try to push the government into using the flexibility inherent in the concession law to grant a lenient concession. However, through the high-stakes negotiations, the Norwegian government was able make at least some arrangements aimed at securing a future Norwegian stake in the company.

A somewhat similar high-stake negotiation took place over the refinancing of Tyssefaldene. The power company A/S Tyssefaldene acquired both the bankrupt British carbide and cyanamide factories for a pittance on a foreclosure sale in 1922, but struggled to keep up production. With little money coming for power production, Tyssefaldene was itself soon facing bankruptcy. The burden soon fell upon Centralbanken and Foreningsbanken, the two beleaguered creditors of the company who ended up with the brunt of the company's voting shares.

Unlike Høyangfaldene, Tyssefaldene had no restrictions on shareholder nationality, but with the introduction of the 1917-law, acquiring a majority of shares in a company which owned or leased natural resources covered by the concession law was also subject to a government concession.[1054]

[1052] Alcoa to Ministry of Ministry of Public Works, 23.01.1923, NRA, S-5946, Industridepartementet, Vassdragsavdelingen, Dc Box 52
[1053] Høyangfaldene to Ministry of Public Works, 26.01.1923, NRA, S-5946, Industridepartementet, Vassdragsavdelingen, Dc Box 52
[1054] As we have seen, this paragraph was considered to be hard to enforce especially if the shares were held by foreigners, but as the

Moreover, Tyssefaldene had an outstanding legal disagreement with the government over whether a series of water regulation works were covered by the concession law or not. However, unlike other forms of acquisition of natural resources, a concession to acquire a majority of shares was not automatically subject to terms. Instead, the law that in such cases there "*could* be set such terms as is deemed necessary for general considerations".[1055] These terms *could* include a Right of Reversion of no more than 60 years. In other words, there was no legal minimum limit to what terms the applicant company had to accept.

Yet, while the state was eager to find refinancing, there were limits to how much it was willing to bend the spirit of the concession laws. When the Norwegian banks who held the shareholder majority contacted the government to enquire what kind of terms they were likely to demand, the government replied that they would not provide specific terms without a concrete buyer, but that it would in any case demand a right of reversion for the whole power development.[1056] Shortly after a concrete proposal had come from a Belgian zinc company*, Cie Royale Asturienne des Mines* (CRAM), the government installed vice-president of Foreningsbanken, Kristen Johanssen, informed the government that the Belgians would only accept a concession with a right of reversion of 99 years, but assumed they would be willing to settle for 80 years.[1057] However, this was legally a bit tricky. While a right of reversion was not a necessary condition for such a concession, if one was demanded, it had to conform to the 50/60 year upper time limit as other acquisition concessions. Consequently, to accommodate the Belgian company the government would have either to pass specific legislation for this circumstance, or shape the concession in such a way that it circumvented this ruling. While the latter option was at least considered, the government decided to insist on a concession in accordance with the existing legislation, after conferring with the parliamentary Forest and Watercourse Committee.[1058]

While the negotiations with CRAM stalled, the Norwegian banks had begun negotiations with a new buyer, the nitrate company Norsk Hydro. Norsk Hydro had been a major consumer of cyanamide, which it used to make ammonium nitrate.[1059] Norsk Hydro was also a more lucrative

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[1055] «[…]kan der fastsættes saadanne betingelser, som findes paakrævet av almene hensyn.» Authors emphasis. See: Amundsen, *Koncessions-loven*, pp. 204-06.

[1056] Middelthon to Centralbanken for Norge, 15.05.1923, Kopibok 94: p. 56, Letter from Centralbanken for Norge to Minister Middelthon, dated 14.05.1923, NRA, S-1428, Industridepartementet, Avdeling for vassdrags- og elektrisitetsvesen, Ek box 13

[1057] Kristen Johanssen to Middelthon, 20.06.1923, NRA, S-5946, Industridepartementet, Vassdragsavdelingen, Db Box 121

[1058] Hovedstyrets møteprotokoll 2: p. 123, NVE Archives. Unsigned letter marked "Et forslag", 27.06.1923. NRA, S-5946, Industridepartementet, Vassdragsavdelingen, Db Box 121, File 1

[1059] Ketil Gjølme Andersen, Gunnar Yttri, and Kjell Wiedswang, *Et forsøk verdt: forskning og utvikling i Norsk hydro gjennom 90 år* ([Oslo]: Universitetsforl., 1997), p. 48.

alternative for the Foreningsbanken, who also had financial interests in Hafslund and Meraker Smelteverk, two allied Norwegian owned carbide producers. These could come under threat if a new owner decided to use the large carbide factory to produce carbide for export, rather than as a raw material for cyanamide.[1060] Norsk Hydro was not only willing to refrain from selling carbide on the world market, but also to transfer the eventual production quotas allotted to it in the international carbide cartel to Hafslund and Meraker.[1061] Furthermore, while Norsk Hydro drove a hard bargain in the concession negotiations, it was willing to accept the condition of a 60-year right of reversion.[1062] However, Norsk Hydro’s French owners were not impressed by the plans, and turned down the takeover arrangement in February 1924.[1063]

When Norsk Hydro pulled out, the Norwegian carbide producers once more came under threat. The banks were willing to give Hafslund a first option to buy A/S Tyssefaldene, including carbide and cyanamide works. However, Hafslund and Meraker on their own did not have the necessary capital. Instead, they contacted the two other power consumers, CRAM and DNN, for a joint takeover of Tyssefaldene, where Meraker and Hafslund would lease the carbide and cyanamide plants. In late June 1924, Hafslund sent a formal concession application to the Ministry of Public Works. As the new coalition was willing to accept virtually the same terms set to Norsk Hydro, the government rushed to have it approved by the Storting before the 1924 session ended, and presented the case on July 11, 1924.

However, the refinancing deal was presented to the Storting before the actual arrangement had been finalized. Hafslund’s proposal did include the possibility that DNN and CRAM might become part owners of Tyssefaldene in addition to Meraker, but as the negotiations had not yet been finalized, the details were sparse. The final terms were instead hammered out on a joint meeting between the interested parties on July 26-27th, where the Norwegian government’s only representative was the same Kristen Johanssen who also represented or had represented several of the other parties, including Foreningsbanken, Meraker and DNN. This agreement outlined splitting

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[1060] For more information on the reconstruction of Tyssefaldene and the role of the Norwegian carbide producers, see: Sogner and Christensen, *Plankeadel*, pp. 246-50; Just, *Aktieselskabet Hafslund: 1898-1948*, p. 158; Nybø, "Sammensmeltingen," pp. 45-46; Angell, "Aktieselskabet Tyssefaldene og konsesjonsspørsmålet," pp. 210-11.
[1061] Storli, "Out of Norway falls aluminium," pp. 192-93.
[1062] Harald Bjerke to the Ministry of Public Works, dated 14.02.1924; Comparison between NVE's terms and Hydro's Terms. Both can be found in NRA, S-5946, Industridepartementet, Vassdragsavdelingen, Db Box 121
[1063] The exact reasons for this is not spelled out in the literature. Angell, "Aktieselskabet Tyssefaldene og konsesjonsspørsmålet." suggests this was related to the lack of progress in Norsk Hydro’s aluminium strategy. However, Norsk Hydro’s French owners were also increasingly worried about the company’s future competitiveness against the ammonia synthesis process, and was reluctant to expand on the Norsk Hydro’s current technology. See:

the ownership of Tyssefaldene in three, between DNN, CRAM and Haflsund-Meraker. Moreover, the three new companies all signed new power lease contracts with Tyssefaldene, each with an option of increasing its lease to 100,000 hp. Shortly after the deal had been approved by the Storting, Hafslund informed the Ministry of Public Works that the participation of all the parties was dependant on receiving power lease concessions with the same length as the concession to Tyssefaldene, 60 years, and on terms similar to their previous concessions.[1064] Having already given its approval, both the government – now a new Liberal government – and the Storting acquiesced, but the fast and chaotic way it transpired left a bitter taste in both the Storting and in the local community.[1065]

It is not clear whether there was any deliberate obfuscation on the part of the Conservative government to have the concession approved in the Storting without knowledge of the full particulars. The sources examined from the Ministry of Public Works, does show direct correspondence with Kristen Johanssen on the subject. It is however possible that Johanssen tried to keep the level of involvement of the foreign owned companies vague, and rather present the government and the Storting with a *fait accompli*.

The Storting would soon enough be forced to make a decision on the refinancing of another Norwegian owned company, where there were no ambiguities about its going to a foreign owned company. A/S Saudefaldene managed to complete the development of its first 40,000 hp., but at an inflated cost of NOK 18,000,000 – much more than the NOK 5,600,000 originally anticipated.[1066] And once again, it was the troubled banks, Foreningsbanken, Centralbanken and Handelsbanken that had picked up much of the bill. Sigurd Kloumann, the general manager of Saudefaldene had managed to increase the rate Union Carbide paid from NOK 28 to NOK 32 per hp, but the company was so heavily in debt that it still ran at a loss.[1067] When Union Carbide in 1923 decided to call in its option for another 40,000 hp, Saudefaldene and its creditors could not afford the estimated NOK 15,000,000 costs. A failure to deliver would incur heavy penalties on the company. The fact that the shares could only be owned by Norwegians made it impossible to obtain a loan in the US for rates that were acceptable, even with help from Union Carbide. With no other options, Union Carbide reluctantly offered to buy the company in April 1925.

[1064] Stortingsforhandlingene 1924, p. 3243
[1065] Angell, "Aktieselskabet Tyssefaldene og konsesjonsspørsmålet," pp. 213-15.
[1066] In 1914, full development of the watercourse was estimated to cost NOK 140 per horsepower. Instead, the cost came to NOK 450 per horsepower. Sandvik, *Saudakraft*, pp. 86-87.
[1067] At the end of 1924, A/S Saudefaldene owed NOK 27,691,526, over seven times as much as the company's faceshare value of NOK 3,950,000. A/S Saudefaldene's defecit was NOK 373,000 in 1923 and NOK 138,000 in 1924. *Saudakraft*, p. 93.

As this acquisition entailed changing a concession granted by the Storting, it would also have to be approved in the Storting. While MPs from all parties were quick to heap scorn on the Norwegian leadership who by signing such a poor contract had "brought great harm to themselves and their country",[1068] few saw other options for refinancing the company. Instead, the central question would not be whether to grant the concession at all, but rather if allowing the company to go into foreign ownership should be offset by a tightening of the terms. In the preparatory negotiations, the majority of the Executive Board of NVE, consisting of the politicians and Ingvar Kristiansen's deputy, argued to increase the tax from NOK 2.00 per hp to NOK 4.00.However, when A/S Saudefaldene replied that a tax increase would not be accepted by Union Carbide, the proponents of the tax increase quickly folded. Instead, it would be picked up again by the members of the Agrarian Party, who lambasted the Liberal governments "unmanly"[1069] stance by letting foreign capitalists set the terms. Once again, the Agrarian MPs argued that the negotiation approach and lack of clear guidelines on concession policy gave the foreign investors the upper hand. To counter this, they proposed a postponement to the next year's Storting, or failing that increasing the tax to the level initially suggested by the majority of the Executive Board. However, the rest of the Storting was unwilling to jeopardize the refinancing, and in the end only 22 voted to postpone, and 24 MPs voted to increase the tax, out of a total of 150.[1070]

It is of course very possible that the Agrarian Party was well aware that there was no majority in the Storting to challenge the concession the Liberal government presented. In this way, the Agrarian Party would have the opportunity to appear as the champions of economic nationalism, without the risk of becoming responsible for a bankruptcy and unemployment. In a similar way, the Labour Party proposed and voted to allow the workers of the company the right to appoint two members on the company board. This measure had no precedent, but in the end received 41 votes – including some from the non-socialist parties.[1071] As before, the very public nature of the parliamentary concession decision combined with the possibility of flexible concession terms opened up an arena for political grandstanding, where opposition parties could "outbid" what had been agreed in negotiations between company and government.

[1068] Quote from Liberal MP Hans Jørgensen Aarstad. See: Stortingsforhandlingene 1925, p. 2843

[1069] "[…]umandig[…]" quote from Agrarian Party MP, Nils Nersten. See Stortingsforhandlingene 1925, pp. 2845-8

[1070] Stortingsforhandlingene 1925, p. 2856. The parliamentary protocols do not state who voted, only the number of MPs that voted. The total number of MPs present during the vote is also not recorded. The Agrarian Party won 22 seats in the 1925 election.

[1071] Stortingsforhandlingene 1925, p. 2856. By 1925, the former Labour Party had split in three, with the Labour Party holding 24 MPs, the more moderate Social Democratic Party holding 8 MPs, and the Comintern-loyal Norwegian Communist Party holding 6.

It is clear that the Norwegian authorities did not hold the strongest negotiating position when it came to decide the reconstruction of Norwegian companies. Moreover, the way concessions were granted to foreign investors willing to refinance Norwegian companies provided an added challenge to finding a set of standard concession terms. As we have seen, concession terms varied from case to case, ever since the first law was introduced. However, in the gradual move to stricter concession terms from 1906 to the post-war depression, there were still some major concessions that set the precedent for what an investing company should expect. The desire of both Norwegian government and parliament to prevent increased unemployment and aid the failing banks, establishing or adhering to a firm principle became a secondary priority. Rather, the Norwegian authorities tried to get what they could, and accepted what they had to.

There was however one crucial exception to this point: The Norwegian authorities did not allow any adjustment to the principle of the Right of Reversion. In refinancing of Tyssefaldene, the government insisted on including this provision, and rejected suggestions at diluting the principle. Similarly, the attempt to use the refinancing of Saudefaldene as an argument for extending the concession was also rejected. Early in the negotiations over the Saudefaldene acquisition, Saudefaldene had demanded on behalf of Union Carbide, that the remaining 54 years on the concession passed in 1914 should be increased to 60 years. However, this was ruled out by the Executive Board.[1072] Thus, with the adjustments introduced to help facilitate a refinancing of the Norwegian hydroelectric industry, the Norwegian authorities had in practice returned to the "harnessing strategy" principles of the earliest years of the concession law. Lack of domestic investors made foreign capital necessary, but would be subject to terms – with the Right of Reversion as the ultimate guarantor of long-term Norwegian interests.

IV. Dealing with new ventures in Norway 1924-1926

As we have seen, when it came to the ifs and hows of allowing foreign investors to partake in refinancing the Norwegian electrochemical industries, there was a broad – if perhaps reluctant – political consensus that the concern for the banks and the jobs of those employed should come before resource nationalist ambitions. However, another matter remained how the Norwegian authorities should position themselves towards potential new investments by foreign owners.

The immediate years following the post-war depression saw an almost complete dearth of private applications to acquire and lease large amounts of hydropower. By the mid-1920s however,

[1072] St. prp. nr. 81 1925, p. 12

there was a revival of interest in Norwegian hydropower. By the time the previously mentioned Belgian zinc company CRAM applied for a concession to lease power from Tyssefaldene in November 1923, there were no principled objections within either the Executive Board of NVE or the Norwegian government. A concession was granted four months later.

In other words, the ambition of reserving leased hydropower for Norwegian owned companies had been abandoned. Yet, while foreign owned companies would again largely be welcomed, the Norwegian authorities still kept up the practice of setting shareholder restrictions to Norwegian owned companies, stating that 2/3 of the shares had to be on Norwegian hands. In other words, Norwegian owned companies that leased power could not be sold to foreign owners without permission from the government. Power lease concessions fell under the jurisdiction of the government in charge. When concession cases had to be decided in the Storting however, things often got more complicated.

One of the most clear-cut example of this can be seen in the debacle over BACo's power lease arrangement with the public electricity company of Kristiansand. Demand for aluminium was soaring in the mid-1920s, and BACo was looking to increase its production capacity at Vigeland Brug, an aluminium smelter in southern Norway, which would require more electricity. The company generated most of its own electricity, but rather than seeking to obtain and develop more hydroelectricity itself, it instead brokered a deal with Kristiansand's Elektrisitetsverk (KEV), the local municipal power company in 1924. BACo would pay KEV to develop Steinsfoss, a waterfall owned by KEV, which could generate roughly 10,000 hp. The municipal power company would then lease the electricity generated to BACo's smelter for NOK 19.50 per year.[1073] After 40 years, the power plant would be the unencumbered property of KEV. This seemed to offer a good solution to both parties. BACo would have access to cheap power for four decades while avoiding the sensitive issue of foreign ownership of Norwegian natural resources. KEV on the other hand, was eager to secure a steady income to help pay of its debts incurred during the war.

There was however a catch to this arrangement. The Norwegian state owned 1/6 of the waterfall. The government agreed to swap its ownership in Steinsfoss for a smaller waterfall owned by KEV, but this arrangement had to be approved by the Storting. This opened a Pandora's Box of regional rivalry. The nearby countywide power company, Vest-Agder Elektrisitetsverk (VAE), which did not have its own generation capacity, wanted to use the opportunity start a joint development of one of its own larger waterfalls. BACo was initially reluctant, but willing to transfer its funds to this

[1073] Pål Thonstad Sandvik and Espen Andresen, *Kristiansand energiverk i elektrisitetens århundre, 1900-2000* (Kristiansand: Agder Historielags Årsskrift, 2000), p. 70.

development, if KEV and the VAE could come to an agreement. However, KEV and VAE could not agree on terms, and it thus became up to the Storting to decide whether to accept KEV and BACo going ahead with its original proposal. It thus became not only a question of regional rivalries. It also became a repetition of whether power foreign owned industry should be allowed to set the terms for the wider general electrification, or whether it should be up to the wider democratic authorities to decide how power would be made available. After a heated debate lasting several hours on June 27th, 1925, a 61 over 48 majority voted to postpone a decision in anticipation of a new round of negotiations between the interested parties.[1074] This was despite warnings from the Minister of Public Works that a deferment would in practice be the same as refusing the concession.

At the same time, the government had to decide on how to proceed with another foreign owned expansion in the aluminium industry. For the American aluminium giant Alcoa, the acquisition of Naco was just part of a wider scheme to use Norway as a base to enter into the European market. Alcoa had secured 1/3 of DNN in 1923, and the year after, it covertly acquired a majority stake in Elkem. Elkem still owned the yet undeveloped hydropower companies A/S Lysefjord and A/S Kinservik, which could provide power for greenfield investments of new aluminium smelters. Alcoa also presented a takeover bid to Bjølvefossen in 1925.[1075]

In other words, Alcoa had big plans for possible expansion in Norway, Kinservik was chosen as the location for a next aluminium smelter. However, to proceed, Alcoa wanted to an additional part of the Kinso-falls, which had not been covered by the original Kinservik concession in 1907. This would yield another 9500 hp., but also meant that the concession had to be approved by the Storting.[1076] The application to expand the concession had initially been submitted in February 1925, without any mention that Alcoa would also be acquiring the shares in the company. Instead, this information was transmitted to the Norwegian authorities 4 months later. It is not clear exactly why the Alcoa's Norwegian representatives[1077] at first chose to withhold this information, only to supply it just before the concession would be presented to the Storting.

In any case, the timing would prove to be unfortunate. The Executive Board issued a recommendation that Alcoa should not be blocked from obtaining A/S Kinservik, but four out of nine members recommended postponing the case as "the case was of a significant principled significance

[1074] Stortingsforhandlingene 1925, p. 2385
[1075] According to Harald Rinde, Alcoa also secured A/S Laatefos – a company which held riparian rights near Odda, on the west coast. This company did not have a concession for its power.
[1076] §4 of the 1917 concession law stated that all hydropower acquisitions of over 5000 hp had to approved by the Storting.
[1077] Alcoa was represented by Sigurd Kloumann and Herman Christiansen, both board members of NAC the former the general director of NACO

and because the available time to prepare and present the case to the state authorities was to short".[1078] The Liberal Minister of Public Works, Ole Monsen Mjelde, decided to side with the minority, and defer the case until the next Storting. This decision was taken only 10 days after the Storting had voted against the government's proposal to go ahead with the BACo-KEV agreement; it is possible that the Liberal government thought it likely that this case might suffer a similar fate.[1079]

The Norwegian government also came to the same conclusion in a simultaneous concession case over an offer by BASF to buy Bjølvefossen. BASF also considered expanding into nitrogen production in Norway, where cheap hydropower could be used to make the hydrogen needed for the ammonia process cheaper than hydrogen made from coal and steam. Bjølvefossen, as the previously mentioned Norwegian owned hydropower companies was heavily indebted, beholding to the same beleaguered banks, and only managed to stay afloat financially by leasing power to the nearby city of Bergen on a short-term contract.[1080] Thus, the offer by BASF was an opportunity to relieve the Norwegian banks, but was also entail a significant expansion by BASF. However, the concession application was only submitted on June 19th, 1925 – less than a month and a half before the Storting was set to adjourn for the year. It was probably theoretically possible for the government to have the case put before the Storting in time, but for many of the same reasons as the Alcoa-Kinsarvik case, it was politically difficult to rush such a potentially controversial matter. While Bjølvefossen had financial problems, it was not nearly as bad as Saudefaldene. Moreover, the Executive Board was split on the issue over whether to demand a concession tax increase from NOK 2.00 to NOK 4.00, which BASF had stated it would not accept under any circumstances.

