A Family Multinational

The Internationalization Patterns of the Pirelli Group (1872-2002)

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Pirelli was one of the first Italian industrial groups that internationalized their activities. Its initial foreign direct investments dates back to the end of the nineteenth century, few years after its establishment as a rubber articles producer in the north of Italy. Such as other European cases¹, the group's internationalization was linked to the tightness of the local market and to the relative scarce Italian per capita income, but also to the group's specific starting sector of activity: the manufacturing of rubber products, and in particular the production of electricity supply and telegraph communications cables. A sector characterized by significant monopolistic tendencies, in which a leading role was played by other European large-sized enterprises, and in which Pirelli could succeeded only by mean of an aggressive commercial policy, the help of the State - at least in Italy - and through the establishment of firm relationships with the final users of its products, which often led to the acquisition of minority holdings in their share capital. In this way Pirelli could successfully compete in a high structured market, taking advantage of the flexibility given by its relative smaller dimensions.

If this was true for the first decades of the group international activities - more or less till the end of the first world war - thing rapidly changed in the subsequent years. And the transformations were due not only to the changes occurred in the field of cables production and laying, but also to the modification of the Pirelli's

¹ For a review of the European enterprises' early internationalization see Jones G. and Schröter H. (eds.) 1993.

product mix and to its engagement in the tyre business. The steady growth of tyre demand in the interwar years, as a consequence of the rapid motor vehicles diffusion, stimulated Pirelli to develop its production in this field. A sector which it had entered in at the half of the Nineties, with the first bicycle tyre commercialization. Notwithstanding Pirelli maintained a good degree of diversification, the growing importance gained by its tyre activities led to a reorganization of the entire group, which also meant a redesign of its governance model. Acting in a market with growing competition led Pirelli to rethink its international strategies in order to integrate its structure and to raise the growing amount of financial resources it needed for new investments. In those years, in fact, the market spread out of the regional sphere in which it had tended to take place in the previous decades and assumed a more international character².

As we will see, the model adopted in the Twenties - not without some significant adjustment - lasted till the half of the Eighties, some years after the failure of the attempt to merge the group with one of its main European competitor, the British Dunlop, started in 1971. In these decades the tyre activities gained increasing importance in the balance sheets of the Pirelli Group, especially in Italy and in other European countries. Pirelli's strategy was oriented towards the dimensional growth of its tyre branches, in order to face multinational competition in a progressively concentrating market. Despite this developments, it is possible to detect one trait that, from the very start, continued to characterise Pirelli's internationalization strategy: the maintenance of a governance structure that enabled fund raising, both at national and international level, but in the meanwhile allowed to preserve the group's ownership structure, minimizing the financial engagement of its tight core holding group - the Pirelli family and a short number of trusted shareholders - by mean of a progressive extension of the control chain, informal agreements between the shareholders or the establishment of voting trusts. A strategy that was in line

² On the tyre market in the interwar years see West 1984, pp. 20-25.

with the governance models prevailing among the major Italian enterprises³.

The paper intends to analyse the patters of Pirelli's internationalization, focussing on the links between its evolution and the transformation of the main markets in which the group operated and on the strategies adopted in order to maintain unchanged its ownership structure in the long run. The paper is divided in four paragraphs, each reflecting the successive organizational configuration adopted by the group between 1872 and 2002: the first decades of internationalization, characterised both by the establishment of commercial subsidiaries and the formulation of international joint-ventures to produce cables and tyres, especially in the South of America and in the European countries; the second phase, started in 1920 with the establishment in Brussels of Compagnie Internationale Pirelli, the financial holding which kept under the whole international activity of the group, a firm that would have been transferred to Basel in 1937, both for political and financial reasons; the decade of the controversial Union with Dunlop, between 1971 and 1981; and, finally, the last twenty years characterized by the slow corporate structure reengineering and by the redesign of the internationalization strategy after the failure of the agreement with the British partner.

Some conclusive remarks will close the paper, stressing the negative consequence that the continuous pursuit of the ownership structure stability had on the most recent industrial development of the group.

On the governance of the large-sized Italian enterprises see the research of the Bank of Italy published in Barca L. (ed.) 2004; see also Brioschi, Buzzacchi and Colombo 1990; Bianchi, Bianco and Enriques Luca 2001 and Bianchi M. (ed.) 2005. On the same topic, but in historical perspective, see Colli 2006, Amatori and Colli 2000 and Bargigli and Vasta 2006. For a review of the effects of the governance models on the ownership structure of large-sized Italian enterprises see Amatori 1997 and Amatori and Brioschi 1997. Finally, as the far as the existing relationship between the governance model based on the family pyramidal group and the unstable performances of many Italian enterprises is concerned, see Barca 1996, especially pp. 170-198.

The starting nucleus of the Pirelli Group was established in Milan in 1872, as a limited partnership promoted by Giovanni Battista Pirelli, to which participated some representatives of the northern Italian industry and aristocracy. The founders, after a degree in engineering taken in 1870, at the school that would have became the Milan University institute of engineering and architecture, and after a journey through the main European industrial countries, decided to start the production of small rubber goods in the suburbs of Milan⁴. On his return, he was introduced to the northern Italian high society by two teachers of the engineering courses he had attended and he succeeded to convince some major investors to support his attempt to enter a sector which presented some risks because of its novelty. If it was true that the elastic rubber applications were continuously growing - especially as intermediate goods in other manufacturing productions - it was also true that starting the productions in this sector was not an easy task in technical terms.

In order to fill this specialized knowledge gap he initially involved in the enterprises a French technician, Antoine-Aimé Goulard, who has had previous experiences in the production and in the commercialization of rubber goods. With the help of Goulard, Pirelli could get the first plant going, but soon problem arose because of the scarce organizational skills of the same French expert who, in fact, was mainly a trader. Two years after his engagement as technical manager he was dismissed and at the request of the board he was replaced by Pirelli himself, who became at once the firm's "technical manager, commercial manager and managing director".

A concentration of functions that lasted more or less for a decade, during which the firm grew, reaching 300 employees⁶, increasing ten times its initial small amount of

On the Pirelli's journey see Bezza 1985 and the Pirelli's diary published in Polese F. (ed.) 2003. Generally speaking, on the Pirelli's training see Polese 2004.

⁵ See Pirelli 1946, p. 16.

⁶ At the beginning the employees were 50.

sales and starting to export its products in many European countries as well as in Latin America. The productions at the end of the Seventies included technical goods, like pipes, transmission belts, valves, joints and suchlike, but also haberdashery and health fittings. The manufacturing of the latter started in 1877, in conjunction with the entrance in the share capital by "a French industrialist, Mr. Cassasa⁷, who had come to Italy in order to establish a competing firm, but afterwards choose to enter into partnership with Pirelli". The enterprise changed its corporate name in Pirelli Cassasa & Co., a name that lasted till 1883 when it was transformed into a limited partnership with share capital, Pirelli & Co., with both Cassasa and Pirelli as technical managers⁸.