As the Storting was ordinarily only in session for half a year every year, no decision on these three cases could be made until the spring of 1926. By that time, BASF had withdrawn its offer. Both the remaining two were approved in the Storting, but not without controversy. KEV and VAE had not reached a new agreement, but 40 still voted against the arrangement. In the Alcoa-Kinservik case, only the small communist party voted against the concession outright, but 40 MPs voted to demand that the company set aside a NOK 500,000 reserve fund to cover expenses of future works stoppages. This idea had been brought up numerous times after the post-war depression, but had been repeatedly rejected by the Executive Board of NVE as inadequate and something that should

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1078 «[…]saken var av betydelig prinsipiell betydning og fordi den tilmålte tid for sakens forberedelse og fremleggelse for statsmaktene var for kort». Hovedstyrets møteprotokoll 3: p. 307, NVE Archives. The proponents for a postponement were Electricity Director Nordberg-Schultz, and MPs Eiesland (Liberal), Aas (Conservative) and Nygaardsvold (Labour).

1079 This conclusion is also shared by Storli, "Out of Norway falls aluminium," p. 180.

1080 Executive Board to the Ministry of Public Works, 03.07.1925, pp. 20-21 NVE archives. Box 67t, folder 4.

rather be dealt with new legislation covering all industry. And it was a term Alcoa had categorically refused. In both cases, the fiercest critics, mainly the Agrarian Party and Castberg warned against the dangers of foreign ownership and export oriented industry, which also drew support from parts of the governing Liberal Party as well as some representatives from the conservative alliance.[1081]

This alignment reflects a continuity of the key proponents of resource nationalism and small industry. However, a key difference in the mid-1920s compared to the period of a radicalized concession policy after 1913, was that the socialist parties now voted in favour of new foreign owned hydroelectric development. Whereas the Labour party had been a consistent proponent of a more radical concession policy towards private enterprise in the 1910s, this had been predicated on both an idea that the industry could accept tougher terms and/or that public ownership was a viable alternative in the short term. With great uncertainty on both these points, the Labour Party and the splinter Social Democratic Party now prioritized new jobs for Norway's unemployed over longer-term principles and voted for the concession as it was presented. With 32 votes, they could have tipped the outcome.[1082]

Despite the two concession cases eventually being approved in the Storting, neither would be realized. According to Espen Storli, the delay seems to have played a decisive role in the outcome. When BACo and Alcoa initially submitted their concession proposals in September 1924 and February 1925, the international demand was surging. However, by 1926, the market was showing signs of overproduction and an international aluminium cartel was established to prevent a sharp price competition.[1083] BASF also pulled out of its plans to acquire and expand Bjølvefossen when the concession was delayed in 1925. Here the rapidly appreciating value of the Norwegian currency from 1925 also seems to have played a significant part.[1084]

Moreover, both BACo and Alcoa had set their sights on hydropower resources elsewhere. BACo's Norwegian expansion was largely only a quick response to rising demand, intended to hold the company over until their larger, government supported, Lochaber development in the Scottish highlands came on stream.[1085] Just as Alcoa was forming its Norwegian plans 1924, the company became aware of a potential challenger to their North American monopoly position, intending to base its smelting on a large hydropower concession at Saguenay in Northern Quebec. Alcoa

[1081] Innst. S. nr. 39, 1926, pp. 91-93. Stortingsforhandlingene 1926, pp. 1011-1074
[1082] Stortingsforhandlingene 1926, p. 1074. In the end, the concession was granted with 90 votes against 40. Appart from the Agrarian Party and Labour Democrats, eight Liberals, six Conservatives and one National Liberal MPs opposed the concession.
[1083] Storli, "Out of Norway falls aluminium," p. 175.
[1084] Byrkjeland, "A/S Bjølvefossen 1905-1931," p. 322.
[1085] Storli, "Out of Norway falls aluminium," pp. 157-58.

managed to acquire the upstart over the first half of 1925, after which the venture was no longer pursued less vigorously. Alcoa had spent a considerable sum in the new Canadian venture, which also offered hydroelectricity at comparable, or even lower, prices to what could be obtained in Norway.[1086] By late 1926, the Norway programme was put on hold, and Quebec became Alcoa's main area of expansion.[1087]

In summary, Norwegian policy towards new foreign direct investments had softened considerably since the hard line of the war years. This was marked in both the Liberal and Conservative governments in power in the first half of the 1920s, and there was little obvious difference between the two on this matter. In other words, the "harnessing strategy" of the pre-war era would effectively become the new norm. The Storting was more hesitant, with a lot of very vocal opposition, but in the end, there was a clear majority for allowing new foreign direct investments. However, this effectively delayed a number of concessions from 1925 over to 1926, after which the investors cancelled the developments. Exactly how important the political uncertainty and the long process were in these outcomes is not clear, as in all the cases there was a combination of factors. However, the cases provided clear and visible examples that cheap Norwegian hydropower was not so attractive that delays or political uncertainty was inconsequential.

[1086] In April 1925, Alcoa signed a lease with J.B. Duke for 100,000 hp., for which the American aluminium giant would pay $6.50 per year. According to the numbers cited in Canadian historian David Massel, this appears to have been close to the cost price. The concession required Quebec Development Company to install 200,000 hp. within 5 years, at a price estimated $12,000,000, or $60 per hp. This price did not include transmission to the factory sites. In comparison to the Norwegian hydropower, this amounted to a development cost of NOK 223.80 and a power lease contract of NOK 24.25 per hp year in a gold parity exchange rate.
[1087] Storli, "Out of Norway falls aluminium," pp. 185-88; Massell, *Amassing power : J.B. Duke and the Saguenay River, 1897-1927*.

V. The Swedish Restriction Act and the problem of circumvention

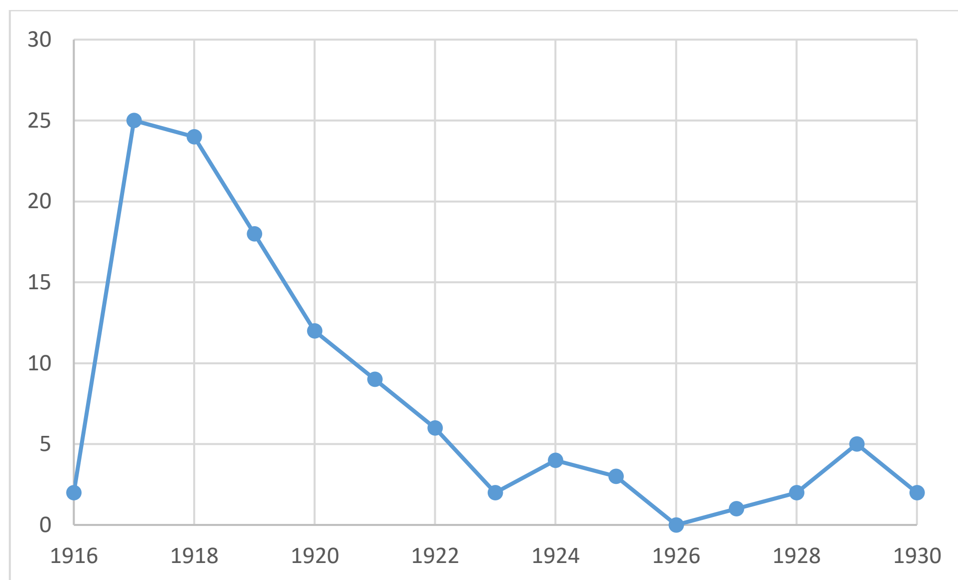
Sweden would also not be spared from the post-war depression and would experience many of the same problems as its neighbour to the west. The country experienced a sharp decline in industrial production in 1920, with unemployment reaching as much as 25%. This downturn was also exacerbated by a deflation policy aimed at returning the Swedish *krona* to the pre-war gold standard. One of the casualties of the downturn was the ambitious hydroelectric development of Harsprånget, which was put on hiatus in 1922 after the only significant customer, the nitrate company AB Elektrosalpeter had decided to cancel its plans. However, as the wartime boom in Sweden had been less staggering, the post-war downturn was also less severe. Sweden also had its own banking crisis, but it was not nearly as destructive. Sweden also managed to bring its currency back to the gold standard by 1924, by which time many of Sweden's important export industries had picked up pace again.

Along with the post-war economic downturn, there was also a notable reduction of cases of acquisitions that the government had to decide to accept or reject according to the 1916 Restriction Act. From 28 cases of companies seeking permission for an acquisition of real property in 1919, there were only 12 cases incoming in 1921. It is in any case not possible to trace any change in policy regarding foreign direct investments in natural resources. What it is possible to assert, is that the Swedish governments did allow pre-existing foreign owned mining companies to acquire new claims adjacent to their existing operation, if these were unlikely to be exploited by any other company. In 1924, the largely British owned *Skandinaviska Montanindustri AB* was granted the right to obtain a mining claim close to their pre-existing operations, although this claim was considered by the local authorities to be practically worthless.[1088] A similar case came in 1928, as the Belgian owned zinc mining company *la Sociéte des Mines et Fonderies de Zinc de la Vieille Montagne* was also granted permission to obtain and develop three zinc holding mineral claims. And while these were not considered worthless, it was assumed that they could not be developed profitably independently.[1089] The year after, British owned *Oskarström Sulphite Mills AB* was allowed to acquire a small waterfall to generate electricity for its pulp factory, as its low energy potential of little more than 100 horsepowers at low water meant that it would only be possible to develop it as a part of the company's pre-existing power generation.[1090]

[1088] Landsfiskalen I Nora Dikstrikt to KB Örebro, 27.02.1924. SRA, Justitiedepartement, Konseljakt 29.08.1924, Nr. 26. Copy of *Kungl. Maj:ts resolution 29.08.1924.* SRA, Kommerskolegiet, Bergsbyrån Fla 46, Folder 2.
[1089] *P.M. ang. ansökning av belgiska bolaget.* SRA, Justitiedepartement, Konseljakt 22.06.1928, Nr. 56.
[1090] *P.M. med anledning av en av Oskarsströms Sulphite Mills.* SRA, Justitiedepartement, Konseljakt 18.01.1929, Nr. 15. SRA, Justitiedepartement, Statsrådsprotokoll, huvudserie vol. 234-236, 18.01.1929

However, these exceptions were rare and only for minor acquisitions for pre-existing companies. There were no cases of the Swedish 1920s governments accepting an acquisition of economically significant natural resources. Indeed, there are altogether very few cases were such permission was at all sought. The seemingly clear line that increased introduction of the 20% foreign ownership limit stipulated by the 1916 Restriction Act might go some way to explain why the numbers of applications from companies continued to decline to no more than one in 1925, and none in 1926 (see Figure 16). While I have been unable to find any survey of how many Swedish companies adopted the foreign shareholding restrictions outlined in the law, a number of applications for exceptions to the Norrland-laws seems to indicate that many did, which again would help explain the decrease in applications, even after the profitability of Swedish resources increased again.[1091]

Figure 16: Restriction Act applications from joint stock companies (1916-1930)



Yet, the low numbers of applications to acquire Swedish natural resources does not necessarily mean that foreign investors refrained from new acquisitions completely, as circumventing the law was also a possibility. One obvious way was to obtain shares in companies that already owned natural resource and were organized with bearer shares, rather than registered shares. Another way was to hire Swedes to act as strawmen in obtaining real property or shares. The extent of this is of course very hard to assess, but as other business historians have shown it was not uncommon.[1092] However, judging from the public discourse at the time, there seems to have been

[1091] See for instance the applications from *Jönkjöpings och Vulcanus Tändsticksfabriksaktiebolag,* granted 12.10.1917, Aktiebolaget Ludvika Bruksägare granted 23.11.1917 and Yngeredsfors Kraft Aktiebolag 21.12.1917 who all introduced the necessary restriction after applying.

[1092] The German steel company *Krupp* used a strawman company owned on paper by five lawyers to obtain shares in the Swedish arms company *Bofors*, and the Dutch company *Moboweg* seems to have controlled the

an understanding that the law both could and was frequently circumvented. Reports that the law was ineffective appeared in Sweden's leading newspapers as soon as the law was passed.[1093]

Indeed, the circumvention problem predated the law itself. A 1913 report on the effects of the Norrland-law concluded that a number of forest companies had indeed used strawmen to obtain forests after 1906, which was supported by the another report in 1920.[1094] Consequently, when discussing possible legislation against strawmanship in 1924, the legislative committee in the Riksdag concluded that: "It should be clear, that the [Norrland-law] as well as [the Restriction Act] has to a considerable extent been circumvented in a way where companies and foreigners have used strawmen to acquire properties which they themselves have been legally prevented from obtaining."[1095]

Finding legislation to combat the use of strawmen had been discussed as early as in the preparations for the Norrland law, but gained new momentum from 1918. While there was broad support for some sort of anti-strawman law in the Riksdag, the process was complicated, and a law acceptable to the RIksdag was only brought forward in 1925. Lindhagen had actively promoted expanding the laws to require persons working directly with a company to apply for the same kind of permission to obtain property as the company itself if they wanted to acquire real property. However, this was rejected. Instead, the law would not require more groups to apply for permission, but establish that if a strawman relationship were found to be in place after the fact, the property would have to be sold within 6 months.[1096] However, this law only targeted private individuals who acquired real property as strawmen for legal subjects who were barred from obtaining such properties without government authorization. It did not cover the use of strawmen to avoid the

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stone exporter *Kungshamns Stenhuggeri AB*. Even the pencil manufacturer *Svenska Blyertspennfabriken AB* was German owned through straw men. Nordlund, *Upptäckten av Sverige*, pp. 126, 74, 210. A list over *Vereinigte Stahlwerke AG*'s interests in Scandinavia shows a number of "cloacked" companies. Harm Schröter, *Aussenpolitik und Wirtschaftsinteresse: Skandinavien im aussenwirtschaftlichen Kalkül Deutschland und Grossbritanniens, 1918-1939* (Frankfurt: Peter Lang, 1983), pp. 412-14. It should be noted that the Restriction Act was not the only reasons why German companies decided to cloak their ownership of Swedish companies. Evading restrictions from the Versallies peace, the clearing system and fear of sequestration following a new European conflict were also important reasons. Nordlund, *Upptäckten av Sverige*, pp. 290-91.

[1093] «Utländska förvärv av svensk egendom: Bulvanverksamhet för att kringgå nya lagen?» Dagens Nyheter 11.07.1916. «Spekulation i Värmlandsgods: Utlänningars förvärv ha tagit oroande utsträkning» Dagens Nyheter 22.02.1918. «Spekulation i Värmlandsgods» Aftonbladet 22.02.1918

[1094] Johan Widén and Karl Åmark, *Den norrländska förbudslagstiftningen och dess verkningar* (Stockholm1913), pp. 28-33.

[1095] «Det torde otvetydigt framgå, att såvel lagen den 4 maj 1906 som lagen 30 maj 1916 I betydange omfattning kringgåtts på det sätt, att bolag och utlänningar använt bulvaner för förvärv av fastigheter, vilka de själva varit lagligen förhindrade att förvärva» Andra lagutskottet utlåtande 31, 1924

[1096]Kungl. Maj:ts. Proposition nr. 216 1925. Motioner i Första Kammaren Nr. 284 1925. Andra lagutskottets utlåtande Nr. 35 1925. Riksdagens Skrivelse Nr. 319. Bihang till riksdagens protokoll 1925. 9 saml. 2 avd.

regulations on share ownership. Thus, it was still possible for a foreign investor to use strawmen to either hold shares directly in a company owning natural resources.

The inherent problems with enforcing the regulations on foreign ownership did not only draw criticism from those who felt it did not go far enough. In 1923, both the managing director of *Skandinaviska Kreditaktiebolaget* (Sweden's second largest business bank) and the managing director of TGO (Sweden's largest publicly traded company) spoke out against the law, deriding it both as ineffective, while at the same time keeping foreigners from buying Swedish shares, thus depriving Swedish companies of welcome foreign investments as well as levelling out the fluctuations of the Swedish stock exchange.[1097] Similar views were echoed by the Swedish economist Eli Heckscher. Hecksher, who had earlier called the idea of regulating against foreign capital as ridiculous as "legislating against foreign grain",[1098] concluded in 1927 that "one has to be happy that the law of 1916 […] has largely been a strike in thin air".[1099] The criticisms of the Restriction Act were also related to ongoing debates in the mid-1920s on the possibility of regulating against the "flight" of Swedish capital abroad. After being a considerable net capital importer for most of the years leading up to 1910, after 1920 Sweden exported more capital than it imported throughout the 1920s.[1100] A perceived shortage of capital for investments in Sweden led some voices on the left to argue for restrictions on capital exports. This led to renew calls among Swedish businessmen that the restrictions on foreign capital should be eased to make up for the outflow of Swedish capital. In the end, neither suggestions were ever turned into legislative initiatives, and the Swedish Restriction Act remained.

Despite all the talk of capital shortages and the possible role the Restriction Act played, significant amounts of foreign investments still made their way into Sweden and its resource industries. By reducing the voting rights on foreign shares, crafty entrepreneurs could sell shares to foreigners far in excess of 20% capital ownership, without going foul of the Restriction Act. It was precisely this model that was central to rise to dominance of one of the most controversial Swedish financiers in the inter-war era, the "match king" Ivar Kreuger.

[1097] «Hur skall vår industri åter växa sig sterk?» Aftonbladet 24.04.1923
[1098] «[…]lagstifta mot utländsk spannmål». "Lagstiftningen mot utländsk kapital" Svenska Dagbladet 16.06.1923
[1099] "[…]kan man prisa sig lycklig att 1916 års lag […] till stor del blivit ett slag i luften». «Kapitalrörelserna» Dagens Nyheter 11.07.1927
[1100] Erin Elver Jucker-Fleetwood, *Sweden's capital imports and exports* (Stockholm,: Natur och kultur, 1947), p. 18.

A Swedish colossus on feet of B-shares

Ivar Kreuger's meteoric rise in the world of international finance in the years following the First World War is a complicated tale to which a few sentences will hardly do justice.[1101] Suffice to say, his prospects changed dramatically when he reorganized his construction company into the holding company *Kreuger och Toll AB*. Through a bit of creative bookkeeping, Kreuger managed to raise significant amounts of capital on the American markets by watering the stocks of a subsidiary. By managing to raise large amounts of capital abroad, Kreuger was well positioned to take advantage of the weakened Swedish capital markets following the post-war downturn.

One of the cornerstones of his new empire was the match company *Svenska Tändsticks AB* (Swedish Match), founded in 1917 as a merger between two older Swedish match companies. It was in this company that Ivar Kreuger first began to issue large amounts of B-shares for foreign capital markets in 1924. These shares carried the same risk and dividends as the A-shares, but only held 1/1000 of the voting rights, which thus made it possible to stay within the limits of the 1916 Restriction Act. This lack of control over the company was accepted by the new shareholders due to promises and history of high returns on the shares, and B-shares would more often than not trade for higher prices than the Swedish only A-shares. [1102] This system would later be repeated in many of Kreuger's companies. Through this, and other ways of channelling capital from abroad, Kreuger expanded massively in Sweden in the latter half of the 1920s. From 1925-28, Kreuger obtained shares for around SEK 150 million. These included a number of key natural resource intensive industries, including a 23% stake in TGO and a number of pulp and paper companies that were merged into *Svenska Cellulosa AB*.[1103]

Kreuger was not the only Swedish investor to follow this strategy. In 1925, Skandinaviska Kreditaktiebolaget, which was Kreuger's closest Swedish banking connection, had obtained a controlling stake in *Centralgruppens Emissionsbolag.* This company had carried out extensive mineral exploration in the county of Västerbotten since 1918, and had discovered a number of very

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[1101] Iver Kreuger's life has been the subjects of several books and biographies (as many as 70 according to Tom Kärrlander, "Frank Partnoy, The Match King. Ivar Kreuger, the Financial Genius
behind a Century of Wall Street Scandals," *Scandinavian Economic History Review* 59, no. 2 (2011).), such as: Frank Partony, *The Match King: Ivar Kreuger, The Financial Genius Behind a Century of Wall Street Scandals* (New York: PublicAffairs, 2009); Lars-Erik Thunholm, *Ivar Kreuger: the match king* (Stockholm: Fischer, 2002)., in addition to a number of more sensationalist and speculative works on the events surrounding his death. One reviewer of of Partonoy 2009 counts around 70 books written on the

[1102] Jan Glete, *Kreugerkoncernen och krisen på svensk aktiemarknad : studier om svenskt och internationellt riskkapital under mellankrigstiden*, Stockholm studies in history (Stockholm: Almqvist & Wiksell, 1981), pp. 103-04.

[1103] *Kreugerkoncernen och krisen på svensk aktiemarknad*, pp. 188-202, 336-407; Gustaf Utterström, ed. *SCA 50 år : studier kring ett storföretag och dess föregångare* (Sundsvall: Svenska cellulosa AB 1979).

promising pyrite ores containing gold and copper. The pyrite was however a rather complex ore with high arsenic content, and a full-scale extraction would require massive amounts of capital. Consequently, the bank organized the new mining companies so that 10% of the shares were A-shares with a 100 votes each, while the remaining 90% were B-shares with one vote each.[1104] Thus, the bank could stay within the limits of the Restriction Act by just holding on to 10% of the capital.

While the complete makeup of Kreuger's financial setup was not public knowledge, the use of large scale passive foreign ownership did not go unnoticed or without controversy. In 1930, Foreign affairs ran an article on Kreuger's rise, and underlined its peculiar structure, including the fact that SEK 10,000,000 A-shares held 100,000 votes, while the remaining SEK 66,000,000 in B-shares held only 660 votes, noting that his access to almost limitless international credit "effectively seems a riddle".[1105]

Yet, if some American investors could perhaps worry about such large investments with little effective control, the opposite problem caused alarm in some quarters in Sweden. Not only could this "passive" ownership perhaps not be so passive in reality, but if the vast majority of capital were foreign owned, then vast majority of capital gains would also go abroad. The Social Democrats wanted to put an end to this, and in 1928 motioned to make the limit on capital ownership and voting power equal in the Restriction Act.[1106] However, the problem was brushed aside by the rest of the Riksdag. The parliamentary committee handling the motion saw this inflow of foreign capital as being very beneficial overall, without which "the development, which have taken place in Swedish industry and trade enterprises […] should in all probability not have come about".[1107] These low voting share arrangements should instead be viewed as "practically the equivalent as [corporate] bonds".[1108]

However, Kreuger's acquisitions in Swedish was not just lucrative in themselves, but also because they could offer new possibilities internationally. TGOs ore exports constituted about half of all international iron ore trade in the middle of 1920s. In order to improve its international position, TGO had also secured iron mines in North Africa, and Kreuger was also interested in Chilean iron mines. However, the biggest obstacle to TGOs continued dominance of the international iron ore market were the export restrictions placed upon the rich Lapland-mines.[1109]

[1104] Glete, *Kreugerkoncernen och Boliden*, pp. 39-40.
[1105] J. F. Deck, "The Match Stick Colossus," *Foreign Affairs* Vol. 9, no. 1 (1930): p. 151.
[1106] Motioner i Första kammaren, Nr. 208, 1928.
[1107] «Den utveckling, som försiggått i vissa svenska industri- och handelsföretag [särskilt å senere tid], skulla med all sannolikhet ej have ägt rum». Första lagutskottets utlåtande Nr. 27, 1928.
[1108] «närmast vara att likställa med obligationer». Första lagutskottets utlåtande Nr. 27, 1928.
[1109] Glete, *Kreugerkoncernen och krisen på svensk aktiemarknad*, 252-80.

Consequently, the company once again entered into negotiations with the Swedish government to both increase the amount of ore they could export per year and to extend the time period before the state could nationalize the mines. In its dealings with the government, TGO maintained the expansion was necessary for TGO to hold onto the German market, as if their demands were not met, the German steel industry would be forced to sink large sums to secure their ore from elsewhere. Furthermore, the extension was necessary to ensure that TGO would have enough time to recover the investments of the expansion programme. Swedish historians disagree on whether this explanation was credible, or whether or not securing its international position and heading off a possible nationalization were the main motives.[1110] For our purposes, it is sufficient to note that they were believed by the Liberal Ekman government.

The deal they negotiated was in many ways a cementation of creating LKAB as a joint venture between the Swedish state and TGO. The time limit for a possible nationalization had already been extended by four years in 1922, in exchange for greater representation on the LKAB board by the state, and a right for the state to also nationalize part of TGOs shipping and ore trading organization along with the remaining 50% of LKAB. The new agreement would postpone the date when a full nationalization was possible from the end of 1936 to the end of September 1947. In addition, the amount of ore LKAB could export each year was increased to 9 million ton – a substantial increase from the pre-existing capacity of about 6.7 million tons, and nearly two and a half times the amount of the original 1907 arrangement. In return, the 50% owned by the Swedish state would now be more in line with a co-ownership. The state would be entitled to nearly a full 50% of the profits generated by the mining, at a royalty rate set every year, but would also take responsibility for all new debts LKAB took on once the new arrangement became active. The royalty rate was set to increase when the option to nationalize the mining company came to pass, so that the profits from the first 3.75 million tons would be divided 50/50, while all that exceeded this amount would be divided 33/67, in favour of the state.[1111]

This arrangement was not without its critics. Increasing production and giving the state a more equal position both in terms of profits and debt was one thing, but postponing the date for a

[1110] Nils Meinander largely supports the idea that holding on to the German markets was the main motive for TGO. Karl-Gösta Alvfors on the other hand claims that heading off a possible nationalization by an ascendant Social Democratic Party was the real motive. This was in part supported by the memoars of Oscar Rydbeck, the head of Skandinaviska Banken and close ally of Iver Kreuger. Alvors also underlines underlines the importance of the Swedish ores for TGOs wider international position in the iron ore market, a point which was frequently made by critics at the time. A later account by Jan Glete finds both explanations plausible, yet speculates that short term increase in the value of the TGO shares might also have played an important part. Meinander, *Gränges*, pp. 105-207; Karl-Gösta Alvfors, *1927 års malmavtal* (Lund: Berlingska Boktryckeriet, 1967); Glete, *Kreugerkoncernen och krisen på svensk aktiemarknad*, pp. 254-58.

[1111] Kungl. Majt:ts proposition Nr. 241 1927

possible nationalization and adding a further economic incentive not to do so when it passed – while at the same time not reducing the price the state had to pay to nationalize it, did not sit well with the opposition Social Democrats. Instead, the Social Democrats motioned to renegotiate a deal where LKAB was allowed to increase exports, but not to extend the nationalization deadline or alternatively reject the deal for the time being.[1112] They also received tenuous support from the agrarian Farmers League – who together could command a majority of the Second Chamber. Yet, the Farmers League was also vary of aligning themselves too closely with the socialists. When the non-socialist majority of the parliamentary committee itself suggested a few changes to the arrangement, including raising the royalty rate for the years 1937-1942 and handing over TGOs smaller inactive mining claims in the region to the state, most of the agrarian MPs came out in favour or the deal.[1113]

In all, the conflict over the 1927-deal lacked the same clear resource nationalist dimension of the 1907-deal. The Social Democrats for their part were critical of the role of Kreuger's trust, and his foreign money. However, Kreuger's dominance over TGO was not yet as pronounced as it would be later. The government for its part dismissed much of the negative press about Kreuger's match stick empire on the continent as "tall tales",[1114] and that even if foreign influence could be brought to bear on TGO, it would in any eventuality be countered by the increased direct influence of the Swedish state. As the increased extraction rate was not a big dividing issue, it left much of the conflict down to how economically beneficial a state run mining operation would be compared to the deal at hand. However, even here the Social Democrats were eager not to push nationalization as a matter of socialist dogma and rather keep the option open as a means of getting the best deal for the Swedish people.[1115] Pushing too hard for nationalization might alienate some moderate voters for the upcoming election in 1928, in which the Social Democrats eyed the possibility of winning an outright majority by themselves.[1116] This left the Social Democrats isolated, but also without a strong alternative that was worth risking the short-term future of the Lapland mining operation. The result was a further solidification of LKAB as a cooperative effort between the Swedish state and some of the most powerful Swedish business interests.

[1112] Motioner I Första kammaren, Nr. 347, 1927

[1113] In the Second Chamber, the Social Democrats and Communists were only joined by two Farmers League MPs, leading to the revised deal being passed with 117 votes against 100. AK nr. 40 1927, pp. 109-114

[1114] Swe: "röverhistorier". See statement by foreign minister Eliel Löfgren, AK nr. 40 1927, pp. 102-105

[1115] See esp. statement by Social Democratic chairman Per Albin Hansson. AK nr. 40 1927, pp. 88-89

[1116] The 1928 election was one of the most fiercy contested elections in Swedish history, marked by its aggressive tone and scare tactics. The Social Democrats, who had organised a electoral alliance with the Swedish Communist Party lost the election in the end, and the liberals were instead replaced by a conservative government led by Arvid Lindman.

On the other hand, this did not mean that government and Swedish industry always found politically acceptable compromises in the minerals sector. The large deposit of sulphite ores found in Västerbotten near the town of Skellefteå after 1918 were a collection of claims both staked by private prospectors on private land, but also on public land (as the right to do so had been reinstated as a war-time shortage measure) and even in some cases by publicly financed prospecting. This meant that the state held the rights to a significant part of the pyrite claims in the area. However, compared to those owned by Centralgruppens Emissionsbolag, they were in a clear minority – especially after the largest *Boliden-field* was discovered in 1924. The expensive infrastructure and industry investments required to extract and process the ore also meant that extracting the state's claims alone would likely be prohibitively expensive.

Consequently, the government wanted some arrangement where the ore fields would be developed and extracted in cooperation.[1117] The state initially wanted to create a joint venture to own the state's claims, which would also partake in the eventual processing of the ore. In return, the state would build a wide gauge railway to connect the mineral deposits west of the coastal railway to the main railway network. However, Centralgruppens Emissionsbolag would only consider a joint venture for the extraction and processing of the ore to the west of the coastal railway, and thus leave much of the rest of the ore claims where the state had less of a stake out of the bargain. When the Boliden-field proved to be even richer than first anticipated, the company's interest in the state's field and the railway dissipated further. Consequently, when negotiations picked up again a joint venture was off the table. Instead, the government and the company agreed on a settlement where instead the company would rent all the government's claims for a period of 60 years, in return for an annual payment of SEK 100,000, and a royalty equivalent to half the profits generated by extraction of ore on the state's claim.[1118] The government would not build a railroad, and would otherwise have no direct influence over the mining company.

While this deal would promise some return for the government, it turned out to be politically unacceptable for the Swedish Riksdag. The parliamentary committee decided, unanimously, to reject the agreement.[1119] The Riksdag considered that the value of what the government controlled was still too uncertain, and with a 60-year deal there would be little possibility of changing it. However, the lack of state influence was also an issue, especially for the Social Democrats, who were keen to criticise the state's participation in creating a "trust" and point

[1117] Kung. Maj:ts prp. 230 1927
[1118] Ore processed at the company's plant would be priced by a committee of three, one appointed from the state and the company respectively, with the last one appointed by the Royal Institute of Technology.
[1119] Statsutskottets utlåtande Nr 143, 1927

out the fact that the Swedish mining company allowed 90% of its shares to be owned by foreigners.[1120] The government for its part defended its proposition as the best way of initiating a "rapid creation of a united a rationally organized mining and processing industry"[1121] and reminded the parliament that further exploration would be costly.[1122] Nevertheless, even if the deal was turned down by a united Riksdag, there no agreement on a very different alternative. The Swedish government did try to lay obstacles in the way to force through a better deal, as it had done in the Lapland mines, and in any case did not have much leverage at its disposal. The private mining company was confident in moving on its own.

To summarize, the Swedish resource nationalist institutions set up before and during the First World War were kept relatively unchanged in the 1920s. Unlike the Norwegian case, there was no discernible change in how the Restriction Act was implemented. Even with an ongoing debate of capital shortages in Sweden, there was no large greenfield foreign direct investments into Swedish natural resources approved through the Restriction Act. However, there were a number of ways of circumventing the laws, which makes it unclear exactly how effective it was. Undoubtedly, substantial amounts of foreign investments did indirectly make their way to these industries through "passive" share ownership arrangements, most clearly exemplified by the Kreuger-empire.

Despite its perceived ineffectivity, the Restriction Act was neither scrapped nor amended. The business interests and liberal economists who argued for repealing the act were not able to create much broader support for actions that would reopen the possibility of increased direct foreign ownership of natural resources. Conversely, the Social Democrats were not able to garner support outside their own party to bolster the Restriction Act. Even though Kreuger's empire had its critics outside socialist circles as well, as long as his resource companies were seemingly under Swedish control, the majority did not see any cause for further intervention. Similarly, the new agreements on LKAB strengthened the "public-private partnership" structure of LKAB. The state would secure more control and larger returns than first outlined, but TGO would still have the strategic control over the company.

Part of the explanation can be sought in the rise of the Social Democrats. As seen in chapter 4, new state intervention held a much more negative ring to it for the 'bourgeois' parties when there was a clear possibility that this state power might after the next election be wielded by a political

[1120] See statemet by Carl Immanuel Asplund, FK 37 1927, pp. 120-121
Motioner i Andra kammaren, Nr 474. Bihang till riksdagens protokoll 1927, 4 saml.
[1121] See statement by minister of trade, Felix Hamrin. FK 37 1927, p. 119
[1122] According to Hamrin, the Swedish government had spent about SEK 400,000 og exploratory diamond drilling so far. In comparison, Centralgruppens Emmisjonsaktiebolag had spent close to SEK 2,000,000. FK 37 1927, p. 119

party with serious ambitions of challenging the existing economic and political order. Yet, beyond that, there was also no obvious target for resource nationalist policies that captured the public imagination. As we have seen previously, new resource nationalist initiatives were usually precipitated by an event or a widely perceived threat around which support for intervention could be mobilized. Without a clear popular resource nationalist rallying “cause” there was nothing to impel any fundamental reconfiguration of the Swedish regulations. On the other hand, despite criticisms of capital exports, Sweden did not experience very obvious stagnation of its natural resource industries that could convince a reluctant public that new foreign direct investments were indispensable.

VI. A more accommodating policy towards foreign direct investments in Norway? (1927-1936)

As we saw in section III and IV, the Norwegian Storting had begrudgingly begun to accept new foreign direct investments as a necessary way out of the crisis. Despite the changing mood, the projected aluminium developments did not materialize either in Kinsarvik or at Vigeland Brug. This prompted the question – was the concession law itself the problem? Concession law reform was thus once more put on the agenda, particularly in circles where it had never won much praise in the first place, such as the Norwegian industrial and engineering circles.

It was primarily the Swedish Water Act that provided the most alluring alternative. In December 1926, the Polytechnical Society organized a discussion on how the Norwegian concession laws for hydropower compared with it Swedish equivalent.[1123] Unsurprisingly, most of the attending engineers and business people found the Swedish Water Law commendable in many ways – the concession tax maximum was lower, there was no Right of Reversion and as the cases were handled by the judiciary, they were more predictable and less susceptible to the transitory political considerations. Critical voices were not just restricted to disgruntled engineers and investors. Birger Stuevold-Hansen, who had recently stepped down as head of NVE also admitted that he saw certain advantages in the more “de-politicised” Swedish system, even though these advantages were exaggerated by the proponents of reform. Former Prime Minister Gunnar Knudsen also joined the

[1123] The proceedings of these two meetings are printed in Teknisk Ukeblad, Issue 50-52 1926, and Issue. 13 1927.

debate, and while he defended the laws overall, he did admit that certain aspects of the Swedish legislation should perhaps be brought into the Norwegian one, such as time limits for the concession process.

Yet, while many could agree that the Swedish legislation had many advantages to the Norwegian legislation, there was not the same universal agreement on whether the Norwegian concession laws had had a decisive effect in lowering the growth of the energy intensive industries in Norway. Economic instability in Norway and Europe as well as advances in coal fired electricity generation were cited by many attendees as more important. Nor was there agreement on exactly *how* the Norwegian laws were detrimental to investments. Indeed, the Norwegian laws were both accused of being too rigid in that it did not take enough case-by-case considerations, as well as too flexible, allowing the implementation to be too arbitrary.

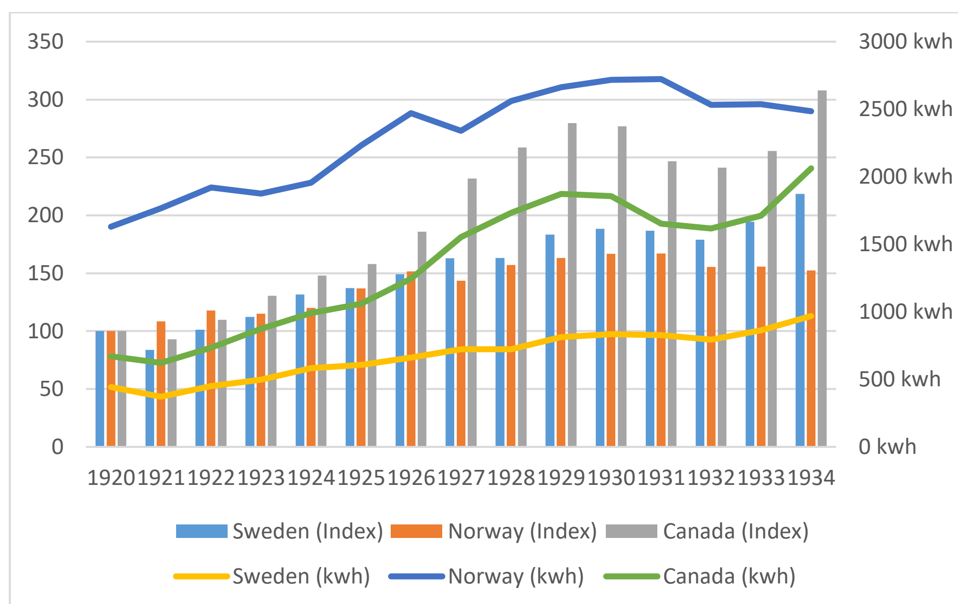
Even if the concession laws were not unequivocally the main culprit of the troubles experienced by the Norwegian energy intensive industry, relaxing them might be a way to alleviate it. In this regard, the Norwegian engineering and business community was not about to pin their hopes on the government initiating reforms friendly to private ownership on their own. In August 1927, the Norwegian Engineers Society (*Norsk ingeniørforening*) agreed to join with the Norwegian Electricity Works Association (*Norske Elektrisitetsverkers Forening*) to examine the question of a revision of the concession law.[1124] Spearheaded by the industrious efforts of Nils Tråholt, the chairman of the latter organization, the initiative had by the end of 1928 gathered a large collection of engineering, electricity and industry associations, who agreed that to appoint a representative committee to propose legal reform. The committee would consist of Tråholt himself, as well as a select group of prominent engineers and business people, including NACo and Saudefaldene director Sigurd Kloumann and Bjarne Eriksen, the right hand man of Norsk Hydro director Axel Aubert. However, the committee also contained people with experience from the other side of the table, namely former Watercourse Commission member Ragnvald Bødtker, and the committee also hired former NVE director Stuevold-Hansen as a consultant.[1125]

The revision process proved to be time consuming, and the committee did not present its proposal before late August 1933. The report itself was a scathing review of the concession law's effect on Norwegian hydroelectric development. The chief complaint was that the system was too

[1124] "Landets ingeniører trått sammen i Oslo i dag" Dagbladet 29.08.1927
[1125] The full list also incuded Hans Thomas Horn, the managing director of *Oslo gass- og elektrisitetsverk,* Fritz Einrich Frølich, chairman of *Industriforbundet, Eksportindustrigruppe*, and Birger Olafsen and Georg Lous as legal consultants. They were later joined by Asbjørn Bjerke, Christian Lindboe, Eivind Hansson, Gunnar Parmann and Johannes Sandberg. Their positions are taken from Hj. Steenstrup, *Hvem er hvem?* (Oslo: H. Aschehoug & Co., 1930).

time consuming and too susceptible to local political pressure, especially for concessions decided by the Storting. In addition, concessions were too heavily taxed and had too many ridged and specific terms, many of which were largely ineffective.[1126] They also pointed to the weak growth of Norwegian hydropower capacity in the 1920s, which according to their numbers had grown by only 32%, in contrast to Canada, where it had grown by 128%. Canada had arguably had a much faster population growth than Norway, but the same picture bears out in electricity consumption per capita (see Figure 17, p. 310). The committee would not go so far as to give the concession laws the sole blame for this fact, but concluded, “that the concession laws’ frightening impact has also played its part in this unfortunate development is beyond doubt.”[1127]

Figure 17: Swedish, Norwegian and Canadian electricity consumption per capita[1128]



Consequently, the *Energy suppliers and industry’s concession law committee* advocated a wide-reaching reform. The most radical proposal was to establish a Water Court system along Swedish lines. These new courts would deal with all concessions regarding development or regulations of watercourses. The government would however retain the authority to grant or deny concessions for acquisitions of riparian rights, and also hold a veto power over regulations which would lead to “singularly large changes in the natural situation or incur […] significant damage for

[1126] These complaints are listed in 11 points in Nils Traaholt et al., *Instilling fra Elektrisitetsforsyningens og Industriens Konsesjonslovskomité* (Oslo1933), pp. 11-14.
[1127] “At konsesjonslovens skremmende virkning også har sin andel I denne ugunstige utviklingen kan der ikke være tvil om.” *Instilling fra Elektrisitetsforsyningens og Industriens Konsesjonslovskomité*, p. 15.. According to the committee’s statistics, the installed capacity of Norwegian hydropower plants had grown from 1,271 MW to 1,690 MW
[1128] Bouda Etemad and Jean Luciani, *World energy production, 1800-1985* (Genève: Librairie Droz, 1991).. Population figures are taken from Angus Maddison, "Maddison Historical GDP Data " World Economics, http://www.worldeconomics.com/Data/MadisonHistoricalGDP/Madison%20Historical%20GDP%20Data.efp..

private and common interests”.[1129] However, the state would only have the power to set terms to acquisitions by foreigners or foreign owned companies, “set to protect Norwegian industry or national interests”.[1130] Moreover, it would no longer be mandatory for the government to put a concession before the Storting for approval, but would instead be done at the government’s discretion. Other terms would instead be decided when a riparian owner sought a concession to develop the watercourse, which would be decided by the Water Courts.