The transformation was linked with a radical change in the enterprise's strategy towards its refinancing, in order to bear new investments without taking out significant bank loans. Between 1879 and 1886, on commission of the Italian Army, the first experimental productions of telegraph cables were started, as well as those of electric conductors and of elastic thread for the textile industry: the products which guaranteed the success of Pirelli during the last decade of the nineteenth century. In 1886 a new plant was finally established in La Spezia to produce submarine telegraph cables. During the same year Pirelli obtained an important order by the Italian government, concerning the telegraph connections to the minor Italian islands and the maintenance of the submarine Otranto-Valona cable, that had been laid between Italy and the Balkans Peninsula in 1864 by British Henley Telegraph Works, one of the main player in that industrial sector. Finally in 1886, before the end of the new plant setting up, and before the launching of the cable ship "Città di Milano", Pirelli was able to knock the London based Eastern Telegraph Co., which was bargaining with the Italian government over the cable

François Cassasa, a Savoy producer of rubber goods, entered Pirelli's share capital as acting partner, but the management and the power to sign were still privilege of Giovanni Battista; on this Polese 2004, pp. 181-184.

⁸ Pirelli 1946, pp. 17-18.

connections between Italy and its overseas territories in Africa.

Adopting an aggressive commercial policy⁹ Pirelli could enter a market dominated by few international large-sized enterprises: taking advantage of its smaller dimensions and of its flexibility, it could strengthen its position, making choices that in the subsequent years will have had several effects on its corporate structure, especially as far as its international branches were concerned. During the following decade the export played a growing role in the commercial strategy of the company. If in the 1885 - when the 40% of the productions was for government supply -Pirelli's export counted only for the 4% out of the whole of commercialized products, five years later its percentage reached the 18%, to exceed the 30% in 1895¹⁰. These results where a consequence of the negative Italian economic trend in the years 1889-1890, which spread its effects among the first half of the Nineties, forcing the enterprises towards foreign markets to increase their level of internationalization; but they were also the outcome of a deliberate strategy. In brief this economic situation led Pirelli to the establishment of the first foreign commercial subsidiaries in the countries where the parent company, till that moment, had worked by itself¹¹.

The first subsidiary was created in Spain in 1901, on the basis of the relationships established in the previous years, when Pirelli - after the experiences with submarine cables in the Mediterranean Sea - entered into a contract to connect the Baleari Islands to Spain. When at the beginning of the new century the Spanish government decided to increase duties on several products, including the electric

Pirelli committed itself to lay the cables in only two months and at a lower price compared to the price offered by its British competitor. To fulfil its obligations it was then obliged to buy the necessary cables on the international market and to hire a cable ship by the Telegraph Construction and Maintenance Co.; on the Pirelli's activities in the submarine cables in these years see Jona 1986. More in general, on its international strategy see Bezza 1987 and Bigazzi 1981.

¹⁰ See Confalonieri 1982 and Bigazzi 1981, in particular tables on pp. 129-130.

¹¹ The countries were Spain, Great Britain and Argentina.

conductors, Pirelli in order not to lose its main export market¹², established a new plant near Barcelona, in Villanueva y Geltrù. A factory that, in short, produced not only electric conductors, but also the energy and telephone cables which a large number of Spanish urban areas were wired with. Pirelli, in fact, could obtain important orders by mean of the acquisition of minority holdings in the Spanish regional electric industries, like Catalana de Gaz S. A. in Barcelona¹³.

Rather different was the strategy adopted in Great Britain where, in 1909 a commercial subsidiary was created in London, Pirelli Ltd., and then in 1929 - after the first world war, when the internationalization pattern had radically changed - a plant for the manufacturing of rubber goods was established in Burton-on-Trent, following the installation of other two factories, specialized in the production of cables, respectively in Southampton (in 1913) and in Eastleigh (in 1927), "as a joint initiative between our enterprise and the General Electric Co. from London, which set up Pirelli-General Cable Works Ltd."¹⁴.

Similarly, in the first decade of the twentieth century other commercial subsidiaries were established in Austria, Belgium, France and Argentina and they were soon transformed into local companies. In Argentina the strategy was however closer to the one adopted in the Iberian peninsula. Here Pirelli initially operated through a small commercial office in Buenos Aires, that in 1910 was transformed into a commercial branch. Seven years later this affiliate was in turn structured as an independent subsidiary, Pirelli S. A. Platense¹⁵, which in 1920 established a plant for the production of electric conductors¹⁶. Soon "a second factory was set up to

¹² On Pirelli's export markets in these years see Confalonieri 1982, p. 411.

¹³ See Bezza 1987, pp. 71-73.

¹⁴ Pirelli 1946, p. 63.

¹⁵ During the same year Productos Pirelli S. A. was formed in Barcelona, in order to control the mentioned factory in Villanueva y Geltrù.

¹⁶ With the financial aid of the Credito Italiano, the main Italian financial partner of Pirelli which, in those years, operated in South America trough the Banque Brésilienne Italo Belge, a banking company established in Anversa. On the activities of the Italian banks in South

produce technical rubber goods and, in 1930, again in Buenos Aires, a new and modern plant was established to gather together the main productions, to which a rolling mill for copper and the manufacturing of subterranean cables were added and - in the rubber sector - the production of bicycle tyres and shoes"¹⁷.

Up to here nothing significantly different compared to the British developments: the forming of a commercial structure, which cleared the way for local productions, initially of cables and subsequently of rubber goods. The differences lied in the management of the market penetration supporting activities, which were very similar to the ones adopted in Spain during the previous years. In the South of America country electrification was at its beginning, and in the process were engaged German Aeg and Siemens-Schuckert, which both had a share in the local Compañía Alemana Transatlántica. Similarly to what had happened in Spain, showing again the adaptation capabilities through which Pirelli succeeded in the submarine cables sector, the Milan company participate with local investors in the constitution of Compañía italo-argentina de electricidad, which guaranteed important orders to Pirelli's subsidiaries. Franco Tosi, one of the main Italian electromechanical Italian firm, and Bade-based Motor, an investment trust company of the Brown Boveri group, also participated to the share capital of this firm. Few years later in Swiss with those two partners Pirelli formed Columbus, underwriting the 7% of its share capital. Established in 1913, Columbus had among its main tasks to raise new funds in order to reduce the risks for its founders. Among the shareholders of this holding company, which soon took the control of Compañía italo-argentina de electricidad and that was merged in 1923 with Columbus to form Motor-Columbus, there were several Swiss banks, and also Basel-based Sarasin, which soon became the main international financial partner of the Pirelli group¹⁸.