More fundamentally, the committee’s proposed system completely removed the “rent capture”-element from the concession laws. The committee argued that the slowdown in hydroelectric development showed that there was no reason to tax hydroelectric production more heavily than other economic activities and “principally reject[ed] all duties of a fiscal nature”.[1131] Instead, duties should only be imposed to cover direct damages from river regulations or to alleviate difficulties caused by halts in production, and kept in separate funds separate from municipal and state budgets and restricted to these purposes alone. In addition, the committee also wanted to remove the right of reversion from domestic owned companies, even if the right of reversion was “in and by itself not a decisive obstacle for the economic exploitation of waterfalls”.[1132] In other words, the committee wanted the Right of Reversion to be only used to prevent foreign ownership, and not to provide a new source of public income in the long run. However, the committee did acknowledge that the terms regarding social provisions of workers, such as housing, medical assistance etc. should be kept, as they were necessary for regulating the difficult conditions of the isolated places where much of energy intensive industry was located – at least until new laws could deal with these issues separately from the concession laws.[1133]

All the while, drift towards a more liberal policy towards foreign establishments and acquisitions continued. In 1926, the government was finally able to find a company willing to lease power from Glomfjord, after years of fruitless efforts. The company in question was the British owned *Aluminium Corporation Ltd.,* who would lease the defunct zinc factory as well as up to 36,000 kW (48,900 hp.) to smelt aluminium, for which it would pay NOK 60 per kW/y (NOK 44.16 per hp/y), which would be reduced to 54.50 per kW/y when using all the power. When Glomfjord had first

[1129] “[…]særlig store endringer I de naturlige forhold eller volde […] betydelig skade for private og almene interesser.” Traaholt et al., *Instilling fra Elektrisitetsforsyningens og Industriens Konsesjonslovskomité*, p. 49.
[1130] “[…}siktende på å beskytte norsk næringsliv eller andre nasjonale interesser[…]” *Instilling fra Elektrisitetsforsyningens og Industriens Konsesjonslovskomité*, p. 52.
[1131] “[…]tar prinsippmessig avstand fra alle avgifter som er av fiskal art”. *Instilling fra Elektrisitetsforsyningens og Industriens Konsesjonslovskomité*, p. 59.
[1132] «[…]i og for sig ikke en avgjørende hindring for vannfallenes økonomiske utnyttelse». *Instilling fra Elektrisitetsforsyningens og Industriens Konsesjonslovskomité*, p. 57.
[1133] *Instilling fra Elektrisitetsforsyningens og Industriens Konsesjonslovskomité*, p. 62.

been nationalised in 1918, the government had vowed not to rent out power to foreign owned companies. In 1926, just such an arrangement passed the Storting unanimously with little criticism or comment.[1134]

Two years later, an American company, *The Melltone Corporation,* was granted a concession to obtain a controlling stake in A/S Arendal Smelteverk, and the following year a Canadian company established *Falconbridge Nikkelverk*, which acquired and rebuilt the defunct Norwegian owned nickel refinery, *Raffineringsverket A/S*. All these acquisitions were power-leasing companies and not power generating companies. However, in 1929 one of the few Norwegian owned power generating industrial companies, Meraker Brug, was also facing economic problems. Its main creditor was Foreningsbanken, which had been placed under government administration, and in order to recoup some of its losses, the carbide and ferroalloy branches of the company, including its power generation was sold off to Union Carbide.[1135] This meant that the concession also had to be approved by the Storting. Yet while many lamented the fact that the company was sold, and there was much criticism from the opposition Agrarian Party and Labour Party on the gold parity policy, which had exacerbated the country's economic difficulties, there was no willingness in the Storting to introduce new terms or reconsider other alternative means of refinancing. In the end, only two MPs voted against the concession.[1136]

Yet, if the mood in the Storting had become somewhat more positive to new hydroelectric investments, the zeal for reforming the concession laws within the political classes did not match those of the country's leading businessmen. Furthermore, foreign acquisitions could still create public uproar and even lead to the fall of a government. Ironically, the case in question was not related to a natural resource intensive industry, but was instead about the independence of the Norwegian fats industry vis-à-vis the Anglo-Dutch soap and margarine trust, Unilever. In early 1930, the largest Norwegian owned soap manufacturing company *Lilleborg Fabrikker* had agreed under pressure to enter into the Unilever sphere, rather than risk an open price war. As part of this arrangement, Unilever would take a 50% stake in Lilleborg, through *Denofa* – another Norwegian fats company it already controlled. This was an important step on the way to almost complete Unilever dominance on the Norwegian soap and fats markets. As part of this, Denofa and Lilleborg decided to seek a concession for the acquisition, even though as it was only a 50% stake, it was not entirely clear that it was necessary. The Liberal government in office at the time refused to grant

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[1134] St. prp. nr. 84 1926. Innst. S. nr. 186. Stortingstidende 1926, pp. 2854-2856. Thue, *Statens kraft 1890-1947 : kraftutbygging og samfunnsutvikling*, pp. 328-43.
[1135] St. prp. nr. 29, 1929
[1136] Stortingstidende 1929, pp. 1228-1235

such a concession if Unilever did not also agree to a market arrangement with the remaining independent Norwegian margarine and soap manufacturers, which limited Unilever's market share to around a third of the total market. Unilever reluctantly agreed even though it was a less dominant position than it had envisioned for itself. The Norwegian government for its part was also anxious not to create an open conflict with the fats giant and had to weigh in the interests of the Norwegian whaling fleet, which depended on selling whale oil to Unilever. The concession was granted, but the market arrangement accompanying it was later challenged by the *Norwegian Trust Directorate*, a regulatory authority set up in 1926 to regulate cartel arrangements, and headed by a radical and independent minded Liberal politician, Wilhelm Thagaard. The government considered Thagaard's intervention as going beyond the intended mandate of the law, and proposed to change the law to prevent such a thing happening again. However, when the decision to grant a concession was reviewed by the parliamentary protocol committee, the government came under severe criticism and the majority of the committee wanted the decision to be rescinded. [1137] The government found this unprecedented second-guessing to be "in reality a vote of no confidence". Yet, as a number of Liberal MPs went against their own government, support from the Conservatives was not enough and government was defeated, and promptly resigned.[1138] In the end, the new Agrarian party did found that it was pointless to try to change the concession, as Unilever could reduce its stake to just short of 50%, while still retain effective control of the company.[1139]

One of the results of the Lilleborg-Unilever case was that instead of a liberalization of the concession laws, the laws were tightened. In order to avoid a similar situation as the Unilever case, where a company could avoid the concession law by a dominant minority stake, the law was revised to make acquisitions of a 35% stake and over conditional to a government concession.[1140] This was tightened further in 1933, when another amendment clarified that a 35% stake was not just calculated from a nominal share value, but also from voting power.[1141] Both these revisions were voted through unanimously.

Consequently, when the *Energy suppliers and industry's concession law committee* published its proposal in late 1933, their ideas did fall on fertile political ground. The Liberal Party, which had regained power after two years of Agrarian Party rule, was not about to embark on a major reform

[1137] Innst. O. VI. 1931
[1138] The full debate can be found in Odelstingstidende 1931, pp. 135-328
[1139] A thorough summary of the Lilleborg-Unilever case can be found in: Pål Thonstad Sandvik, "Såpekrigen 1930-31 : Lilleborgsaken, venstrestaten og norsk økonomisk nasjonalisme," *Historisk Tidsskrift* 89, no. 3 (2010); Pål Thonstad Sandvik and Espen Storli, "Big Business and Small States, Unilever and Norway in the interwar era," *Economic History Review* 66, no. 1 (2013).
[1140] Ot. prp. Nr. 31, 1931
[1141] Ot. prp. Nr. 9, 1933

that would go a long way to admit that the regulatory system they had created and put so much political capital into was a failure. While much of the conservative press continued to blame the concession law for the decline in resource intensive industry, the only party that still openly talked about a wide concession law reform were the National Liberals.[1142] However, this party had now become a parliamentary irrelevance after the 1927 election, varying between one and three representatives in the Storting, before disappearing for good after 1936. The Conservative party campaigned on removing red tape and taxation in general, but not against the concession laws in particular.

Instead, the socialist Labour Party would become the single largest party in the Storting. The Labour Party, as we have seen, had been decisive in both 1909 and 1917 in creating a stricter concession law than what would otherwise have been the case. However, the Labour Party did not hold the same scepticism of big industry as a basis for growth and employment as much of the liberals and agrarians. In 1927, the soon to be Labour cabinet minister Alfred Madsen publicly opened the question of whether the concession laws needed to be reformed in a fashion more friendly to growth. While Madsen saw the Right of Reversion and "the revolutionary basis"[1143] in the concession law as "the most valuable […] the Liberals have created"[1144] his own party was opposed to "the Conservatives and the Agrarians production- and labour unfriendly policy".[1145] In other words, the Labour party was keen to adopt a concession policy that both furthered growth and jobs, while at the same time improving labour conditions. On the latter point, the party had unsuccessfully pushed for the introduction of a NOK 500,000 work stoppage fund as a condition for hydropower concession on several of the big concessions of the mid-1920s. However, exactly how the party would promote growth in the energy intensive industries was less clear. Madsen emphasised that the solutions needed to be "pragmatic", and that the nationality of the investors was a secondary concern to tackling unemployment. However, Madsen gave no indication as to whether such pragmatism included lower concession taxes or loosening regulations for private investors.[1146]

[1142] See for instance: «Professor Brøggeers foredrag i Trondhjem» Adresseavisen 15.09.1930 and «Konsesjonslovgivningen må op til revisjon» Adresseavisen 13.12.1934. The short-lived fascist party, *Den Nasjonale Legion,* also campaigned to scrap the concession law in 1927. See: «Dragesæden spirer» Stavanger Aftenblad 06.08.1927. The party was dissolved I 1928.
[1143] «[…]det revolusjonære grunninnhold[…]» Stortingstidende 1927, p. 330
[1144] «[…]det verdifulleste som [det gamle] venstre har vært med på å skape» Ibid.
[1145] Ibid., pp. 329-332
[1146] See Madsens statements in the inaugural speech of the 1927-Storting, Stortingstidende 1927, pp. 329-332. Also: "Den økonomiske krise" *Arbeiderbladet* 02.02.1927. Det Norske Arbeiderparti, *Politiske kampspørsmål: Saker på det 75. Storting* (Oslo: Arbeidernes Aktietrykkeri), pp. 25-26.

When the Labour Party in the end came to power in 1935, it soon became clear that easing the conditions of the export industry by loosening the regulations was not going to be a part of the socialist counter-crisis strategy, even if a reform of the concession law was still a question they wanted to look into. Ole Colbjørnsen, who became one of the leading economic planners for the Labour Party, argued publicly on several occasions against the engineers and business organization's narrative that the concession laws was a decisive factor in the lethargic development of Norwegian industry since the Great War. As proof that this was not the case, Colbjørnsen referred to all the concessions given before the stricter 1917-laws been introduced which remained undeveloped. Instead, the international economic difficulties as well as cartelization by producers in larger countries had stunted Norwegian big industry. Thus, easing the restrictions would not make much difference. Instead, Colbjørnsen wanted an active state policy to use Norwegian natural abundance to become less intertwined with the winds and whims of the international economy. Rather than trying to compete as an attractive host for export oriented industry, Norwegian resources should instead be mobilized for steel production for the home market, coal replacement and other import substituting initiatives.[1147] As the 1937 drew to a close, Traaholt lamentingly admitted to the Norwegian Engineers Society that since his committee had submitted their reform proposal to the government and parliament, they had heard nothing.[1148]

There was in other words not to be a repeat of the Swedish Water Law in Norway. Despite a concerted effort among some of the leading Norwegian businessmen involved in hydroelectric production, the initiative fell flat. Part of the explanation lies in the fact that the political constellations in power in the 1930s were not the likeliest to liberalize a law they had all fought to create. However, there seems to have been a general reluctance among Norwegian politicians to put concession law reform on the political agenda. The Great Depression had damaged the credibility of economic liberalism and market oriented sollutions in the eyes of many Norwegians, as it had in much of the rest of the western world.[1149] Moreover, passing a wholesale liberalization of the concession law might also be politically sensitive. Despite the gradual acceptance for a much more relaxed policy towards foreign direct investments in Norwegian hydropower, the Lilleborg case had clearly demonstrated that economic nationalist sentiments might easily flare up. In addition, even those most eager to change the concession law did not agree that the concession laws alone were to

[1147] «Vi må få mer fart i vannkraftutbyggingen», Arbiderbladet 30.11.1935, «Mer interesse for vannkraftsutbygning», Arbeiderbladet 18.04.1936, «Elektrisitetspolitikken», Arbeiderbladet 15.11.1937
[1148] «Vannfalls-utnyttelsen er hårhendt behandlet hos oss: Konssjonslovene ikke ajour med utviklingen» Aftenposten 13.11.1937
[1149] Lie, *Norsk økonomisk politikk*, pp. 59-76; Hanisch, Søilen, and Ecklund, *Norsk økonomisk politikk*, pp. 101-05.

blame for the troubled state of much of Norwegian hydroelectric and mining industries in interwar Norway, but rather one factor among many. Not only did this indicate that changing the laws might not really change the situation all that much. The instability of the Norwegian hydroelectric industries had led many to the conclusion that export oriented resource industries were not the golden route to rapid economic growth it had seemed before the First World War.

In a broader sense, it is possible to conclude that Norwegian resource policies experienced a liberalization as predicted in the "obsolescing bargaining model". However, crucially it was only a liberalization in practice. Foreign direct investments were allowed in, but only under the terms outlined in the 1917-law.

VII. Lex Boliden: Tightening the Swedish Restriction Act (1930-1934)

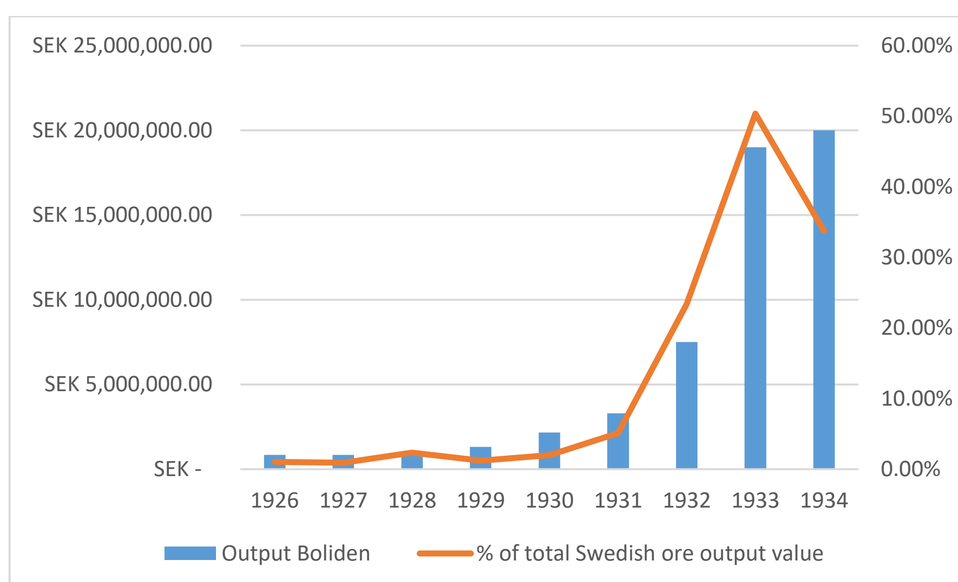
The Restriction Act – despite its detractors both among the socialists and Swedish business people – had rather strong political support during the 1920s, and there was little concerted initiatives for either dismantling it or seriously expand it. The explanation for this can partially be found in the fact that there was no clear threat or event that could create wider public support for reform. However, precisely such an event came in 1932 with the death of Ivar Kreuger, and the collapse of his empire. The downfall of Kreuger's matchstick empire was not just a major financial crisis in Sweden; it also brought home the possible dangers of relying on "passive" foreign ownership for Swedish natural resources. In this section, we will explore the Swedish governments response to the Kreuger crisis, culminating in the reform of the Restriction Act in 1934 – dubbed Lex Boliden, after the mining company at the heart of the issue.

As we have seen the division between capital ownership and voting power had to a large degree opened the opportunity for financial juggler Ivar Kreuger of setting up a business conglomeration controlled almost exclusively by himself, but to a large degree backed by "passive" foreign ownership of low voting shares. Ivar Kreuger's access to foreign capital gave his operation a solid advantage in the Swedish business world. However, Kreuger's access to inward foreign direct investments with little control for the investor was to a large degree predicated on Kreuger's reputation of being able to show solid returns. Opinions are divided on whether Kreuger should be

viewed as an outright swindler, or just a secretive and aggressive businessman.[1150] Either way, when the great depression hit Europe with full force in 1931, Kreuger came into severe liquidity problems.

By this time, Kreuger did not only own a sizable stake in TGO and the large paper and pulp company *Svensk Cellulosa AB*, but had also acquired the successor companies of Vesterbottens Emmisionsbolag for over SEK 57,000,000, which he consolidated into *Bolidens Gruv AB*. Mining operations had begun, as had a new processing plant near the coast. And even though there were still technical challenges, Boliden was clearly becoming the richest mining operation in Sweden outside of Lapland – a fact that was further helped by the increase in the gold price in the early 1930s. According to the official statistics, Boliden extracted ore worth 3.3 million SEK in 1931, which rapidly rose to 19 million SEK in 1933 (see Figure 18 below).[1151]

Figure 18: Value of mining output of Boliden Gruv AB[1152]



Boliden was thus one of Kreuger's most valuable assets not already heavily leveraged, and consequently one of the more hotly contested assets after his death and bankruptcy. Boliden had been central in Kreuger's plans to stay afloat during the financial crisis, either as a basis for further share emissions in his holding company, or by selling it outright. Here, Kreuger also examined the

[1150] See for instance: Håkan Lindgren, "The Kreuger Crash of 1932 in memory of a financial genius, or was he a simple swindler?," *Scandinavian Economic History Review* 30, no. 3 (1982); Lars-Erik Thunholm, "Ivar Kreuger - Myter och verkelighet," *Historisk Tidsskrift* 113, no. 1 (1993).
[1151] For details on Krueger's acquisition of Boliden, see: Glete, *Kreugerkoncernen och Boliden*, pp. 60-69; Oscar Falkman, *Så började Boliden* (Stockholm1953), pp. 35-39; Ernst Söderlund, *Skandinaviska banken i det svenska bankväsendets historia 1914-1939* (Stockholm: Almqvist & Wiksell 1978), pp. 421-22.
[1152] Sveriges officiella statistik, Bergshanteringen 1926-1934. It should be noted that the high percentage of total Swedish output in 1933 is also related to the almost total collapse of iron ore extraction that year.

possibility of coming to some agreement with the Swedish state. In October 1931, Kreuger proposed to the Swedish minister of finance, Felix Hamrin, that the *Riksbank* (Swedish National Bank) should provide him a loan of SEK 86 million in return for an option on the Boliden shares for the same amount. The liberal government was willing to entertain the idea, as the consequences of a collapse of Kreuger's empire would be enormous. However, the Riksbank was less enthusiastic, and also questioned the legality of such a contract. Instead, the Riksbank was willing to provide a SEK 40 million with Kreuger's Boliden shares as collateral.[1153] Nevertheless, negotiations between the government and Kreuger continued after this arrangement, as did Kreuger's various other attempts of using Boliden to raise ore money. The liberal government, especially Felix Hamrin, were not completely alien to the idea of nationalizing Boliden – especially if the alternative was foreign ownership. However, when Kreuger was found dead on March 12 1932, nothing more had been settled.