America see Piluso 1994.

¹⁷ Pirelli 1946, p. 64.

¹⁸ On the forming of Columbus see Barbone 2004, pp. 93-95.

In few years from a group of commercial offices a network of subsidiaries arose, always under the control of the Italian parent company. This subsidiaries, often formed merely because of the financial advantages that Pirelli could achieve, permitted the group to adopt different strategies in each country it operated, strategies that, in any case, were designed by the Italian general management. The Milan enterprise - as we have seen - was also directly involved in local electric and telephone companies which were the main outlets for its productions. In this way, in partnership with other electrotechnical and electromechanical firms, Pirelli - without massive financial engagements - could enter market traditionally dominated by a tight number of large international competitors.

Organizing a diversified multinational group: 1920-1970

In the years considered Pirelli & Co. was also involved in a rapid process of evolution. In 1906 Giovanni Battista bought a 150 square meters plot of land in the neighbourhood of Milan in order to set up a new plant, for the financing of which he had to look for new external funds. After the capital increases of the first years, since 1888 the share capital had been increased just one time in 1904, from 5 millions and a half Italian liras (1,063,829.79 US dollars) to 7 millions (1,353,965.18 US dollars); , in 1907, after the purchasing of the new area outside Milan, it was increased again to reach 10 millions and a half Italian liras (2,030,947.77 US dollars), while bonds for 3 millions (58,0270.79 US dollars) were placed.

But the major changes were not related to the increase of the productions and the raising of financial sources. In those years a process of progressive transformation of the product mix started; a process which affected the whole group, both in term of commercial strategy and organization. If till that moment the main Pirelli's products were strictly linked with the electrotechnical sector, from the beginning of the new century, approximately since the 1907 crisis, the tyre productions began to

play a major role. The manufacturing of tyres, in fact, had started at the end of the nineteenth century, when the first bicycle tyres were commercialized, but it was only during the following decades that, along with the growing motorization, it started to carry weight among the Pirelli's balance sheets. In 1907 tyres just amounted to 8.3% of the whole Pirelli's sales; only five years afterwards this percentage rose to 23.7% ¹⁹. A rapid development that in few years favoured a reengineering of the company in order to "better adapt its structure to the productions"²⁰.

During the First World War four technical departments were established, each responsible for one of the different fields of Pirelli's activities: electric conductors, tyres, minor rubber goods and chemical compounds (mainly a research and development department). At the same time, in order to integrate the commercial branches and the productive ones, three general management offices were also established. But the reengineering was not limited to Pirelli & Co., it interested the whole group, in order to increase organizational effectiveness and to centralize strategic decisions. During the Twenties new subsidiary were established in Romania and in Swiss and - as we have seen before - in many other countries the productive investments, implemented during the previous decade, were doubled. The dimensional growth, aiming to increase the group's sectoral and geographical diversification, along with the growing importance of the tyre sector - a field in which the setting up of global commercial and productive strategies was necessary led to the transformation of the group's structure. Two were the main targets of the reengineering: to favour the fund raising, both at national and international level, and to give to the group a structure that - with a limited amount of shares - would have allowed to maintain it under the control of the Pirelli family and of a tight group of shareholders closer to it.

Consequently in 1920 Compagnie Internationale Pirelli (Cip) was established in Brussels - mainly because of fiscal advantages - and it took under control all the

¹⁹ See Bigazzi 1981, p. 133.

²⁰ Executive order n. 337, March 23, 1916, cited in Montenegro 1985.

Pirelli's foreign activities, including also the recently acquired rubber plantations in Java and in Malaysia. In the same time a new company, Società Italiana Pirelli, was established in Milan by Giovanni Battista, his sons and some senior Pirelli group's managers. This new enterprise took upon itself the responsibility for all the operational Italian activities of Pirelli & Co., which in turn became a financial holding. The latter company since that moment would have kept under control both the new Brussels-based firm and Società Italiana Pirelli, that became the industrial fulcrum of the whole group. An agreement signed the subsequent year set the relationships between the three enterprises: the Milan operational firm would have given technical assistance to Cip and to its subsidiaries, maintaining the property rights on both brands and patents.

The 1920 reorganization gave to the group an integrated structure, establishing the central role of the Italian management, loosing in the same time the control chain: a preliminary condition to allow the participation to share capital by other national and international investors, without radical changes in the ownership structure. The growth realized during the Twenties increased the need for additional financial sources, which Pirelli tried to raise initially by mean of a bonded loan, obtained in 1927 by a group of US banks coordinated by J. P. Morgan²¹, and subsequently with the listing at the New York Stock Exchange in 1929 of Società Italiana Pirelli.

As soon as the negotiations for the bonded loan started, in order to defend the Pirelli's ownership, the 30 million Italian liras debt owed by Società Italiana Pirelli to Pirelli & Co. was transformed in share capital, by mean of the issuing of a new pluri-vote shares series²². The loan agreement provided the opportunity to convert the bonds into ordinary shares in the following six years: with the issuing of pluri-vote shares the control exerted by the Pirelli family was preserved, through the

²¹ The loan amounted to 4 million dollars, to be paid back within 1952; cfr. Montenegro 1985.

²² The Società Italiana Pirelli share capital grew from 120 millions Italian liras (6,187,161.64 US dollars) to 150 millions (7,733,952.05 US dollars). In the assembly the new 300.000 shares counted for 5 votes each.

Milan limited partnership. In the meanwhile it was cleared the way to the entrance in the Società Italiana Pirelli's board by other directors from outside, in particular the representative of J. P. Morgan in Italy and some Italian industrialists, the main members of the electric industry, with whom Pirelli had shared the experiences of Columbus, of Credito Italiano and of Edison, one of the principal competitors in the Italian electric sector²³.

While Pirelli broadened its alliances at home, also its international branches were reorganized, both centralizing their coordination in Brussels and deepening their relationships with the Swiss financial market. In 1929 Società Volta - Société Anonyme pour Enterprises Electriques at Industrielles was established in Zurich by Pirelli and Sarasin Bank. At the beginning its tasks were very similar to those assigned to the previous holding companies, like the Motor-Columbus; during the Thirties however the role of Società Volta radically changed: it became the second support of the whole group structure. Following the economic sanctions established after the Fascist military intervention in Ethiopia in 1935, Pirelli tried to loose - at least formally - its relationship with Cip in order to avoid reprisals. At first it transferred its shares in this company to Società Volta, which was also part of the group, but in a lesser prominent position; afterwards in 1937, again with Sarasin, Pirelli established Pirelli Holding S. A. in Basel²⁴, which incorporated all the Cip's activities and then merged with Società Volta²⁵.