In the bankruptcy proceedings of his opaque international conglomerate, it was not immediately clear exactly who should have rights to Boliden and its rich gold claims. However, it was Kreuger's biggest Swedish creditor, Skandinaviska Banken, who soon came to hold the upper hand, vis-à-vis the other receivership administrations of the majority foreign owned Kreuger & Toll and International Match Co. Skandinaviska Banken's position was also strengthened by a massive rescue operation from the Swedish state. When the Kreuger empire collapsed, the Swedish government hurriedly organized a financial rescue plan for Skandinaviska Banken of over SEK 200 million in extra credits, which was approved by the Riksdag – if reluctantly. As part of this deal, Skandinaviska Banken would be allowed – as a creditor for Kreuger – to redeem and transfer the Boliden shares from the Riksbank over to the *Riksgäldskontoret* (Swedish National Debt Office), as collateral for the new credits they received from the state through the latter institution. This was important for two reasons: Boliden was placed within a Swedish owned bank's indirect control for the time being, rather than the receivership administrations of foreign owned companies, and they could not be sold without a green light from the government.[1154]

With the future ownership of the mine still pending, the liberal government who had brokered the bailout would be replaced by a new government traditionally less aligned with domestic business interest. Prime Minister Ekman was forced to resign in August 1932, after having falsely denied receiving a large campaign contribution from Kreuger on behalf of the liberals. His

[1153] Glete, *Kreugerkoncernen och Boliden*, p. 131-35.
[1154] *Kreugerkoncernen och Boliden*, pp. 163, 81-86; Söderlund, *Skandinaviska banken 1914-1939*, 492-504.

replacement, the aforementioned Felix Hamrin, would only remain in office for a few weeks until the liberals lost the 1932 Riksdag election and was replaced by a new Social Democratic government.[1155]

As we have seen, the Social Democrats had nearly always been on the political forefront of campaigns for more public control over natural resources and the profits generated from them. Boliden was no exception to this point, and the party had argued for a tougher stance on both passive foreign ownership and the previous government's willingness to lease mineral rights to the company without any continued government control. Nationalizing Boliden had been a topic at the Social Democrats party congress in late March 1932, with proposals that a new Social Democratic government should work towards that goal. The party leadership however were more reluctant and argued that it might be tactically unwise, or should not be the top priority, even if it was a desirable goal in itself. This also seems to have been the policy of the new Hansson-government after it came to power in September 1932. One important explanation for this is that the Social Democrats held only a minority government, supported by compromise of anti-crisis policies with the Agrarian party. A hard push for nationalization might meet resistance by the non-socialist majority, and the government would rather spend political capital on alleviating the more immediate social problems.[1156] Instead, the government initially took a more cautious wait-and-see approach and left the matter to the creditors of Kreuger's ruined empire for the time being.

With final ownership of Boliden still unresolved, both Skandinaviska Banken and the two receiverships were looking to find a buyer for the mining company. Before his death, Kreuger had done his best to drum up interest in the project, an in 1933 a British consortium contacted the interested parties with an offer to buy the new mining company.[1157] The offer they outlined was a good example of how the 1916 Restriction Act could be circumvented. The British consortium would buy the B-shares, while at the same time make a deal on certain aspects of how the company should be run with a Swedish group who would own the voting A-shares. The deal would include provisions for increasing the rate of extraction by over 60% compared to the output of 1933, and that all retained earnings should be used to pay dividends.[1158]

The parties would not finalize such a deal without a green light from the government. However, when the government was sounded out on the arrangement in early summer of 1933, Prime Minister Hansson stated that it was not prepared to approve a sale of the company to

[1155] Hadenius, *When the Law Does Not Matter*, pp. 57-59.
[1156] Anders Isaksson, *Per Albin 4: Landsfaderen* (Stockholm: Wahlström & Widstrand, 2000).
[1157] The British consortium consisted of Cull & Co., Canadian Seletion Trust Co. and New Consolidated Goldfields Ltd. Glete, *Kreugerkoncernen och Boliden*, p. 187.
[1158] Boliden extracted 366 364 tons of ore in 1933. The British consortium wanted an extraction rate of 600,000 tons. *Kreugerkoncernen och Boliden*, p. 189.

foreigners. As a possible solution, the consortium suggested that instead of a Swedish consortium holding the A-shares – which could potentially become strawmen for the B-shares – the Swedish state itself should be the A-share partner. The state would acquire a majority of the voting A-shares, thus securing government control over the company, albeit limited by the agreement with the B-shareholder on extraction rates and dividends. Such a solution was at least conceivable to some in the government, yet the government was split and continued to take a hands off approach to the whole issue. Without a green light, the British consortium would not proceed, and negotiations eventually broke down in December 1933.[1159] Almost at the same time, news about the possible sale leaked to the Swedish press, which proceeded to run alarmist articles about the possibility of Boliden falling on foreign hands, and the consequences of such an outcome – particularly the possibility of a short-term extraction rate.[1160] This condemnation, if with varying degrees of severity, was almost universal regardless of political affiliation, with only the few free trade oriented papers arguing for viewing Boliden and its minerals as nothing more than a normal business venture.[1161]

For the government, the outrage in the press over the possible British acquisition of Boliden was a clear sign that a more active approach was warranted. Indeed, the negative reaction in the press did not only spur on the Social Democratic government, but perhaps also signalled that a more hands on approach which much of the party favoured would now have a greater chance of finding the necessary support on the other side of the political aisle. The government soon reopened negotiations to find a solution where the company remained on Swedish hands, with full nationalization as a clear option.

At the same time, the government presented new legislation to tighten the 1916 Restriction Act by removing the differentiation between the limits on capital ownership and voting shares. With the new law amendment proposal, quickly popularly dubbed “Lex Boliden”, foreign ownership of shares was restricted to both 20% of the nominal share capital and 20% of the voting majority. In addition, the government also proposed a new strawman law, which made strawmanship for share ownership illegal.[1162]

Besides a general tightening of the Restriction Act, which the Social Democrats had motioned for in 1928, the amendment also served an important purpose in the ongoing negotiations to find a solution for Boliden. First, by tightening the Restriction Act it would be harder and less

[1159] *Kreugerkoncernen och Boliden*, p. 192-99.
[1160] “Bolidens guld i utländsk ägo?” Svenska Dagbladet 15.12.1933, Aftonbladet 15.12.1933, Social-Demokraten 16.12.1933
[1161] See for instance: Göteborgs Handels- och Sjöfartstidning 16.12.1933
[1162] Kungl. Maj:ts proposition nr. 217 & 258. Bihang till riksdagens protokoll 1934. 1 saml.

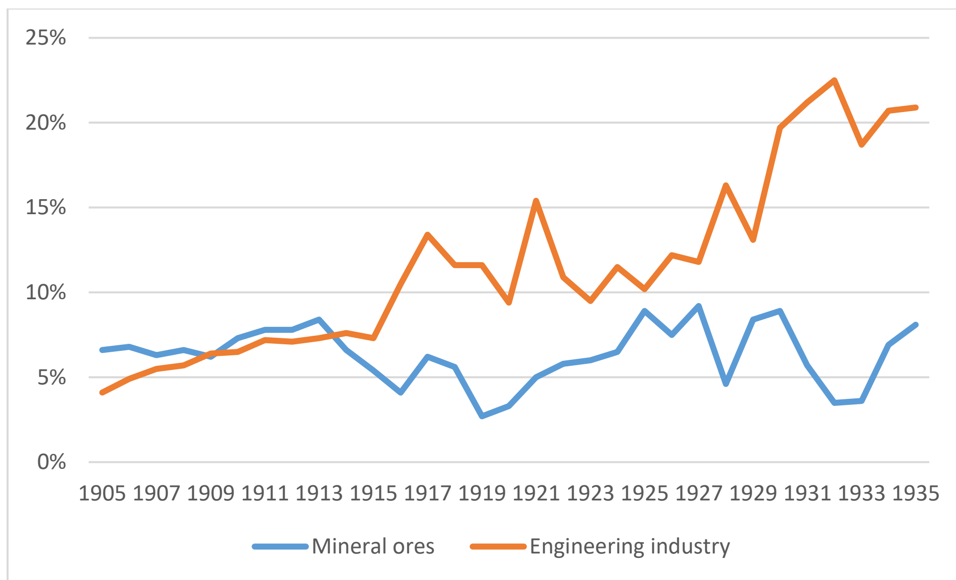
lucrative to circumvent the law, and would prevent a hypothetical sale to a foreign investor who was willing to risk acquiring the company without a green light from the government. Secondly, by eliminating the possibility of foreign acquisition, the government also eliminated many potential buyers, which would likely lower the price for the company.

While there was strong parliamentary support for not allowing Boliden to fall in foreign hands, "Lex Boliden" was not universally welcomed. The receivership administration of Kreuger & Toll were naturally displeased. As about 73% of their claims were held by foreigners, they interpreted the proposal as a retroactive legislation against them, and the inability to sell Boliden abroad would diminish the receivership's chances of recouping some of its losses.[1163] However, protests also came from central Swedish business interest groups, *Svenska trävaruexportföreningen* (Swedish timber export association) *Sveriges industriförbund* (Swedish Industry Association) and *Svenska bankföreningen* (Swedish Banking Association), as well as five of the largest Swedish engineering industry companies. The three latter groups were especially concerned that this new legislation might lead to countermeasures against Swedish companies operating or seeking to establish themselves abroad.

This anxiety over countermeasures abroad was not entirely new, and had been voiced in the discussion preceding the Restriction Act itself. However, the strong protests from leading Swedish business interests also reflected a change in the country's economy. As mentioned, capital no longer flowed overwhelmingly in only one direction, and many Swedish companies had subsidiaries abroad – especially the big engineering industry companies. This sector had come to occupy an increasingly important part of the Swedish economy. While wood and iron based products still made up the bulk of Swedish exports, by the 1930s the engineering industries accounted for over 20%.[1164]

[1163] Kungl. Maj:ts proposition nr. 217. Bihang till riksdagens protokoll 1934. 1 saml., pp. 13-14
[1164] Sune Carlson, *Swedish industry goes abroad : an essay on industrialization and internationalization* (Lund: Studentlitteratur, 1979); Mats Larsson, *En svensk ekonomisk historia 1850-1985*, 2:a uppl. ed. (Stockholm: SNS, 1993), pp. 93-94.

Figure 19: Relative size of Swedish exports (1905-1935)[1165]



The Social Democrat government was nevertheless set on tightening the Restriction Act. In the event, the protesting business interests had argued for at least a more lenient limit than 20%. On this point, they were also supported by the Kommerskollegium (Swedish National Board of Trade). These protests also translated into counter proposals from the non-socialist opposition. Based on the concern for the Swedish export industry, two conservative and one liberal MP in the Second Chamber motioned to have the amendment rejected outright. However, when government agreed to soften the law to accept 40% nominal foreign ownership rather than 20% on the suggestion of the parliamentary committee, the law was passed unanimously along with the strawman act.[1166]

These amendments did make it easier to prevent Boliden coming on foreign hands. However, if the Social Democratic government's goal was to nationalize Boliden, these legislative actions were not without their catches in this regard, as strengthening regulations on foreign ownership arguably removed much of the underlying justification for nationalizing it in the first place. However, whether this would have effected a potential majority for nationalization in the Riksdag quickly became just a theoretical question. The liquidity of Skandinaviska Banken had improved significantly since the bailout in 1932. The bank had never been the most eager of the parties to sell, and as the mine would not fetch the same money without an international purchaser in any case, the bank decided instead to acquire the whole mining company for itself. Skandinaviska

[1165] Lennart Ohlsson, *Utrikeshandeln och den ekonomiska tillväxten i Sverige 1871-1966* (Stockholm: Industriens Utredningsinstitut, 1969), Tabell B:6, pp. 137-38.
[1166] Första lagutskottets utlåtande Nr. 55, Bihang till riksdagens protokoll 1934. 9 saml. Första lagutskottets utlåtande Nr. 56, Bihang till riksdagens protokoll 1934. 9 saml. Första Kammarens Protokoll Nr. 31, 1934, pp. 44-46. Andra Kammarens Protokoll Nr. 33, 1934, pp. 46-47

Banken managed to redeem the shares held by Riksgäldskontoret, and eventually bought the remaining shares after settling with the creditors of the remnants of Kreuger's empire.[1167]

In the end, the consequences of the Kreuger crash on the policy of Swedish natural resources regulations would not be tremendous. The Restriction Act was strengthened, which made a "passive foreign ownership" giant like Kreuger less likely to occur in the future, but the direct government control over natural resources were not significantly strengthened, through either new regulations or direct ownership. On the other hand, the Swedish government did not feel compelled to change the policy on foreign ownership of natural resources, as established during World War I in face of a financial crisis, in the way the Norwegians had in the 1920s. While Skandinaviska Banken had needed large amount of emergency credit, it had recovered and was able to take on the financial burden of acquiring Boliden outright. This was indeed a striking pattern for the whole of Kreuger's Swedish companies – the rest of the Swedish banking sector was in the end capable to absorb and reconstruct them.

VIII. Conclusions

The post-war created a very different situation than the one where the two countries resource nationalist policies had been established. While the 1920s did see a reestablishment of a globalized economic system, government's intervention would become more common and accepted than it had before. The two countries policies to establish national control over their key natural resources was not challenged and the failed League of Nations attempts at establishing rules of equality for foreign investors went to prove that the international purchase and sale of real property would be contingent on political concerns.

Yet, if the resource nationalist systems were challenged from abroad they were put under strain by changing economic circumstances at home. The post-war crisis hit both countries hard, and a number of economic liberals and business interests in both countries challenged the wisdom of the two countries' restrictive regulations on natural resource ownership. In such a case, the obsolescing bargain model predicts that the states experiencing a dearth of investments are likely to liberalize its policy towards foreign direct investments. In Norway, there was indeed a significant retreat in practical policy from the most ambitious resource nationalist visions espoused by the Liberal government during World War I. With little hope of refinancing from domestic investors, foreign

[1167] Glete, *Kreugerkoncernen och Boliden*, 217-40; Falkman, *Så började Boliden*, 45-64.

investors were allowed to acquire a number of Norwegian owned hydropower plants and related energy intensive industries, and were eventually also granted concessions to develop new. However, this retreat was politically contentious, and the delays and uncertainties it entailed may have been a factor in why so few of the planned developments ever materialized. In Sweden on the other hand, there was no such retreat. The Restriction Act was upheld in a similar fashion as when it was introduced in 1916.

There are a number of causes that can explain the different paths taken by the two countries. The crisis in Norway was more severe, and the Norwegian business banks proved less resilient than their Swedish counterparts, making new foreign direct investments more necessary. Moreover, the Norwegian energy intensive industry was also hit by a technological and trade policy challenge altered the prospects for rapid growth in the sector beyond the wider economic problems in the inter-war era. In addition, strawmanship and more notably the possibility of using "passive" foreign ownership did allow for significant amount of inward foreign investments.

Yet, despite the change in implementation in Norway, there was liberalizing legal reform. In both countries, the principle that political authorities should have the power to approve or deny foreign direct investments into natural resources was never seriously challenged, despite the protests from economic liberals and business interests. In both countries, the idea that natural resources should be under some form of national control held firm.

The inter-war era thus saw a continuation of the two different approaches taken by the two countries before the war that had been established before and during the war. Norway would allow foreign direct investments into hydropower and minerals as long as they adhered to a set of regulatory conditions. Conversely, Sweden would deny new overt foreign direct investments into natural resources altogether, while giving altogether freer reins on Swedish owned companies. For Sweden, this model was put under pressure following the Kreuger-crash in 1932. However, both due to resistance from Swedish industry and the ability of the remaining private Swedish financial institutions to take on full ownership of Kreuger's natural resource investments ensured that the regulatory consequences of the Kreuger crash was a reinforcement of the existing model, rather than any shift towards more direct state intervention.

Conclusions: Scandinavian resource nationalism in the early 20th century

As we have seen in this thesis, the two Scandinavian countries introduced a series of substantial measures to secure greater national and/or political control over their own natural resources. These measures included as well as wide-reaching laws allowing the two countries' governments to regulate all new foreign acquisitions of key natural resources, such as timber, minerals and hydropower, as well as nationalisation or part-nationalisation of some key resources.

This thesis has attempted to show that the reasons behind these resource nationalist interventions were always composite. In very broad terms, they were all connected to an uneasiness over rapid uncontrolled integration into the global economy and the possibility of the two countries developing an economic and/or political subservient position to the larger European economies. There was altogether much less clarity or agreement on exactly how these negative consequences would manifest themselves. These ranged from concerns of foreign owners reaping the lion's share of wealth generated from rich resources, foreign companies lack of long-term vision and willingness to engage in down-stream production, social responsibility and appropriate "national mind-set". Indeed, visions of short-term over-exploitation of natural resources and potential under-exploitation in order to raise the price of a resource elsewhere could often coexist in the political discourse as arguments in favour of political intervention. Moreover, some saw the economic power of the companies themselves, bolstered by implicit or potential support from their home government, as the greater threat, while others speculated that the foreign owned companies could act as tools of their home country's larger strategic interests. Yet, if these visions were varied and sometimes even contradictory, they were all united in a greater concern that foreign ownership of key natural resources could be detrimental to the country's economic and political future.

Despite the many similarities between the two countries, the regulatory response had some notable differences. Norway introduced wide-reaching concession laws for all acquisitions of forests, hydropower and minerals in 1906. Sweden introduced a regional restriction on forest acquisitions in 1906, but there was a greater reluctance to introduce regulation on foreign share ownership, which was not introduced until 1916. However, the Swedish state took a more active direct role in the more capital-intensive resources, with the part-nationalization of LKAB in 1907 and in leading the construction of some of the country's largest hydroelectric plants.

Both the introduction and shape of the resource nationalist initiatives were decisively shaped by the international economic system and the perceived "rules of the game" that governed it. As seen in chapter 1, the kind of regulations on foreign ownership that the two Scandinavian countries introduced, or discussed introducing, had few if any real equivalents in the world at the time. It was thus not entirely clear what kind of international response these kinds of regulations would encounter. Prevailing international law at the time did however have fairly strict notions that any expropriation of foreign owned property had to be compensated in full, and a breach of this could warrant countermeasures, including military, from the home state. Consequently, both the Swedish and the Norwegian interventions sought to pre-empt large-scale foreign direct investments, as future expropriations or wide-reaching regulations might be either economically very costly, or politically dangerous. The same expediency of pre-empting investments also helps to explain the Liberal Knudsen-governments push to extend the concession laws and the Right of Reversion to Norwegian owned companies, as foreign owned companies managing to obtain rich resources through circumvention might be difficult to challenge or change after the acquisition had taken place. In addition, removing differentiation could also pre-empt counter measures by foreign governments. However, foreign direct investments in natural resources that preceded these initiatives were left largely unmolested, and allowed to continue. This policy runs counter to the predictions made by the "obsolescing bargain model" or the "resource nationalist cycle", which assumes that the bargaining position of the host country increases as the foreign investor has sunk more capital into the country.

Despite concerns in Scandinavia of possible foreign countermeasures, opposition from the leading capital exporting countries was for the most part muted. Outside the question on iron ore export tariffs, the thesis has not found any clear examples of foreign governments introducing countermeasures in attempt to reverse Scandinavian legislation. This can in part be explained as a consequence of the two countries managing to successfully balance within the parameters of the semi-informal "rules of the game". Attempts after the First World War to codify international agreements on liberal treatment of foreign investors failed, which further cemented the impression that the kind of regulations the two Scandinavian countries had introduced were an acceptable part of the purview of a sovereign state. There were however several examples of foreign investors reconsidering investing in Norway due to the concession laws. The extent of this is however difficult, if not impossible, to gauge, and considerable foreign direct investments did continue to come into the natural resource sectors after the fact.

In addition to being shaped by the international political economy, the domestic political economy of the two Scandinavian states also played an important part. As this thesis has shown, more or less organised interest groups did at times play a significant role in instigating or promoting

resource nationalist initiatives. The most obvious cases were the role of the Swedish ironwork owners in the early years of the Lapland ore controversy, and the Norwegian sawmill owners and later forest owners in the reaction to Kellner-Partington. However, these interest groups were never able to dominate the debates, or indeed to sell their arguments based solely on their own economic interests. Instead, the push for resource nationalist interventions had a much wider support from a disparate set of sources.

Despite their eclectic origins, the new laws regulating use and ownership of natural resources were at times *targeted* to favour specific interest groups. This is most notable in the case of forests, as both countries' regulations on forest ownership had provisions aimed at preserving the independence of smaller forest owning farmers against larger forestry companies, whether foreign or domestic. The LKAB-agreement of 1907 also established the principle that the Swedish state would reserve low-phosphorous iron ore for the domestic Swedish iron ore industry. The Norwegian concession laws also included provisions giving some advantages to domestic upstream production of machines and materials, as well as ensuring that output from mines and energy intensive industries would be available to domestic downstream processing. Norwegian farmers were especially privileged in this regard, as concessions from 1913 and onwards mandated that a portion of fertilizer production should be set aside for Norwegian farmers at a reduced price.