In this way non only Pirelli could bypass the commercial sanctions, but it could also avoid the confiscation of some of its international activities during the Second World War. The structure given to the group during the Thirties was maintained in the subsequent decades, even if the main reasons that led to its creation lost their importance. On the contrary, the presence of two parent companies, the first in

²³ See Credito Italiano (ed.) 1926 and Associazione fra le società italiane per azioni (ed.) 1928. On the power structure of the Italian electric industry in those years see Falchero 1994.

²⁴ Società Italiana Pirelli subscribed only the 30% of the new enterprise's share capital.

²⁵ See Barbone 2004, pp. 102-104.

charge of the Italian activities (and of the European ones, after the creation of the common market) and the second responsible for all the overseas activities was the main characteristic of Pirelli till the Eighties when costs in term of efficiency clearly exceeded the advantages in term of stability of the ownership structure.

At the beginning of the Sixties the group's structure was exactly the same established thirty years before, with the only formal change in the denomination of the two holding companies: Società Italiana Pirelli had became Pirelli Spa, while Pirelli Holding had been renamed Société Internationale Pirelli S. A. (Sip). In the meanwhile the group, which was still controlled by the family limited partnership in Milan, had gained a good level of geographical diversification, thanks to the rapid territorial expansion of its controlled companies: in Great Britain, where in those years a Central buying office was established, but also in France, Belgium, Spain, Turkey, Greece, Argentina, Brazil, Mexico and Canada. An agency in New York and two commercial subsidiaries, the Swiss Pirelli Produkte A. G. and the Danish Nordisk Pirelli, completed the international group²⁶.

The productive diversification was also fair. In this field one could probably found the main difference between the Italian side of the group and its branches controlled from Basel: if in the first case "the three sectors²⁷ equally participated to the whole amount of sales", overseas the cables' contribution - in 1958 - counted for the 64%; the tyre's one counted only for the 24% while the technical rubber goods' one counted for the remaining 12%. This difference would have had important consequences on the future economic results of the two branches of the group, but between the end of the Fifties and the beginning of the Sixties - while the so-called Italian economic miracle was starting - did not cause deep concern. Instead problems arose "from the financial situation, which was quite 'heavy'

²⁶ See Sip, 22ème Rapport Annuel 1958/1959, Sip, 23ème Rapport Annuel 1959/1960 and Asp, CpLP, S. 2, b. Discorsi Convegni dirigenti 1957-1971, f. Convegno dirigenti - Milano 11 aprile 1960, Leopoldo Pirelli's speech. On international Pirelli's development between the interwar years and the Italian "economic miracle" see Montenegro 1993.

²⁷ Tyres, cables, and technical rubber goods, including shoes.

because of the growing necessity of capital assets for the numerous industrial initiative recently established or scheduled for the future, and the mounting need of circulating capital in relation with the increasing turnover and with the devaluation, that was particularly intense in some countries"²⁸, especially in Latin America. At the end of the decade is seemed that a solution to these problems could come from the signing of an agreement with one of the major European competitors.

The Union with Dunlop: 1971-1981

As we have seen in the previous paragraph, during the two decades after the end of the Second World War Pirelli progressively increased its activities in the tyre sector, especially in Italy. At the end of the Sixties slightly less than half its turnover (45%) was in tires, 40% in cables, and the remaining 15% was in rubber-related items.

In the same decades the tyre market radically changed. Since the interwar years the process of internationalization had rapidly developed. On one hand the competition had taken a global character, European and US company had started to came into direct conflict at a world level; on the other hand they had begun to compete also in term of cross-investments, because of the growing diffusions of tariffs on tyre imports. Till the Twenties Dunlop, as well as Michelin, had erected a plant in the US; in the same decade the American companies had started to invest in Great Britain, at that time the major European market: in 1924 Goodrich had built here its first factory, followed by Goodyear in 1927 and by Firestone in 1928. During the next ten years competition through direct investments sharpened and involved not only the industrialized country, but also the underdeveloped ones, first of all - as it was seen also in the case of Pirelli - Argentina, but also India and South Africa, which offered the most promising markets because of their dimensions.

²⁸ Asp, CpLP, S. 2, b. Discorsi Convegni dirigenti 1957-1971, f. Convegno dirigenti - Rapallo 11-12 aprile 1959, Leopoldo Pirelli' speech.

After the Second World War the process of globalization developed further: 89 foreign manufacturing subsidiaries or affiliates were established by the major tyre market players in the years 1946-1975, against a total of 52 in the first half of the century. In particular the move towards less developed country continued: 58 of the mentioned 89 new factories were built in non-industrialized nations. As far as developed countries were concerned, US companies were particularly active in expanding their direct intervention in Europe: a total of 18 new manufacturing subsidiaries or affiliated were created in European countries by US companies between 1946 and 1968. Their foreign direct investments was not only oriented towards Great Britain, as in the past, but it was also directed towards other countries like France, West Germany, Italy and - to a lesser extent - towards Holland, Belgium, Luxembourg, Sweden and Norway. In Italy General Tyre established a subsidiaries in 1950, followed by Goodyear and Firestone in 1965²⁹.

In the same decades the concentration of local markets, that was significant since the interwar years, holds its level high (from 1935 to 1972 the first eight world companies concentrated between 88 and 90% of the entire production of tyres and inner tubes) and partly changes its characteristic. In the second post-war era it was recorded a significant growth of medium-sized multinationals, which progressively eliminated or absorbed smaller producer. This was true for the US, but moreover for the European countries where the disappearing of small-sized local producer was sometimes due to a takeover by US companies.

The answer to these transformations by European producers came either in the shape of new technologies and in the attempt to reach formal or informal agreements, aiming to hold back the progress of US multinational; in both cases a peculiar role was played by Michelin, the main European producer. The French multinational was the first to successfully commercialize a new kind of tyre after the end of the Second World War, the so-called radial-ply one, which differed from the traditional cross-ply tyre in the disposition of plies, the layers of rubber cord that

²⁹ See West 1984, the table at p. 19 and pp. 29-32.

form the carcass of the tyre. In the traditional tyre the plies run diagonally between the two beads that fix the tyre to the wheel rim, while in radial-ply tyres they lie at approximately 90 degrees to the circumference of the "direction of travel". The major advantages of radial-ply tyre in the conduct of auto vehicles (they could be mounted quite exclusively on cars) are the increased comfort at high speed, the improved cornering power and the greater stability. Generally speaking, the flexible sidewalls provided by the radial disposition of plies minimize the distortion of the tread bracing layers, leading to a higher life of the tread itself³⁰.

As said, Michelin was he first producer to introduce radial-ply tyres in 1948, the "X" tyre, redesigning a previous project of the Detroit-based Palmer Tyre Company. Three years after, raising some disputes on patents, Pirelli launched its "Cinturato", a radial-ply tyres that differed from the French one because it was built using rayon instead of steel wire belt. In the next decade the radial-ply tyre spread in the European market and in the Sixties also the other producers started to commercialize radial-ply tyres, often under Pirelli's licence³¹. On the contrary the diffusion outside Europe was slower: in the US, only during the Seventies the radial-ply tyre began to be commercialized³² and the choice was strictly linked with the Ford's decision to equip its cars with radials. The main reason of US companies' reluctance to introduce the new type of tyre lied in the fact that he radials adoption obliged to change the production processes introducing new machinery. Secondarily it should be considered that the massive diffusion of radial-ply tyres could have led to a overproduction crisis, due to the longer life cycle of radials itself; crisis that effectively occurred during the Seventies.

As far as the attempt to establish agreement between the European producers is concerned some encounters between Michelin and Pirelli are illuminating. During

³⁰ On these technical topic see Morton and Quinton 1982.

³¹ By 1969 it would have been licensed 67 tyres companies in 25 country.

³² Michelin opened its first overseas radial-ply tyre plant in Canada in 1971.

the Sixties and the Seventies François Michelin, the chief of the French group, met several times Leopoldo Pirelli, the nephew of Giovanni Battista who, between the end of the Fifties and the beginning of the subsequent decade, had succeeded his father - Alberto Pirelli - at the head of the Italian multinational. The reports on these meetings, that he regularly spread among the Pirelli's top management, were very good examples of the exchanges between two large-sized enterprises operating in an oligopolistic market. In particular is interesting here a report on a meeting occurred in Milan at the end of April 1965.

The major topic of the summit was a possible technical alliance between the two multinational, which would have implied a future enlargement both to Dunlop and to Continental. The main reason of a similar agreement were explained by Michelin himself who showed its concern about "the American menace on the European market" and his belief that the only defence could have come from a convergence between the four major European companies. This agreement would have discouraged the possible approach between Dunlop and the Americans, in particular between the British producer and Goodyear, with whom they had had some contacts in the previous years. Michelin showed its scarce confidence in Ray Geddes, the head of Dunlop, who - in his opinion - was "always friendly and polite, but also too much schematic, too much Anglo-Saxon". Michelin, continuing his discourse, in a chauvinist tone, talked about the necessity of an "alliance latine" as a basis for future enlargements, thanks to the cohesive power of the "esprit latine" that united Michelin and Pirelli. But his discourse, as noticed by Pirelli, had not links with some "concrete an practical solution". Michelin - Pirelli continued - was in fact "hampered by his own closer collaborators" which considered the possibility of an European technical agreement "a waste of their technical knowledge laid in during decades of independent policies".

Notwithstanding more than two hours talks, Pirelli concluded that only emerged from the meeting uncertainty and perplexity. There were no concrete follows up in any fields, "just vague considerations, expression of friendship and goodwill, but

nothing more". In the end, it seemed that "even if François Michelin conceived a wide anti-American abstract vision, he [did] not want to, or he [could] not, share any portion of his technical assets. He, evidently, [felt] himself strong and he [was] persuaded both that he [could have] acted by his own also in the future and that his enterprise [could have] grew further on the basis of internally developed technologies". It was not by chance that in the same year Michelin had entered the share capital of the French Kléber Colombes buying out the 25% share of Goodrich: Michelin had decide to conduct by his own the containment action against US companies³³.

As it would have happened other times in the future, the agreement between Pirelli and Michelin was not signed and few years later Pirelli strengthen its relationships with Dunlop, which, since the beginning of the Sixties, had established a joint technical committee with, on problems related to car and giant radial tyres. Five years after the Milan meeting with Michelin, on March 2, 1970 Leopoldo Pirelli and Reay Geddes announced to the shareholders of the two groups that negotiations for a merger between Pirelli and Dunlop were at an advanced stage. Weaknesses in the tyre market which the two groups were facing around the same time was a serious issue for each. As we have seen, the expansion of US multinationals in Europe had a great impact, especially on British market. Dunlop market share was significantly affected by this growing competition: the group's share of total industry sales fell from around 50% in the post-war years to about 35% in the early Seventies³⁴. As far as Pirelli was regarded, it also had to face the expansion of US multinational, but also the advance of Michelin, who had opened its own plant in Italy and who, at the end of the Sixties, had signed an agreements with Fiat, that acquired Michelin's holdings in Citroën and, moreover, abandoned Pirelli as supplier in order to adopt Michelin's radial-ply tyres to equip its cars.

³³ See Asp, CpLP, S. 2, b. Michelin 1, f. *Incontri François Michelin - Leopoldo Pirelli (1963-1966)*, minute of the meeting in Milan on April 28, 1965 between Pirelli, Brambilla and Michelin.

³⁴ See West 1984, p. 28.

Pirelli and Dunlop non only shared a common difficult situation, but they were also complementary, both geographically as well as in terms of production lines: 75% of Pirelli's turnover came from Europe with the remainder from Latin America (22%) and the remaining 3% from North America. The company had no presence in Asia, Africa, or Oceania. For its part, Dunlop located 63% of its sales in Europe, only 2% in Latin America, 14% in North America and in addition the company could vaunt a presence in markets in Africa, Oceania, and Asia. Even stronger was the degree to which they were complementary in production. In the new group Pirelli would bring its important production of cables as well as sophistical mechanical productions such as shock absorbers, brakes, wheels, and aircraft landing equipment. For its part Dunlop would bring to the Union its production of natural and synthetic rubbers as well as a large variety of rubber industrial items and consumer goods.

The Pirelli Dunlop Union (with a combined turnover of slightly more than 2 billion of dollars) ranked number 3 in the rubber industry behind Goodyear, who at the beginning of the seventies had a turnover of almost 3 billion dollars, and Firestone, with its 2.1 billion. The Anglo-Italian group employed 178,000 persons (76,000 were within Pirelli and the remaining 102,000 were with Dunlop).

Notwithstanding the high degree of complementarity, the Union between the two companies was not conceived as a true merger, but as a "specular integration" on the basis of equality, that had to be considered "an objective to be maintained and perfected in everything except trade investments unrelated to the Union"³⁵. In this perspective, the symmetry between the two groups - both in term of profitability and value - had relevant monetary and financial consequences because it allowed to "fulfil the agreement without any money transfer, by mean of exchanges of holdings, aiming to achieve equality"³⁶.

³⁵ Asp, CpLP, S. 1, b. b. Union Pirelli Dunlop 2, f. Documenti costitutivi della Union, *Code of practice*, January 21, 1971, p. 2.