In Norway, the role of farming interest in the creation of the concession laws have been the subject of some debate, as to whether the concession law was intended or used to halt or slow industrialisation in the country. Concession policy until 1913 and after 1921 show no indication of deliberate efforts to slow down industrial growth by the various governments, but some river regulation projects were delayed due to the opposition of local farmers and their supporters in the Storting. With the reform of the concession laws beginning in 1913, fast industrialisation became a more pressing issue, with several members of the governing Liberal party stating that slower industrial growth might be a beneficial outcome in order to prevent crowding out agriculture. Several concessions for hydroelectric developments were also denied from 1916. However, these denials were not justified by concerns for agriculture, but rather to prevent further competition over labour and materials, which could cannibalize other ongoing hydroelectric developments. Thus, even if the concession laws did create an avenue for opponents of energy intensive big industry to protest and stall, slowing down industrialisation in the interest of agriculture seems never to have been overtly adopted by any Norwegian government.

This begs a question that has often been discussed in the Scandinavian historiography, namely to what extent these political interventions should be regarded as initiatives primarily aimed

against foreign ownership or were they rather a result of increasing regulatory ambitions of the state in the wake of democratisation. From the studies conducted in this thesis, especially as seen in the Norwegian concession laws and the Swedish Norrland, it seems clear that there was significant overlap between these two aspects. However, resource nationalism remained a key ingredient to mobilize the wider support necessary to introduce significant change in the regulatory regime for natural resources. This is best exemplified in the contrast between the debates on concession laws for hydropower and minerals. In Sweden, there was support for some form of concession law for these resources within the more democratic Second Chamber of the Riksdag, which was repeatedly put down by the less democratic and more conservative First Chamber. In other words, Olle Gasslander's view that the First Chamber halted Sweden from taking a similar route as Norway does indeed bear out. However, the form of concession laws that were discussed were much less radical than their Norwegian counterpart. Moreover, the regulations on natural resources established during World War I did survive introduction of universal suffrage.

Both the overlap of general regulatory ambitions and resource nationalism can also be seen in how the two different regulatory regimes dealt with new foreign direct investments. In both countries, capital inflows from abroad were still seen by most as necessary and desirable for the more capital-intensive hydroelectric and mining industries. In Norway, foreign direct investments was generally allowed to continue in these two sectors, provided the investing companies agreed to the list of terms set by the concession, a strategy I have dubbed the "harnessing strategy". On the other hand, the Swedish system after 1916 restricted new direct ownership to Swedish owned companies. Foreign capital would, at least nominally, be restricted to ownership without direct control.

This thesis argues that these differences was not just due to contrasting regulatory ambitions of the two countries authorities at the time. Instead, the difference between the two countries was also grounded in what was seen as practically feasible at the time. Swedish owned industrial companies managed to a large extent to put themselves forward as "national champions", or nationally minded companies reliable enough to build an economic future beneficial to Sweden. In Norway, there were initially no companies willing or able to take on this mantle. Most notably, the policy towards foreign owned companies also began to change in Norway as more fully Norwegian owned companies entered the scene during and shortly before the First World War. Beginning in 1913, Norwegian concession policy shifted in favour of reserving hydropower generation and even the use of hydroelectric power for Norwegian owned companies. The Liberal Norwegian government also took an active role in reducing foreign ownership of natural resources, such as supporting the private Norwegian acquisition of Kellner-Partington and the outright nationalization of Grong Gruber and Glomfjord. However, as the post-war crisis hit the country and its banking sector hard, the policy

towards foreign ownership was softened up again, and reversed to something more akin to the pre-war harnessing strategy.

These are of course not the only explanations. This thesis supports the arguments put forward by scholars such as Eva Jakobsson that the different approaches taken in the two countries were also underpinned by differences in the qualities and locations of the resources themselves, as well as the historical contingencies of the differences in pre-existing legislation of the resources. As argued in Chapter II, the Swedish debates were to a large extent centred on the large Lapland ore fields. As these were located in a few specific locations far inland, they could be regulated by specifically controlling these resources. In Norway, the resources in question were much more widely spread across the country, with no other obvious way of controlling acquisition and exploitation than generally applicable laws. This to a large degree explains why the Norwegian Storting introduced the concession laws in 1906, while the Swedish Restriction Act – which had been requested by the Swedish Riksdag in 1902 – was kept on ice until it was finally passed in 1916.

In the end, what were the broader institutional consequences of the resource nationalist initiatives? As we have seen, a number of scholars have suggested that resource nationalism has a corrosive effect on liberal institutions in a state. To what extent is this applicable to Sweden and Norway? Indeed, seeing these initiatives as an attack on liberal private property rights was an issue at the time, and has also been so since. This was and is especially the case in Norway, where previously liberal laws on both minerals and especially hydropower were replaced by laws that mandated nationalization in the longer term, without compensation to its owner. Even though these were not retroactive for pre-existing developments, they did substantially impact the value of undeveloped resources to its owners. Moreover, the concession laws did also introduce a level of government arbitrage. As shown in chapter 3, the Norwegian concession system was intentionally shaped to prioritize democratic flexibility over rule bound predictability. This did increase uncertainty for potential investors, who in the worst of cases could not be certain whether they would obtain the necessary concessions, at exactly what terms or at what time. The Swedish system was less intrusive towards business in this regard. However, the Lapland mining companies were dependent on government goodwill to increase production, and could thus not always respond as quickly as it could have to rising demand. Moreover, the suspension of staking rights on state land in Northern Sweden also likely reduced private mineral exploration.

Consequently, as far as pure economic growth is concerned, these interventions did come at a cost, at least in the short-term. However, these negative impacts should not be overestimated. The resource industries continued to thrive after the introduction of these resource nationalist measures.

Moreover, even in Norway where the legislation was flexible, implementation of the policies were mollified by attempts by nearly all governments to limit variations in terms between different concessions given at a certain time. Moreover, this research has found little to no sign that the concession process was made subject to corruption on behalf of the regulators. While the laws favoured democratic flexibility, they were also organized in a way that placed some limitations on the freedom of a single government to change policy to favour potential political insiders. This was especially the case for hydropower developments, which had to be approved by the Storting. Moreover, the political representatives of the Executive Board of NVE was also made to reflect the political makeup of the Storting.

In the longer term, it is in any case clear that the resource nationalist interventions did not have a noticeably negative impact on the liberal institutions of the two countries. Indeed, it is possible to argue that the resource nationalist interventions strengthened Scandinavian liberal institutions in the long run. The willingness in both countries to strike democratic compromises on the issue of resource policy prevented the establishment of economically dominant foreign owned companies, which in the longer run could have led to even more radical resource nationalist reaction, as it did in many other countries in the post-war era.

Appendix

Table 6: Hydropower acquisition concessions for private companies 1906-1935

Pt.: Processing time (days) | **Type:** Acquisition (**A**) or acquisition and hydro regulation (**A+R**) **| Nat.**: Ownership nationality | **Product**: Main product at the time of application | **CC**: Capital Control | **RoR**: Right of Reversion (years) | **Start/Finish**: Time limit (years) for construction commencement (**P**) and subsequent time limit for completion (**F**) | **pN**: % of shares available to Norwegians on capital expansion | **S. tax:** Concession tax per. kW/y (NOK) to the state| **M. tax:** Concession tax per. kW/y (NOK) to the municipality | **S. pow:** Power to be made available to the state at a fixed price| **M. pow:** Power to be made available to the municipality at a fixed price

Passed	P. time	Applicant	Type	Nat.	Product	CC.	E.p.p.	Start/finish	RoR	Rd.	S.tax	M.tax	S. pow.	M. pow.
17.01.1907	54	A/S Kinservik	A+R	SWI/GER?	Carbide/Nitrates		46368 kW	P 5, 50%F 5	75					1472 kW
13.05.1908	177	A/S Kinservik	A+R	SWI/GER?			7360 kW	P 5, 50%F 5	75					368 kW
16.09.1908	267	A/S Matrefaldene (BASF)	A+R	GER	Nitrates		34592 kW	P 5, F 7	75		1.36			368 kW
16.09.1908	240	A/S Tyinfaldene (BASF)	A+R	GER	Nitrates		51520 kW	P 5, F 7	75		1.36			368 kW
28/09/1909	171	A/S Lysefjord	A+R	Unk.			73600 kW	P 5, F 7	75		1.36			5%
23/12/1909	330	A/S Svælgfos (Norsk Hydro)	A	FRA	Nitrates		4195 kW	P 2, F 5	75*					2.5%
23/12/1909	504	Elektricitetsaktieselskapet Førde	A+R	GER?	Carbide		3680 kW	P 5, F 7	75		1.36			5%
30/12/1909	120	A/S Ryfylke Kraftanlæg	A	NOR	Power?		8464 kW	P 5, F 7	80					5%
27/01/1911	164	A/S Hopla Træsliberi	A	NOR?	Pulp and paper		1744 kW	P 5, F 7	80					5%
09/08/1912	283	A/S Glomfjord	A+R	SWE	Nitrates / Zinc	Pn. 33%	32384 kW		75		0.91	0.18	5%	5%
22/12/1913	713	A/S Aura (Nitrogen Products & Carbide)	A+R	UK	Cyanamide	Pn. 33%	147936 kW	P 2, F 5	65**		1.81	1.81	5%	5%
16/01/1914	55	A/S Aamdals Verk	A	?	Mining		736 kW		60					
27/02/1914	821	A/S Birtavarre Gruber	A+R	UK?	Mining		11040 kW	P 2, F 5	80		0.91	0.36	5%	5%
13/03/1914	472	A/S Kongsberg Træmassefabrik	A	?	Pulp and paper		736 kW		80				5%	5%
12/06/1914	388	A/S Bjørkaasen Gruber	A+R	GER?	Mining		2723 kW	P 2, F 5	60		1.09	1.81	5%	5%
11/12/1914	391	A/S Saudefaldene	A+R	NOR	Industrial power	100% N	61824 kW	P 2, F 5	65	40	0.91-1.81	0.91-1.81	5%	5%
23/04/1915	454	A/S Bremanger	A+R	NOR	Industrial power	100% N	17848 kW	P 2, F 5	65	40	0.91-1.81	0.91-1.81	5%	5%
18/09/1915	900	A/S Osa Fossekompani	A+R	NOR	Industrial power	100% N	32384 kW	P 2, F 5	65	40	0.91-1.81	0.91-1.81	5%	5%
19/11/1915	629	A/S Høyangfaldene	A+R	NOR	Industrial power	100% N	37168 kW	P 2, F 5	65	40	0.91-1.81	0.91-1.81	5%	5%
03/12/1915	466	A/S Bjølvefossen (Elkem)	A+R	NOR	Cyanamide	100% N*	33856 kW	P 2, F 5	65	40	0.91-1.81	0.91-1.81	5%	5%
29/09/1916	213	Eidefoss Kraftanlæg A/S	A	NOR?	Household power	100% N	883 kW	P 2, F 5	60	40				
10/11/1916	521	A/S Porsa Kobbergruber	A	NOR	Mining	100% N	736 kW	P 5, F 7	80					
02/04/1917	163	A/S Vittingfoss	A	NOR	Power	100% N	13248 kW	P 2, F 5	70				5%	5%
02/04/1917	210	A/S Høyangfaldene	A+R	NOR	Aluminium	100% N	5962 kW	P 2, F 5	65	40	0.91-1.81	0.91-1.81	5%	5%
03/08/1917	282	Rena Kraftselskap A/S	A	NOR	Power	100% N	8832 kW	P 2, F 5	60				5%	5%
16/11/1917	458	A/S Flørli Kraft og Elektrosmelteverk	A+R	NOR	Ferro alloys / Pow	100% N	8832 kW	P 2, F 5	60	40	1.81	1.81	5%	5%
08/04/1921	839	Nordland Portland Cementfabrik A/S	A+R	NOR	Cement	100% N	16192 kW	P 2, F 5	60	35	2.72	2.72	5%	10%
07/04/1922	581	The Bede Metal & Chemical	A	UK?	Mining		368 kW	P 2, F 5	50		0.45	0.45	5%	10%
14/03/1924	183	A/S Rjukanfos (Norsk Hydro)	A	FRA	Nitrates		22669 kW	P 2, F 5	60	35	0.13	0.47		10%
15/01/1926		A/S Tyinfaldene (Norsk Hydro)	A+R	FRA		Pn. 50%	10598 kW	P 2, F 5	60	40	0.51-1.02	0.51-1.02		10%
14/05/1926	450	A/S Kinservik (Alcoa)	A	USA	Aluminium		6992 kW	P 2, F 5	56	40	2.72	3.62		1472 kW
12/08/1927	283	A/S Kjaardavasdraget	A+R	NOR		100% N*	12070 kW	P 2, F 5	60	40	1.36	1.36	5%	10%
05/04/1929	770	Raffineringsverket A/S	A	Unk.? CAN?	Nickel		3533 kW	P 2, F 5	50	40	1.81	1.81		10%
07/02/1930	861	Bergverksselskapet Nord-Norge A/S	A	FRA	Mining		3312 kW	P 2, F 5	48	35	1.81	1.81		10%
09/05/1930	503	A/S Lysefjord	A+R	USA		Pn. 33%	23935 kW	P 2, F 5	60	40	1.81	1.81		10%
22/07/1932		A/S Vestlandske Vassdrag- og kraftselskap	A	NOR		100% N	10598 kW	P 2, F 5	60	35	0.91	0.91		10%
18/11/1932	379	A/S Skaland Grafitverk	A+R	NOR	Mining		1573 kW	P 2, F 5	50	35	0.91	0.91	5%	10%
10/03/1933	217	A/S Opdal Elektrisitetsverk	A	Mun./NOR	Power	100% N	2760 kW	P 2, F 5	50	35	0.18	0.18	10%	10%

Figure 20: Concessions for aquisition of riparian rights (1907-1935)

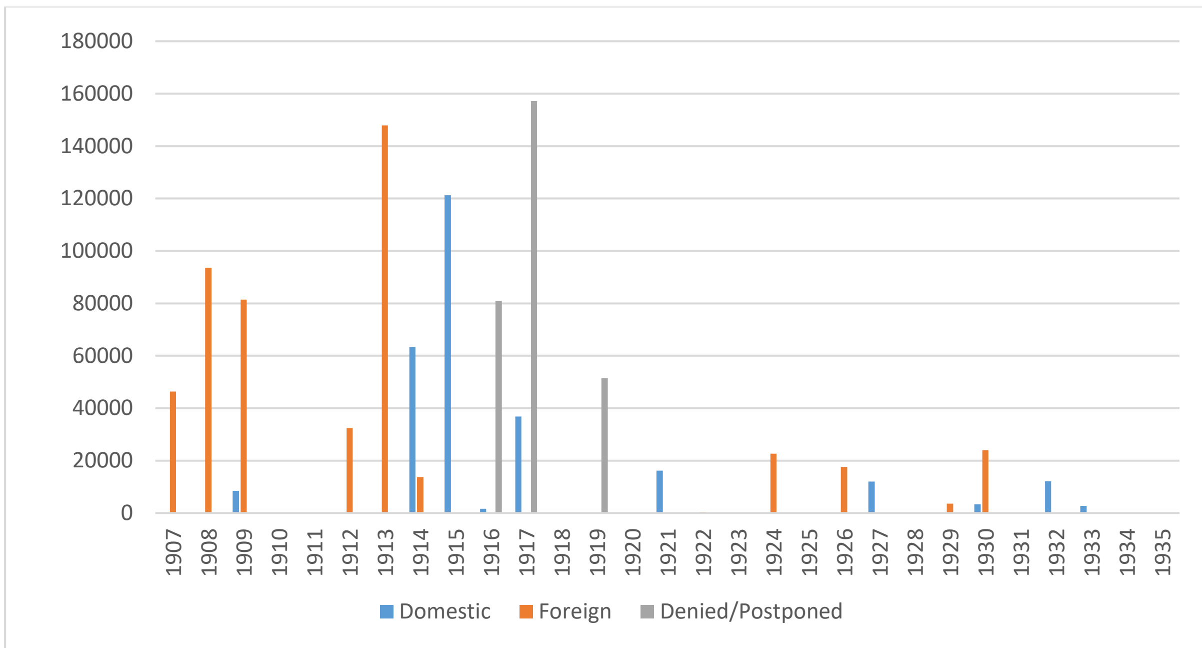


Figure 21: Time-limits and concessission taxes on acquisitions of riparian rights (1907-1935)

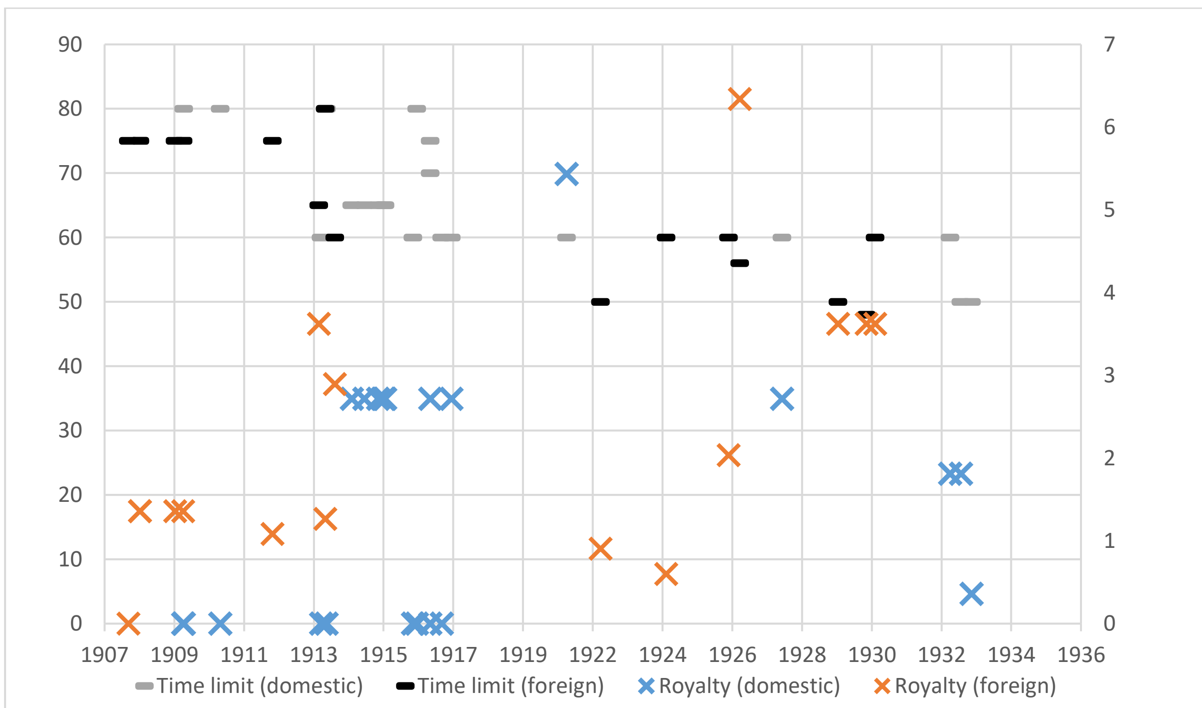


Table 7: Norwegian power lease concessions granted 1906-1935

Pt: Processing time (days) | **Nat.**: Ownership nationality | **CC**: Capital Control | **Sh. Capital** : Share Capital | **S.tax**: State tax (NOK per kW/year) | **M.tax** (NOK per kW/year)