³⁶ Asp, CpLP, S. 1, b. Pirelli Spa 2, f. Consigli 1970, sf. Consiglio Pirelli Spa 23 febbraio 1970, Integrazione Pirelli-Dunlop. Relazione generale per i dirigenti ed i consigli, p. 4.

To make it possible, it was necessary that the two groups had the same number of leading entities. In fact, the points of departure were different. Dunlop was based on one leading company at the same time both an industrial firm and a financial holding, while Pirelli - as previously seen - had two companies at the top of the pyramid: Pirelli Spa, which was at the same time both an industrial company as well as the controlling holding of activities in Italy and in the European Common Market, and Sip S. A. which controlled overseas activities. In order to make an exchange on equal terms, Dunlop created Dunlop Holdings Ltd which controlled all the participations in the UK, Ireland and the countries of the European Common Market, a counterpart to Pirelli Spa which was transformed into a pure controlling holding company which the new Industrie Pirelli Spa, a coordinating industrial company, would respond to. All the industrial shares owned by Dunlop outside of the UK, Ireland, and European Common Market were controlled by Dunlop International Ltd. On the Pirelli side, the corresponding entity was Sip S. A.

After a year of analysis on the potential combinations, the complex company structure that was created during the summer of 1971 - when the two groups formally signed the agreement - mainly guaranteed that neither lost control of its structure, thereby keeping the share balance unchanged. On the basis of the previously described reorganization Pirelli could acquire 49% of Dunlop's assets in the UK, Ireland and Common Market as well as 40% of Dunlop's assets in the rest of the world; the same occurred for Dunlop as regarded its shares of Pirelli, with Italy taking the place of the UK and Ireland³⁷. This choice, which had a deliberately low impact on corporate bodies, encouraged a favourable reception of the alliance at all levels, but over time made it difficult to coordinate the two groups.

Starting in the early Seventies, Union management made new proposals of organizational changes. Quite soon it was for example argued that a higher organizational efficiency and effectiveness could be reached by changing from

³⁷ Asp, CpLP, S. 1, b. Pirelli Spa 5, f. Assemblea ordinaria e straordinaria del 21 dicembre 1970, assembly report.

company management, the separate management of the group industrial activities, to product direction, the joint management of the single activity sectors, thereby making the Union become more similar to a multidivisional integrated group³⁸.

However, these restructuring plans had to cope with two hindrances difficult to overcome: on one hand, opposition against any change of the proprietary structure of the two groups, and on the other hand an economic situation negatively affecting profitability of some elements of the alliance itself. As regards the first aspect reported, an anonymous document by the Italian top management presented in 1972 explained the core of the problem: the incomplete merging of Pirelli and Dunlop was not due to the lack of suitable European laws³⁹, but to the management structure of the two groups. Pirelli & C. - the limited partnership company through which the Pirelli family and the shareholders closer to it controlled the Pirelli group - owned only the 7,1% of the share capital of Pirelli Spa and 18% of Sip S. A.; in this situation "Sip S. A. [represented] the control pillar of Pirelli Spa (11,4%)", while it was controlled by Pirelli & Co. (18%) and directly by the family and close friends (20%). On the contrary, Dunlop did not rely on control groups, so in the event of a complete merging all the Italian cross-holdings would have been cancelled and the Pirelli & C. shares would have accounted for only 7,8 % of the share capital of the new company created by the merging of Dunlop Holdings Ltd., Pirelli Spa and SIP S. A.⁴⁰.

As already mentioned above, the other product management obstacle was the

³⁸ See Asp, Cplc, S1, b. Union Pirelli Dunlop 4, f. Incontri LP/RG 1972, *Notes on organisation of cable sector within the Pirelli-Dunlop Union,* this document is anonymous and without the date, but according to its accompanying documentation it was written in March 1972 by Stanley Crooks, almost certainly with the help of Alessandro Signorini, who at that time were respectively Deputy General manager of Sip and General Director of Pirelli Spa.

³⁹ This was the explanation given both by the Board accepting, as for the Italian side, to join the Union, and during the various press conferences when the plan was presented to the journalists.

⁴⁰ Asp, Cplp, S1, b. Union Pirelli Dunlop 4, f. Incontri LP/RG 1972, Osservazioni su studio organizzativo Union, this document is anonymous and without the date, but it must have been written in 1972, a few days after the report cited in note n. 38.

progressive negative development of the economic situation, especially in Italy. Here labour costs increased over the three-year period from 1969 to 1971 with an absolute value equal to the Pirelli turnover; then, in the early Seventies, the problems caused by the energy crisis and the subsequent decline in the automotive market, together with the more and more pervading spread of preference for long-lasting radial tires, soon led to an overproduction crisis, being more severe in Italy, both because of the increasing social tensions and because of the reported lower productivity levels⁴¹. All these elements literally arrested the development of the Pirelli group. Increasing costs together with sales growth erosion, i.e. the figures of sales remain almost unchanged between 1970 and 1971, led to progressive outcome worsening and an increase in debt levels⁴².

Following severe criticism of British public opinion towards the developments of the alliance, because of the huge losses of Industrie Pirelli Spa (at the end of 1972 they amounted to over 80 million of dollars, i.e. over a third of the whole share capital), Dunlop decided to "freeze" its holdings in the Italian group. From that moment on, Pirelli Spa had to bear on its own financial responsibility for Industrie Pirelli Spa because Dunlop would not increase its initial investment in that company (amounting to 41.5 million pounds) any more, at least until "sustained profitability" could be again guaranteed⁴³.

During the following years a series of rescue plan for Industrie Pirelli Spa were elaborated and in 1980, for the first time since it had been set up, it could earn profits⁴⁴. However, during the last years of the decade, the effects of the international crisis involving the tire sector also affected the British counterpart of

⁴¹ See Negri 1979.

⁴² See Asp, Cplc, S1, b. Industrie Pirelli Spa 1, f. Piano di risanamento P2 (Industrie Pirelli Spa), Piano generale, April 13, 1973.

⁴³ See Asp, CpLP, Castaldo M. and Pittini M., *Pirelli: The Union With Dunlop*, Fontainebleau, INSEAD, 1987 (case prepared under the supervision of Sumatra Goshal) and Bolchini 1985, pp 78-83.

⁴⁴ On the group reengineering see Manca 2005, pp. 70-74 and Bolchini 1985, pp. 88-150.

the Union⁴⁵, thereby creating further problems between Dunlop and Pirelli, that in 1976 and 1978, respectively, decided not to accept the mutual funds requests in order to recapitalize the operating companies. In April 1981 the alliance was declared jointly dissolved by Leopoldo Pirelli and Campbell Fraser, the new chairman of the group who had replaced Raey Geddes in 1978.

Restructuring and reengineering: 1982-2002

The Union dissolution made the Milan-based company return to its situation of 10 years before. It presented almost the same problems that, at the end of the Sixties, made the Pirelli high management try to find an international alliance and to change the group structure in order to solve problems arising both from the size and from the type of organisation, especially from the two separate decision-making centres represented by the two parent companies. It was fairly clear that - as the previous experience within the Union and the simultaneous development of other international groups suggested - it was necessary to manage activities of the two holdings by "a single supervision centre, by just one board and by one and the same management". When the decision to dissolve the alliance with Dunlop was taken, the hypothesis of a merging of Pirelli Spa with Sip was taken into consideration, so as to solve the long-lasting problem of the "two-heads". However, the implementation of such a merger was very unlikely to happen "both for monetary reasons, but also because Pirelli Spa, that was the main company on which the group strategies had been based till that moment, would have become too weak from a 'political' point of view". Therefore an intermediate solution was chosen, i.e. setting up the Pirelli Société Générale (Psg), another holding with its head office in Basel, jointly controlled by Pirelli Spa and Sip S. A. and directly managing the

⁴⁵ See Dunlop Annual Reports from 1976 to 1978.

operating companies⁴⁶.

The reorganisation, however, didn't save the situation, because the "two-head" problem was not solved, but simply moved backward, changing the corporate configuration, so that after four years, another reorganization was needed in order to simplify the whole structure. In May 1988, the planned new company structure was presented to the group's assemblies: the limited partnership company, Pirelli & Co., should control 35-40% of Sip S. A., which should become the financial core of the Pirelli group; Pirelli Spa should be directed by the latter, with shareholding amounting to 45-50%. At the same time, Psg should leave the stage, transferring to Pirelli Spa all its competencies - including management of the newly born Pirelli Tire Holding of Amsterdam, that should then combine all group's activities in the tire sector⁴⁷.

However, in the early Eighties, Pirelli was late to meet the market needs, not only because of its financial and organizational structure; in fact, after leaving Dunlop, its scarce competitiveness was mainly caused by its size, especially the size of the tyre sector. On one hand, the group was totally absent on the leading United States market, which the company lost when the Union was dissolved, and on the other hand, as described by a report presented to the Board of directors in December 1986, its tyre sector was "too big to limit itself to market niches, too small to compete satisfactorily with the first 4 Big Producers", that in the early Eighties were Goodyear, Michelin, Firestone and Bridgestone. As it was stressed by Lazard Freres, which was contacted in order to evaluate the possibility to establish a new

Asp, Cplc, S2, b. Pirelli Spa 22, f. Studi per ipotesi creazione Pirelli Holding (P.H.), *Problema case madri*, highly "confidential" note by Emanuele Dubini of 13 April 1981 (to which cit., belong). For more information about the organizational structure, see Asp, Cplc, S. 2, b. Pirelli Spa 24, f. Studi, costituzione e documenti Psg, Leopoldo Pirelli's letter to the group manager, April 16, 1982; Asp, CpLP Castaldo M. and Pittini M., *Evolution to a Global Organization - Pirelli: 1970-1987*, Fontainbleau, INSEAD, 1988 (case prepared under the supervision of Sumatra Goshal) and Perulli 1986, pp. 38-44.

⁴⁷ See Asp, Cplc, S2, b. Société Internationale Pirelli 4, f. Consigli Sip 1988, sf. Consiglio 10 June 1988, Rapport du Conseil d'administration à l'Assemblée générale extraordinaire de actionnaires de la Société Internationale Pirelli Sa du 6 mai 1988.

international alliance, the group's structure looked "too complicated". Moreover, Pirelli looked "basically as an Italian group" which operated in sectors, "that no longer had common characteristics and which by that time offered scarce opportunities to create synergies".

Within a market becoming more and more concentrated⁴⁹, it was necessary to create an international alliance or to increase the group size. Therefore, at first in the spring of 1988, the company tried to buy out Firestone and Armstrong, a much smaller American company; then, after a failed attempt to sign an agreement with Michelin⁵⁰, it tried to stipulate one with Continental between 1990 and 1991. However, just one of these efforts was successful, i.e. Armstrong acquisition, while the other plans, that were more important because they involved bigger enterprises, failed. In the first case, Bridgestone submitted a counteroffer that was disproportionate according to Pirelli, which abandoned the deal⁵¹. The talks with Michelin failed because, as usual, the French group decided to develop by its own acquiring Uniroyal-Goodrich in 1989. In the third case, after many months of negotiation, the supervisory board of the German company rejected the proposal of unifying all the activities of both groups into the tyre sector under the corporate name of Continental, together with the purchase of the majority share of the latter by Pirelli⁵².

⁴⁸ Cfr. Asp, CpLP, S. 2, b. Pirelli Spa 7, f. Controllo, Progetto Lazard Frères Parigi - incontro con M. R. Laan a Basilea il 21 novembre 1983.

⁴⁹ In the period between 1970 and 1986, in Europe, due to the different agreements, merging or acquisitions of the major manufacturing companies, the originally fifteen operators of the tyre sector, were reduced to only seven: Avon, Continental, Fireston, Goodyear, Pirellli, Sumitomo and Michelin; see Asp, Cplc, S. 2, b. Société Internationale Pirelli 3, f. Consigli Sip 1986, sf. Consiglio 19 Dicembre 1986, Board Report. More in general, if in 1979 the three leading companies in tyre sector accounted for 46.0% of world tyre sales, in 1991 the percentage of , Goodyear, Bridgestone and Michelin rose to 51.9% (in that year Pirelli accounted for 6.0%); see Barlow, Jayasuriya and Tan 1994, p. 222.

⁵⁰ See Asp, CpLP, S. 2, b. Michelin 3, f. *Contatti François Michelin - Leopoldo Pirelli (1988-1989)*, minute of the meeting in Paris on July, 7 1988 between Pirelli and Michelin and relative note of Pirelli written on July, 1.

⁵¹ See Pirelli Spa, Annual report, December 1988.

These developments, and especially the latter, not only avoided the Pirelli group to gain the desired dimensional growth, but they also had heavy consequences on its financial situation. The terms of the agreements stipulated with its allied in the attempt to take over Continental costed to Pirelli more than 295 million of dollars in 1991. The negative results of that year suggested to adopt a new strategy for the future, in order to solve the synergy problems pointed out by Lazard Freres few year before. The situation suggested to direct the industrial activities towards the second of the two choices that the group had faced in the mid-Eighties: to compete with the biggest enterprise of the sectors in which Pirelli operated, becoming one of the main international players, or - on the contrary - to reduce its dimension in order to specialize in highly profitable productions⁵³.