Passed	Pt.	Applicant	Nat.	Power	Leasing from	CC.	S.tax	M.tax
10.05.1906		Alby Utd Carbide	UK	27379 kW	Tyssefaldene			
08.06.1907	42	A/S Meraker elektriske Kraft- og Smelteverk	NOR/UK	736 kW	A/S Meraker gruber			
07.08.1907	21	A/S Ilens smelteverk	NOR	736 kW		50% N		
09.12.1907	79	Almindelig elektrometallurgisk Aktieselskap	NOR?	11776 kW	A/S Barbu	67% N		
25.01.1908	372	North Western Cyanamid Co.	UK	2944 kW	Alby Carbide			
03.10.1908	60	Tronstad Bruk ltd.	NOR	736 kW		67% N		
11.01.1909	28	Ludvin Manskow (for selskap)	NOR?	1472 kW	A/S Hafslund			
01.04.1909	65	A/S De norske salpeterverker	FRA/GER	7360 kW	Norsk Hydro			
23/11/1909	92	Norsk Elektrisk Metallindustri, Sundløkken	NOR?	4416 kW	A/S Hafslund		1.02	
17/12/1909	44	Norsk Hydro	FRA	2797 kW	The Albion Products			
16/05/1911	124	A/S Tinfos Jernverk	NOR	7360 kW		67% N		
07/06/1911	77	Stavanger Elektro-Staalverk A/S	NOR?	1840 kW	A/S Ryfylke Kraftanlæg			
23/05/1913	34	Rena Træsliperi A/S	NOR	2355 kW	Aamot komm. Kraft, Osa	100% N		
07/07/1913	221	Det Norske Nitridaktieselskap	FRA	18400 kW	A/S Arendals Fossekompani		0.34-1.36	
07/07/1913	340	A/S Arendals Smelteverk	NOR/GER	6624 kW	A/S Arendals Fossekompani		0.34-1.36	
13/03/1914	469	A/S Barbu	NOR?	2208 kW	A/S Arendals Fossekompani		0.34-1.30	
07/08/1914	114	A/S Hardanger Elektriske Jern & Det Norske Nitrid	NOR/FRA	10598 kW	A/S Tyssefaldene		0.68	
23/10/1914	255	Porsgrund Elektrometallurgiske Aktieselskap	SWI	7360 kW	Skienfjords kommunale Kraftselskap		1.02-1.36	
11/12/1914	287	Electric Furnace Products Co. Ltd.	USA	61824 kW				
14/01/1915	331	Sagbrugsforeningen	NOR	530 kW	Cathrineholm Jernverk		1.36	
16/04/1915	596	A/S Arendals Fossekompani	NOR	4416 kW			1.02-1.36	
25/02/1916	708	Fredriksstad Eektrokemiske Fabriker A/S	NOR	1472 kW	Fredriksstad Gas og Elektricitetsverk	67% N	1.36	
09/02/1917	380	A/S Kristianssands Nikkelraffineringsverk	NOR	700 kW	Modum kommunale el.		1.70	
16/02/1917	983	Vera Fedtraffineri A/S	NOR	1840 kW	Treschow-Fritzøe	67% N	1.70	
02/04/1917	172	Cementfabrik Norge Co-No Portland A/S	NOR	589 kW	Lier komm.el.	67% N	1.70	
02/04/1917	163	Edw. Lloyds	UK	0 kW	Vittingfoss Bruk			
07/06/1917	401	A/S Bamle Nikkelkompani	NOR	736 kW	Langesundsfjords komm. El.	100% N	1.36	
31/08/1917	127	A/S Toten Cellulosefabrik	NOR	515 kW	Vardal Elektricitetsverk	75% N	1.70	
09/11/1917	185	A/S Mesna Træsliperi og Kartonfabrik	NOR	662 kW	Lillehammer komm. El	67% N	1.70	
16/11/1917	133	Cementfabrik Norge Co-No Portland A/S	NOR	294 kW	Lier komm.el.	67% N	1.70	
16/11/1917	364	A/S Kvina Carbid og Smelteverk	NOR	3680 kW	A/S Trælandsfoss	100% N	1.70	
23/11/1917	217	A/S Christiania Portland Cementfabrik	NOR	2500 kW	A/S Glommen Træsliberi / Hafslund	75% N	1.70	
23/11/1917	262	A/S Greaker Cellulosefabrik	NOR	883 kW	A/S Hafslund	75% N	1.70	
14/05/1918	656	Det Norske Nitridaktieselskap	FRA	22080 kW	A/S Tyssefaldene		2.72	1.36
09/08/1918	289	A/S Norsk Valseverk	NOR	736 kW		100% N	0.68-2.04	0.68-2.04
13/12/1918	1431	Ringesaker og Nes almeninger	NOR	2944 kW	Lillehammer komm. Kraft		0.14	
20/12/1918	485	Norsk Ferro Legering A/S	NOR	2200 kW		100% N	0.68-2.04	0.68-2.04
28/03/1919		Glomfjord Smelteverk A/S	SWE	33120 kW		100% N&S		0.68
27/06/1919	289	Treschow-Fritzøe	NOR	4416 kW	Tinfos Papirfabrik			
19/03/1920	338	A/S Sydvaranger	GER/SWE?	1251 kW	Taarnelven kraft A/S		0.68	
01/05/1920	411	Norsk Elektrothermisk A/S	NOR/SWE	11040 kW	Tyssefaldene	67% N	2.04-2.72	2.04-2.72
04/06/1920	771	A/S Østlandske Steexport	NOR	1104 kW	Eidefoss Kraftanlæg A/S	100% N	1.36	1.36
09/07/1920	773	Titan Co. A/S	NOR	736 kW	A/S Hafslund (Fredrikstad Gas- og Elektrisitetsverk)	100% N**	0.68-2.04	0.68-2.04
22/09/1922	310	A/S Ilens Smelteverk	NOR	4000 kW				
27/01/1923	141	A/S Norsk Aluminium Co.	USA	0 kW				
15/02/1924	102	A/S Norske Zinkkompani	BEL	14720 kW	A/S Tyssefaldene		1.02	2.04
16/05/1924	248	A/S Tofte Cellulosefabrik	NOR	1000 kW	Hurum komm. Elektrisitetsverk	67% N		
23/05/1924	778	J.N. Jacobsen & Co.	NOR	442 kW	A/S Fredrikstad Gas og El.verk	67% N		
03/10/1924	101	Det Norske Zinkkompani	BEL	73600 kW	A/S Tyssefaldene		1.02	2.04
03/10/1924	101	D.N.N.	FRA/UK/USA	73600 kW	A/S Tyssefaldene		1.02	2.04
03/10/1924	101	A/S Odda Smelteverk	NOR	73600 kW	A/S Tyssefaldene	100% N	1.02	2.04
24/10/1924	424	A/S Songe Træsliperi	NOR	900 kW	Aust-Agder kraftverk	67% N	1.00	
24/10/1924	381	A/S Namdalens Træsliperi	NOR	450 kW	Nord Trøndelag elektrisitetsverk	67% N	1.00	
23/01/1925	49	Gjeving Tresliperi A/S	NOR	1400 kW	Aust-Agder kraftverk	67% N	1.00	
23/01/1925	120	A/S Risør Træmassefabrikker	NOR	1200 kW	Aust-Agder kraftverk	67% N	1.00	
23/01/1925	490	Egelands Verk	NOR	700 kW	Aust-Agder kraftverk	67% N	1.00	
23/01/1925	669	A/S Skedsmo og Sørums Elektrisitetsforsyning	NOR	?	Akershus el.verk	67% N	1.25	
17/07/1925	591	Fosdalens Bergverks-A/S	GER	700 kW	Nord Trøndelag elektrisitetsverk		1.00	
17/07/1925	503	A/S Fiskå verk	NOR	2500 kW	Kristiansand el.verk	67% N	0.50	0.50
11/09/1925	185	A/S Kristianssands Nikkelraffineringsverk	NOR	1500 kW	Kristiansand kommune		1.70	1.70
02/10/1925	213	Electric Furnace Products Co. Ltd. (Union Carbide)	USA	33856 kW	A/S Saudefaldene		1.00	1.00
13/11/1925	225	Schous Bryggeri	NOR	4000 kW	Oslo el.verk	67% N		
26/11/1925		A/S Hafslund	NOR	4000 kW	Mørkfoss-Solbergfoss	67% N		
12/02/1926	128	A/S Greaker Cellulosefabrik	NOR	883 kW	Hafslund	75% N	1.50	1.50
20/02/1926		De-No-Fra A/S (Lever Brothers)	UK/NOR	8832 kW	Hafslund		0.50-1.00	
19/03/1926	150	Cementfabrikken Norge Ce-No-Portland	NOR	1300 kW	Lier kommune	67% N	1.00	
23/04/1926	594	A/S Vigelands Bruk	UK	9568 kW	Kristiansand kommune		1.50	1.50
30/04/1926	154	A/S Fiskaa Verk	NOR	1000 kW	Kristiansand kommune	67% N	0.50	0.50
28/05/1926	134	A/S Christiania Portland Cementfabrik	NOR	600 kW		67% N	1.00	
06/08/1926	98	A/S Haugvik Smelteverk	UK	36000 kW			1.30	1.00
10/09/1926	276	Fredrikstad nye Elektrokemiske Farbikker	NOR	1104 kW		67% N	1.50	
10/09/1926	276	"Jan" Kemisk Fabrik A/S	HOL	1251 kW			1.50	
22/10/1926	63	A/S Risør Træmassefabrikker	NOR	500 kW	Aust-Agder Kraftverk	67% N	1.00	
29/10/1926	177	A/S Sagbrugsforeningen	NOR	4416 kW	Fredrikshald lysverker	67% N	1.00	
12/11/1926	153	A/S Foss Jernstøperi	NOR	400 kW	Olso Elektrisitetsverk	67% N		
26/11/1926	748	A/S Dale Fabrikker	NOR	1472 kW	Bergenshalvøens kraft	67% N	1.36	
03/12/1926	311	A/S Yven Papirfabrik	NOR	662 kW	Halfsund	67% N	1.00	1.00
22/12/1926	494	A/S Risør Træmassefabrikker	NOR	3091 kW	Kilandsfoss	67% N	1.36	
08/07/1927	330	Sande Træsliperi A/S	NOR	5152 kW	Vestfold Kraftselskap	67% N	1.36	
08/07/1927	59	Christiania Spigerverk	NOR	5000 kW	Akers elektrisitetsverk	67% N		
21/10/1927	333	A/S Gransfos Bruk Ltd.	NOR	992 kW	Glommens Træsliperi	67% N	1.00	
23/12/1927	101	Titan Co. A/S	USA	736 kW	Hafslund		1.50	
20/01/1928	175	Alfr. Andersen mek. Verksted	NOR	868 kW		67% N		

03/02/1928	83	A/S Gjermaa Elektrisitetsverk	NOR	2000 kW		67% N		
13/04/1928	115	A/S Framnes mek. Verksted	NOR	1325 kW		67% N		
29/05/1928	133	Ragnar Schjølberg	NOR	1500 kW		-		
17/08/1928	1882	A/S Stangfjordens elektrokemiske Fabrikker	UK	2000 kW			1.00	1.00
09/11/1928	95	A/S Risør Træmassefabrikker	NOR	3100 kW	Aust-Agder Kraftverk	67% N	1.00	
01/02/1929	154	Bøhnsdalen Mills, Ltd.	NOR	500 kW		67% N		
19/04/1929	149	A/S Risør Træmassefabrikker and A/S Grimstad Trem.	NOR	7700 kW		100% N	1.00	
25/07/1929	426	Raffineringsverket A/S	NOR	600 kW				
25/07/1929	70	Falconbridge Nikkelverk A/S	CAN	3312 kW	Kristiansands Elektrisitetsverk			
07/02/1930	78	Follum Træsliperi	UK	1200 kW				
14/03/1930	1178	A/S Norsk Blikvalseverk	NOR	3200 kW	Bergen Elecktrisitetsverk	100% N		
09/05/1930	65	Hol Elektrisitetsverk	Mun?	500 kW				
27/06/1930	105	A/S Hamang Papirfabrik	NOR	515 kW	A/S Glommens Træsliperi			
03/10/1930	181	A/S Syrefast Materiell	NOR	6800 kW		100% N	1.00	
20/11/1930	188	A/S Mesna Træsliperi og Kartonfabrik	NOR	1100 kW		51% N	1.00	
20/03/1931	106	Fiskaa Verk	NOR	6000 kW	Vest-Agder Elektrisitetsverk	67% N	0.50	0.50
12/06/1931	146	Fosdalens Bergverks-Aktieselskab	GER	1300 kW	Nord-Trøndelag Elektrisitetsverk		1.00	
10/07/1931	78	Skandinavisk Direkt Stål A/S	SWE	2200 kW	Vestfold Kraftselskap		1.00	
28/08/1931	168	A/S Drammenselvens Papirfabrikker	NOR	11000 kW	Drammens Elektrisitetsverk		1.00	
20/11/1931	129	A/S Svelvik Papirfabrik	NOR	2000 kW	Vestfold kraftselskap			
26/02/1932	407	A/S Christiania Portland Cementfabrik	NOR	1500 kW	A/S Glommens Træsliperi	75% N	0.50	
18/11/1932	310	Torp Bruk A/S	NOR?	3500 kW	A/S Hafslund			
18/11/1932	105	O. Mustad & Søn	NOR	450 kW				
13/01/1933	120	A/S Toten Cellulosefabrik	NOR	750 kW	Vardal komm. Kraftforsyning	75% N	1.00	
16/02/1933		A/S Rjukanfos	FRA	6500 kW	Norsk Hydro			
31/03/1933	161	Falconbridge Nikkelverk A/S	CAN	957 kW	Kristiansands Elektrisitetsverk		0.50-1.00	0.50-1.00
11/08/1933	184	Saugbrugsforeningen	NOR	6000 kW	Halden Lysverker			
05/01/1934	287	A/S Lillestrøm Cellulosefabrik	SWE	900 kW	A/S Glommens Træsliberi		1.00	
05/01/1934	321	A/S Askim Gummivarefabrik	NOR?	1104 kW	Askim komm. Elektrisitetsverk		1.00	
05/01/1934	149	Falconbridge Nikkelverk A/S	CAN	1840 kW	Kristiansands Elektrisitetsverk		0.50-1.00	0.50-1.00
13/07/1934	241	A/S Dalen Portland Cementfabrik	NOR	3000 kW	Langesundsfjordens komm. Kraftselskap	100% N	1.00	
21/09/1934	182	A/S Lillestrøm Cellulosefabrik	SWE	250 kW	A/S Glommens Træsliberi		1.00	
28/09/1934	95	Follum Træsliperi	NOR	35000 kW	Nordrehov komm. Elektrisitetsverk	51% N		
15/02/1935	298	Vittingfos Bruk A/S	NOR	2104 kW	Tønsbergs Elektrisitetsverk	100% N	1.00	
07/06/1935	55	A/S Titania (National Lead Co.)	USA	1104 kW	Jøssingfjord Manufacturing Co. A/S		1.00	
27/09/1935	18	A/S Tinfos Papirfabrik	NOR	4000 kW	Norsk Hydro	100% N		
27/09/1935	206	A/S Knaben Molybdenærgruber	SWE	800 kW	Vest-Agder Elektrisitetsverk	33% N	1.00	
29/11/1935	119	A.S. Stephansen A/S	NOR?	1100 kW	Haus Elektrisitetsforsyning			
13/12/1935	32	Sandar Fabrikker A/S	NOR?	3000 kW	Vestfold Kraftselskap		1.00	

Figure 22: Sum of power lease concessions granted 1907-1935

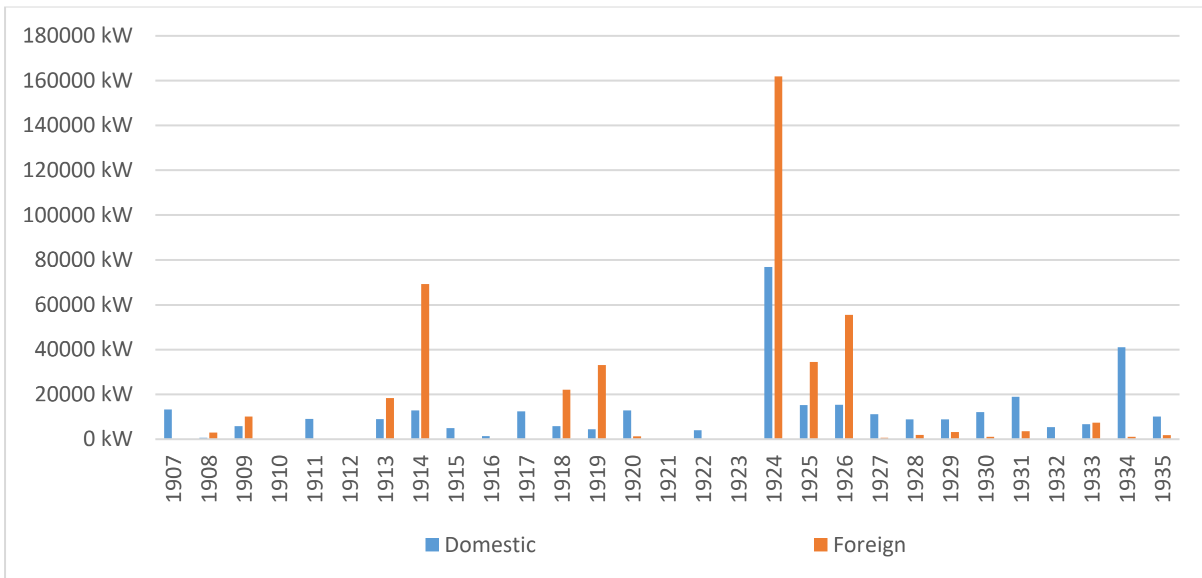


Figure 23: Power lease concession tax per kW/year

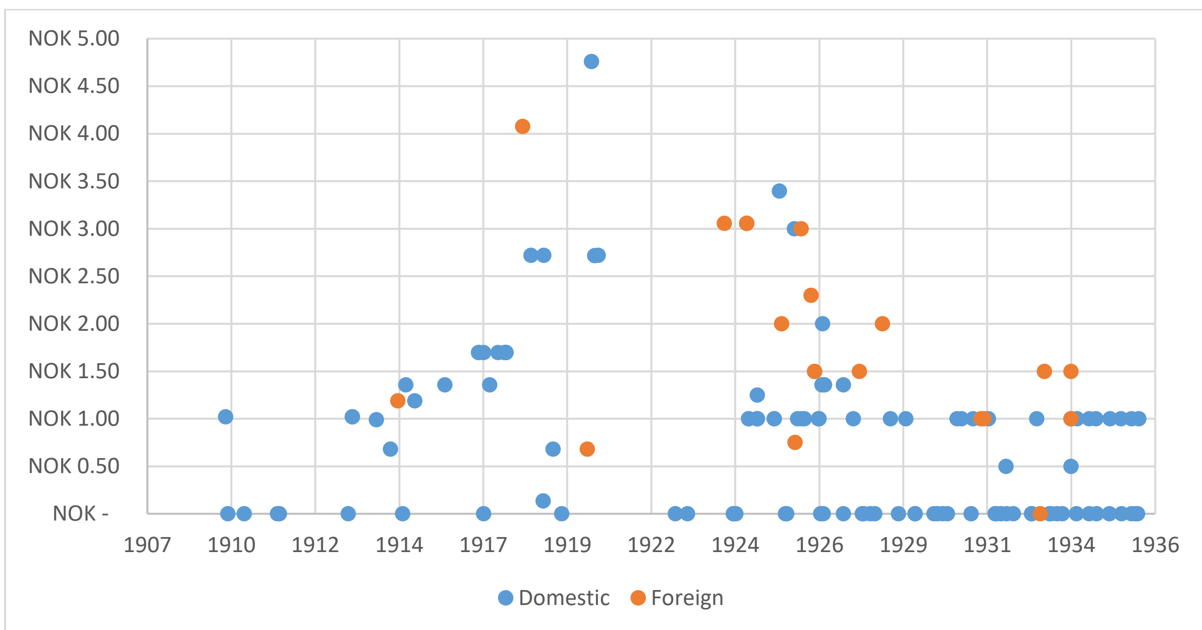


Figure 24: Time passed between application and approval for different concession

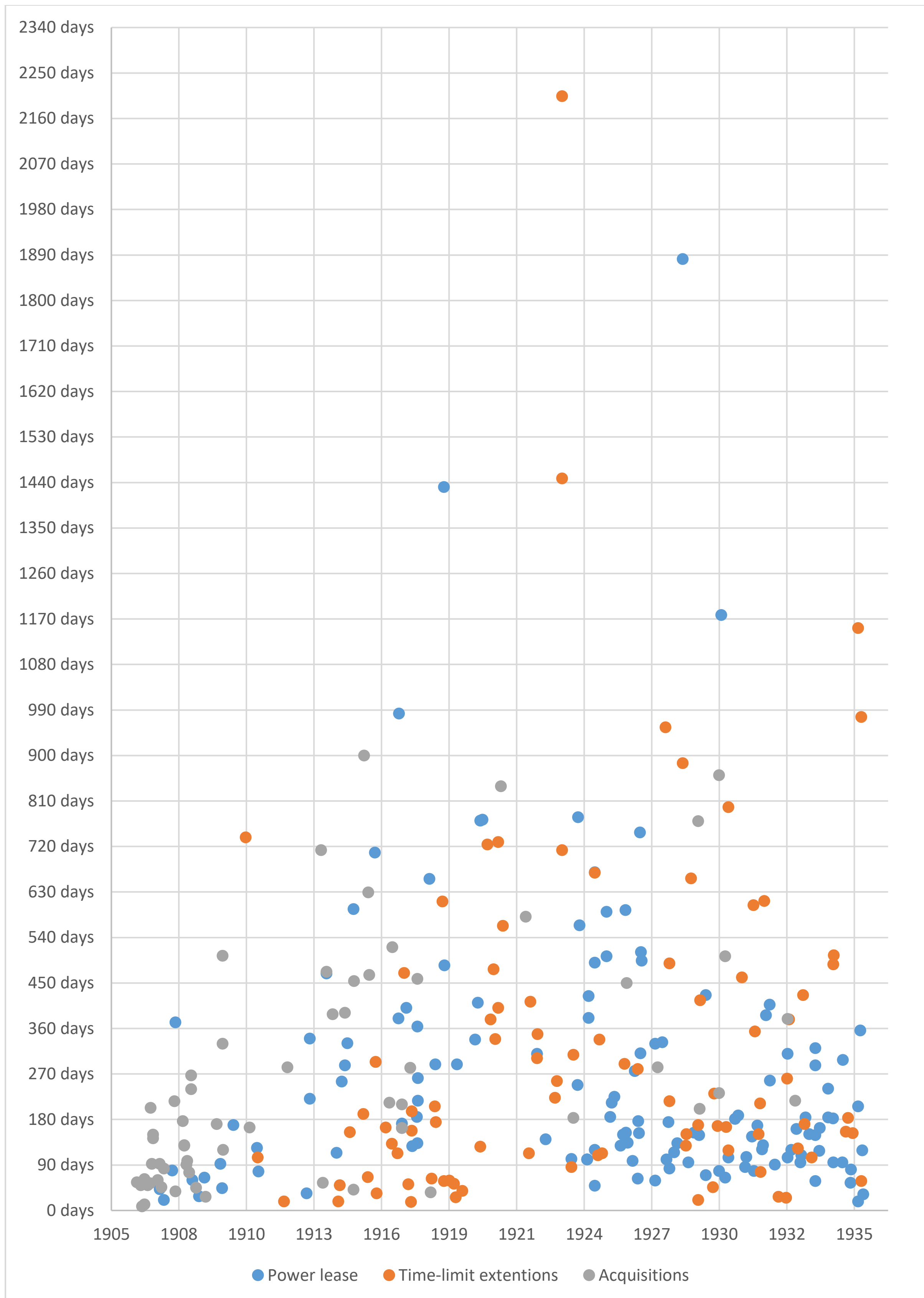


Table 8: Norwegian mineral concessions 1903-1935

Pt.: Processing time (days) | **MR:** Mineral rights**, SR:** Staking rights**, AQ:** Acquisition **|** **Nat**.: Ownership nationality | **Prod**.: Main product | **CC**: Capital Control | **Sh. Capital** : Share Capital | **RoR**: Right of Reversion (years) | **DP**: Share of product to be made available for domestic consumption | **pN**: % of shares available to Norwegians on capital expansion | **Royalty**: % of net output value

Passed	Pt.	Name	Type	Nat.	Prod.	CC.	Sh. capital	RoR	Royalty	DP avail.
12/12/1903	50	Kjøli Mines Ltd. London	AQ	UK						
12/12/1903		Sulitelma AB	MR	SWE	Cu					
25/05/1904	41	Thors Grube	MR	UK	U					
04/06/1904	96	P. Christiansen	MR	GER						
25/06/1904	100	Sulitelma AB	SR	SWE						
30/06/1904	105	Dunderland Iron ore Co. ltd. London	SR	UK	Fe					
30/06/1904	139	Nils Persson	SR	SWE	Fe					
16/07/1904	131	Sulitelma AB	MR	SWE						
01/03/1904	69	A/S Vesterdalens Kobbergruve	MR	?	Cu					
29/06/1904	23	C.W.M. Price	MR	UK	U					
17/09/1904	217	Sjangli norske AS	MR	SWE	Cu		NOK 100,000.00			
02/11/1904	81	A/S Ofotens Malmfält	SR	SWE	Fe					
03/12/1904	44	Alfred Teyes	MR	BEL						
03/12/1904	164	A/S Vigsnæs Kobberværk	AQ	BEL						
04/01/1905	30	The British Molybdenite Co. Ltd.	MR	USA	Mo					
13/02/1905	76	Axel Ekman	MR	SWE	Fe					
21/02/1905	43	Nordiska Grufaktiebolaget, Østersund	MR	SWE						
21/02/1905		Orkla Grubeaktiebolag	MR	SWE						
28/02/1905	31	Melkedalen ltd., London	SR	UK	Cu/S					
07/03/1905	94	Charles Mc. Cully	AQ	USA						
01/04/1905	36	Nils Persson	SR	SWE	Fe?					
01/03/1905	218	A/S Vesterdalens Kobbergruber	SR	?	Cu					
19/04/1905	68	Blackwells Development Corp. ltd.	MR	UK	Mo					
19/04/1905	37	Blackwells Development Corp. ltd.	MR	UK	Mo					
29/04/1905	22	Atchley, Magnus Co.	MR	FRA/UK	Zn					
29/04/1905	23	Charles Mc. Cully	SR	USA						
13/05/1905	79	Nordiska Grufaktiebolaget, Østersund	MR	SWE						
13/05/1905	49	Diskefjord Malmfelter A/S	MR	SWE?						
25/05/1905	84	Alfred Teyes	AQ	BEL						
30/08/1905	26	The Rovaldberg Copper Mines ltd.	MR	UK	Cu					
06/12/1905	117	The British Molybdenit Co. Ltd.	MR	UK	Mo					
06/12/1905	128	Nils Persson	SR	SWE						
13/02/1906	110	A/S Meraker Gruber	AQ	GER						
27/02/1906	103	Octave Henry	AQ	BEL						
27/02/1906	22	The Foldal Copper & Sulphur Co. ltd.	AQ	UK	Cu/S		NOK 1,800,000.00			
11/06/1906	90	Traag Mines ltd.	MR	UK	Zn/Pb					
16/11/1906	59	A/S Sydvaranger	MR	SWE/GER?	Fe		NOK 5,000,000.00			
10/01/1907	71	Salangens Bergværksaktieselskap	MR	GER	Fe		NOK 1,500,000.00			
11/02/1907	324	A/S Hadelands Bergværk	MR	BEL			NOK 576,000.00			
08/06/1907	53	Røros Kobberværk	AQ	NOR	Cu					
17/06/1907	415	A/S Stordø Kisgruber	MR	BEL	Cu/S		NOK 300,000.00		1%	
17/06/1907	283	A/S Mines de Jarlsberg	AQ	BEL			NOK 1,800,000.00		Undecided	
07/08/1907	162	A/S Norske Mineraler	MR	UK	Fe				0,10 p. t.	
28/10/1907	270	Nils Persson	MR	SWE	Fe			75		
28/10/1907	255	A/S Skandia Kobberværk	MR	SWE	Cu		NOK 4,000,000.00			
13/05/1908	64	A/S Røstvangen	MR	SWE	Fe	50% N			3%	
19/06/1908	182	Bergværksaktieselskapet "Norge"	MR	GER	Zn/Pb		NOK 1,000,800.00	82	3%	
24/10/1908	655	A/S Kristiania Minekompani	MR	NOR		100% N				
23/03/1909	346	Graf. Henchel von Donnersmack-Beuten	MR	GER	Zn			82	3%	
04/08/1909	415	A/S Birtavarre Gruber	MR	UK	Cu			82	3%	
04/08/1909	315	A/S Røros Kobberværk	AQ	NOR						
12/08/1909	302	William Walker Hood, John Hobort Armstrong	MR	UK	Au			75	3%	
04/06/1910	120	Gewerkshaft Bergmannsglück zu Gotha	MR	GER	Cu/Mo				3%	15%
06/05/1910	359	Bergværksaktieselskapet "Norge"	MR	GER	Zn/Pb				3%	
28/03/1912	1562	A/S Nordiske Grubekompani	MR	SWE/NOR		pN 50%		75	2%	25%
07/06/1912	393	A/S Trollerud Sølvverk	MR	GER	Ag/Au					
23/08/1912	436	Kaljord Syndicate A/S	RE	UK	Fe			70	2%	25%
25/10/1912	311	A/S Ringerikes Nikkelverk	MR	NOR	Ni	75% N		80	1%	
25/10/1912	198	A/S Røstvangen	MR	SWE/NOR						
18/12/1912	142	Fosdalens Bergværk A/S	SR	SWE/GER?						
09/05/1913	924	A/S Rødfjeldets Kisgruber	AQ	SWE	Cu/S	pN 67%		50	3%	50%
03/06/1913	522	A/S Grong Gruber	MR	FRA	Cu/S	pN 50%	NOK 6,480,000.00	50	3%	<50%
30/11/1913	227	Bjørkaasen Gruber	MR	GER	Cu/S		NOK 2,000,000.00	55	3%	
16/01/1914	114	A/S Aamdals Kobberverk	MR	FRA	Cu	pN 50%	NOK 2,880,000.00	55	3%	<50%
03/04/1914	692	Verstreaete Fils, Gent	MR	BEL	Cu			80	2%	
14/07/1914	1369	A/S Kvina Grube	RE	NOR	Mo	50% N	NOK 200,000.00	80	2%	25%
12/03/1915	422	A/S Vigsnæs Kobberverk	MR	NOR	Cu/S	100% N	NOK 250,000.00	80	2%	
30/07/1915	106	Bergverksaktieselskapet Rørangen	AQ	NOR	Cr	pN 50%	NOK 100,000.00	50	2%	>25%
29/10/1915	66	A/S Aamdals Kobberverk	MR	NOR	Cu					
19/06/1916	508	A/S Vaddas Gruber	MR	SWE	Cu	pN 50%	NOK 3,500,000.00	60	3%	<50%
04/08/1916	424	A/S Porsa Kobbergruber	MR	NOR	Cu	100% N	NOK 750,000.00	80	1%	<50%
26/08/1916	82	A/S Søftesdal Gruber	MR	NOR	Fe	100% N	NOK 500,000.00	50	1/2%-3%*	<50%
15/12/1916	227	A/S Bamle Nikkelkompani	AQ	NOR	Ni/Cu	100% N	NOK 1,350,000.00	50	1%	<50%
02/04/1917	658	A/S Svanø Gruber	AQ	?	Cu/S	pN 50%	NOK 700,000.00	50	2%	
02/04/1917	280	A/S Dalen Gruber	AQ	NOR	Mo	100% N	NOK 580,000.00	50	1%	<50%
05/12/1917	775	Anglo-Scandinavian Molybdenum, Ltd.	MR	UK	Mo	pN 50%	£15,000	50	3%	25%
15/05/1920	1176	The Foldal Copper & Sulphur Co. ltd.	SR	UK	Cu/S	pN 50%		50		
05/05/1922	755	A/S Porsa	AQ	NOR	Cu					
02/09/1927	-	A/S Rødsand Gruber	IM	NOR	Ti/Fi	pN 50%		50	1%	
07/09/1928	567	Bergverkselskapet Nord-Norge A/S	MR/SR	FRA	Zn/Pb/Cu	pN 50%		50	2%	
15/02/1929	482	Raffineringsverket A/S	MR/SR	GER	Ni	pN 50%		50	<4%	
22/11/1929	401	A/S Gruber og Malm	TR	GER	Zn	33% N				
31/03/1930	117	A/S Knaben Molybdengruber	MR/SR	UK	Mo			50	2%	<50%

22/01/1932	491	Fosdalens Bergverks A/S	IM	GER	Fe	33% N		50	2%	
06/07/1933	189	A/S Sulitjelma Gruber	AQ	NOR	Cu/S	pN 33%		50	0.04 p. t.	<30%

Table 9: Swedish Restriction Act Concessions, 1916-1935

Pt.: Processing time (days) | **Nat.**: Ownership nationality. Blank spaces are either known to be, or presumed to be Swedish owned. | **Property**.: Blanks are forms of real estate without forests, minerals or riparian rights.

Decided	Pt.	Company	Nat.	Property	Decision
24/11/1916	76	Holmens bruks och fabriksaktiebolag		Share purchase	Approved
30/12/1916	18	Sandvikens Jernverks AB		Mine	Approved
02/03/1917	101	Hofors AB			Approved
09/03/1917	91	Wargöens Aktiebolag			Approved
16/03/1917	28	Råsunda förstadsaktiebolag.			Approved
04/05/1917	162	Skyllbergs bruks AB			Approved
25/05/1917	27	Onsena fosfataktiebolag			Approved
25/05/1917	25	Närsjö Jästfabrikaktiebolag			Approved
25/05/1917	28	Hofors aktiebolag			Approved
01/06/1917	20	Aktiebolaget Elektrosalpeter	SWE/FRA		Approved
01/06/1917	18	Helsingborg Bryggeri AB			Approved
01/06/1917	17	Nordiska syrgasverken aktiebolag			Approved
22/06/1917	169	A.B. Mustad & Son	NOR		Approved
22/06/1917	158	Carlsdahls AB	GER		Approved
29/06/1917	44	Aktiebolaget Lomma Tegelfabrik			Approved
20/07/1917	29	AB Norrahammars bruks			Withdrawn
07/09/1917	78	AB Åminne bruk			Withdrawn
05/10/1917	129	Aktiebolaget Svenska (?)kvärnsfabriker Trpskvärn?			Approved
12/10/1917	44	Jönkjöpings och Vulcanus Tändsticksfabriksaktiebolag		Property, with waterfall	Approved
18/10/1917	20	Aktiebolaget Jästfabrikerna Activ			Invalid
26/10/1917	?	Handöls Nye Täljstens- och Vattenkraft AB			Approved
26/10/1917	23	Frälsesarmeens förlagsaktiebolag			Approved
26/10/1917	11	Jönkjöpings och Vulcanus Tändsticksfabriksaktiebolag			Approved
23/11/1917	49	Aktiebolaget Ludvika Bruksägare			Approved
23/11/1917	22	Läderfabrikaktiebolaget Chromol			Approved
21/12/1917	25	Jönkjöpings och Vulcanus Tändsticksfabriksaktiebolag			Approved
21/12/1917	400	Yngeredsfors Kraft Aktiebolag			Approved
04/01/1918	27	Jönkjöpings och Vulcanus Tändsticksfabriksaktiebolag			Approved
18/01/1918	52	Aktiebolaget Gästriklands yllefabrik			Approved
08/02/1918	70	Aktiebolaget Landtmannaförbundet			Approved
08/02/1918	25	Aktiebolaget Papyrus			Approved
22/02/1918	18	Aktiebolaget Fritz Frigern			Approved
22/02/1918	16	Halstad – Näsjö järnvägaktiebolag			Approved
15/03/1918	27	Aktiebolaget Papyrus			Approved
15/03/1918	21	Jönkjöping och Vulcanus Tändstiksfabrikaktiebolag			Approved
12/04/1918	358	Gruvaktiebolaget Dalarna	GER	Mining claim	**Denied**
26/04/1918	18	Reymersholms Gaula Spritförädlings Aktiebolag			Approved
07/05/1918	34	Strömbacka bruks aktiebolag			Approved
10/05/1918	8	Aktieselskapet Grong Gruber	FRA		Approved
19/07/1918	52	Aktiebolaget Hvitvarmels fäldtspatsbrott			Missing
26/07/1918	18	Östuljunga Andelsforströförening			Approved
09/08/1918	59	Svenska diamantbergbornings aktiebolaget			Approved
23/08/1918	9	Aktiebolaget Landskrona Alfalsaffär			Approved
06/09/1918	31	Allmäna Svenska Utsädes Aktiebolag			Approved
13/09/1918	20	Aktiebolaget Liljeholmens Kabelfabrik			Approved
26/09/1918	12	Aktiebolaget J.A. Pripp & Son			Approved
11/10/1918	9	Aktiebolaget Pomsil			Approved
08/11/1918	650	AB Forenade Chokladfabrikerna			Approved
08/11/1918	13	Svenska Varor- och Rederiaktiebolag			Approved
15/11/1918	27	Fastighetsaktiebolaget Merigaus			Approved
13/12/1918	165	Aktieselskapet Grong Gruber	NOR	Forests	**Denied**
31/01/1919	11	Svenska Varor och Rederiaktiebolaget			Approved
07/02/1919	224	Fagersta Bruks Aktiebolag	GER	Forests	**Partial**
07/02/1919	214	Fagersta Bruks Aktiebolag	GER	Forests	**Partial**
14/02/1919	16	Rörstrands Fastighetsaktiebolag			Approved
14/02/1919	11	Trollhättans Elektrotermiska Aktiebolag			Approved
09/05/1919	144	AB Brusafors-Hällefors			Approved
09/05/1919	28	Östra Centralbanans Järnvägsaktiebolag			Approved
09/05/1919	15	AB Brusafors-Hällefors			Approved
30/05/1919	78	Korsnäs sagverks aktiebolag			Approved
19/06/1919	55	Kappenbergs och Hofors Sågverksaktiebolag			Approved
31/07/1919	35	Nässjö Torvorströ			Approved
15/08/1919	**200**	Aktiebolaget J.A. Pripp & Son			Approved
20/09/1919	37	Aktiebolaget Papyrus		Waterfall + property	Approved
03/10/1919	86	Gävle – Dala Järnvägsaktiebolag			Approved
31/10/1919	8	Skånska intäckningsaktiebolaget			Approved
05/12/1919	59	Forsasteröens Kraftaktiebolag			Approved
19/12/1919	27	Borås järnvägaktiebolag			Approved
31/12/1919	1058	Ostkustbanans AB			Withdrawn
13/02/1920	**171**	A.B. Huskvarna Brändstorf			Withdrawn
13/02/1920	79	Aktiebolaget Marks Tegelbruk			Approved
04/06/1920	?	Aktiebolaget Edsbyens elektricitetsverk			Withdrawn
11/06/1920	94	Fors och Frosta herades Andelstorstoforening		Property w. turf	Approved
18/06/1920	**197**	Aktiebolaget Svenske Denofas	UK		Approved
18/06/1920	52	Aktieselskabet Nye Danske Brandforsikrigs-selskab	DEN		Approved
18/06/1920	41	Yxhults Stenhuggeri Aktiebolag			Approved

18/06/1920	39	Gävle-Dala järnväg aktiebolag			Approved
09/07/1920	268	Lake Copper Ltd.	UK	Shareownership in liquidation	Approved
24/09/1920	**226**	Eslövs skyttegilles fastighetsaktiebolag			Approved
15/10/1920	23	Aktiebolaget Svenska automobilfabriker			Withdrawn
12/11/1920	170	Nävekvarns Bruks aktiebolag			Withdrawn
14/01/1921	35	Göteborg-Borås Järnväsaktiebolag			Approved
14/01/1921	25	Råsunda Förstadsaktiebolag			Approved
04/03/1921	**109**	Norra Södermanland Järnvägsaktiebolag			Approved
01/04/1921	101	Maskarsyd-Veiinge järnvägaktiebolag			Approved
01/04/1921	21	Bergslagens Järnvägsaktieblag			Approved
01/04/1921		Gresta fastighetsaktiebolag			Withdrawn
22/04/1921	83	Fastighetsaktiebolaget Norden			Approved
10/06/1921	76	Eslövs skyttegilles fastighetsaktiebolag			Approved
22/07/1921	**182**	Linoleum Aktiebolaget	DEN		Approved
27/01/1922	?	Gränsfors Bruks AB			Invalid
27/01/1922	37	The Cunard Steam Ships Company	UK/US		Approved
03/02/1922	50	Fastighetsaktiebolaget D. Carnegie & Co.			Approved
05/05/1922	10	AB Våsgårda elektriska kvern			Approved
14/07/1922	80	Västergötland-Göteborgs Järnvägsaktiebolag			Approved
13/10/1922	225	Varpnäs Forlagsaktiebolag			Approved
23/02/1923	41	Stidsvigs & Hälsingborgs Limfabriken Aktiebolag			Approved
12/11/1923	54	Aktiebolaget Lomma Tegelfabrik			Approved
29/08/1924	235	Zinc de la vieille montagne	BEL	Mineral claim	Approved
29/08/1924	228	Skadninaviska Montanindustri Aktiebolaget	UK	Mineral claim	Approved
27/09/1924	19	Svensk-engelska mineraloljeaktiebolaget	UK/HOL		Approved
03/10/1924	24	Aktiebolaget Landskrona Valskvern			Missing
30/01/1925	20	Svensk-engelska mineraloljeaktiebolaget	UK/HOL		Approved
17/07/1925	49	Aktiebolaget Elektrosalpeter	SWE/FRA		Approved
09/12/1927	57	A/S Saugbrugsforeningen i Fredrikshald	NOR		Approved
13/04/1928	34	Skogbruksforeningen i Fredrikshald	NOR		Approved
22/06/1928	53	Zinc de la vieille montagne	BEL	Mining claim	Approved
18/01/1929	150	Oskarström Sulphite Mills Aktiebolag	UK	Property w. hydro (<500 hp)	Approved
16/05/1929	124	Blikstad, A. buys shares in Mörsbacha-Trysil	NOR	Share purchase	Approved
31/05/1929	?	Den Norske Handelsbank A/S (in liquidation)	NOR		Approved
19/09/1929	93	Zinc de la Vieille Montagne	BEL	Mining claim	Approved
01/11/1929	**141**	A/S Saugbrugsforeningen	NOR	Forests	**Denied**
30/05/1930	122	Aktieselskapet Verdalsbruket	NOR	Forests	**Denied**
14/11/1930	111	Trysil kommun	NOR		Approved
14/01/1931	149	Aktiebolaget Lomma Tegelfabrik			Missing
02/10/1931	88	Ljungaskogs AB			Approved
04/11/1932	15	Bilhjul AB I Stockholm	NOR		Approved
02/06/1933	27	AB J. Persson & Co. Örebro			Approved
20/10/1933	17	AB O. Mustad & Son	NOR		Approved

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