The turnaround process was driven by Marco Tronchetti Provera, the brother-in-law of Leopoldo Pirelli, who in the previous years had got responsible jobs within the group and who was one of its main shareholders, through the financial company Camfin. From a financial point of view the primary objects of the reengineering were "a reduction of indebtedness, improvements in the financial condition [and] a re-evaluation of relations with the banking system" The redress of the financial situation would have been achieved through a reduction of the diversification degree, dismissing the minor rubber productions, orienting the other sectors towards high added value products and marginalizing the more traditional segments. In the tyre sector the turnaround led to the development of high performance tyre productions and to the closing of numerous plants in Europe and in Italy (among them also the Milan historic Bicocca factory). Also in the cable sector a large number of plants were stopped in order to focus on profitable productions,

⁵² On the entire negotiation see Asp, CpLP, Bagley C. E., Dick M. R. and Pai S. H. Y., *The Attempted Merger of Continental and Pirelli*, 1993 (Stanford University Graduate School of Business case study).

⁵³ All the minor producer had to face this choice in those years; see Barlow, Jayasuriya and Tan 1994, pp. 221-225.

⁵⁴ Pirelli Spa, Annual Report, December 1992.

transforming the group in a supplier of telecommunications networks and turnkey systems⁵⁵.

The reengineering process gain its first results in 1992: "a 35% rise in the operating profit before deprecation and amortization compared with preceding year, an increase in the gross operating profit of Lire 100 billion [67,987,440 US dollars], despite higher deprecation of Lire 108 billion [73,426,440 US dollars], a free cash flow of Lire 708 billion [481,351,060 US dollars], and a net cash flow, also positive, of Lire 275 billion [186,965,450 US dollars]" The turnaround, that ended at the half of the Nineties, led also to the solution of the main Pirelli's organizational problem: in 1999 Sip S. A. ceased its activities and Pirelli Spa (controlled as usual by Pirelli & Co. which held the 30.575% of its share capital) became the new core company of the group with its holding of 99.82% of the Amsterdam-based Pirelli Tyre Holding S. A. and the 100% of Italian Pirelli Cavi e Sistemi Spa.

The group balance sheets showed again positive net results; in the meanwhile the turnaround favoured a slow transformation of the group which progressively abandoned the sectors which it traditionally operated in. The new managing director clearly stated this attempt in his 1999 address to the assembly. In the field of systems and cables - he said - the competitive environment presented daily developments. The strategic alliance signed that year with Cisco System, enforced the group competitive position in the US market. In the same direction moved the founding of a US company for the manufacturing of optical components with American management, "opened to every possible opportunity which could have let to an increase in its value". Also the field of the energy transmission had in those years a rapid evolution, "with acquisitions, mergers and privatizations all over the world". The integration of Pirelli's activities with Siemens' ones, the acquisition of both Australian Metal Manufacturers and Netherlander Nkf, as well as the announced take over on the British Bicc General, "had strengthened [that] year the

⁵⁵ See Manca 2005, pp. 189-196 and Sicca and Izzo 1995, pp. 77-126.

⁵⁶ Pirelli Spa, Annual Report, December 1992, p. 6.

group's world leadership". On the contrary, the tyre sector had been less dynamic, also because of the progressive merger of the procurement departments of the main car industries. The Pirelli's strategies in this sector aimed to reduce production costs, introducing new automation systems in the manufacturing process, in particular the promising Mirs - Manufacturing Integrated Robotised System, and to widen its high performance tyre product lines⁵⁷.

Two years after, in 2001, Pirelli realized the controversial Telecom Italia take over, a leveraged buy out that should have launched the "refoundation" of the group within a strategy that would have "focussed the enterprise on telecommunications, cable technologies, optical fibres, optical components and communication services"⁵⁸.

Conclusive remarks

Presenting the Telecom Italia acquisition to the Pirelli's assembly in 2001 Tronchetti Provera, stressed the importance of the decision to take over the ex state monopolist in the telecommunication field - privatized some years before - as the conclusion of a three-year period of deep change. Between 1999 and 2001 both the optical land system and the optical components were sold respectively to Cisco and to Corning: "two start-ups, whose turnover did not exceeded 250 millions Euro, were sold at the apex of a positive market cycle, as showed by the economic value generated with a net taking of about 4.000 millions Euro". The liquidity derived by this two transactions was used to realize "an asset swap with a clear strategic

⁵⁷ See Pirelli Spa, Annual Report, December 1999, pp. 7-8.

⁵⁸ See *The main Pirelli Group's strategic guide lines*, Milan, July, 30 2001; press release available at the following address: http://www.it.pirelli.com. On the developments before the Telecom Italia take over see Amatori and Colli 2000, pp. 45-51 and the interview of Roberto Colaninno, the previous Telecom Italia's chairman, published in Colannino 2006.

enforcement of the group's setting"59.

Only four years after the acquiring of Telecom Italia, Pirelli decided to sell its activities in the cable sector and in the field of energy transmission and telecommunication systems, mainly to pay off the debts related to the buy out⁶⁰. The asset swap lead therefore to the transfer of activities that since the very beginning guaranteed the group's success and then its surviving during the crisis of the Seventies and the reengineering of the Eighties: cables during these decades always showed better results than tyres and it was due to the positive performances of the Basel parent company, more focussed on cables than the Italian one, that the Union with Dunlop could last ten years.

On April 2007, after seven months of bargaining and more than one year of political controversies, Pirelli transferred its holdings in Telecom Italia to Telco, a new company established in order to allow the entrance in the Telecom Italia's share capital of Telefonica, the Spanish telecommunication operator. The financial consequences of the buy out led to the abandoning of telecommunication, to the reorienting of the corporate strategy towards tyre, but in significantly weaker position, to the preponderance of financial and real estate activities, due also to the significant divestment program started during the first half of the Nineties.

In the end, it seems possible to conclude that notwithstanding the internationalization pattern of the Pirelli Group changed over the last century, its governance model was quite stable. It allowed the control of the group by the Pirelli family itself and in the first decades it guaranteed the group economic success mainly due to the peculiarity of the sectors in which it operated and to the capabilities to form strategic and financial alliances focussed both at national and international level on the energy industry⁶¹. During the second half of the century

⁵⁹ See Pirelli Spa, Annual Report, December 2001, p. 7.

⁶⁰ See Pirelli sells to Goldman Sachs Capital Partners its cable, energy transmission and telecommunication branches, Milan, June, 1 2005, press release available at the following address: http://www.it.pirelli.com.

⁶¹ On the role of financial alliance and in particular on the role of the banks in the growth of

however the model adopted showed its limits. This was due to the decision of the Italian government to nationalize the energy industry - a decision which radically redesigned the power structure of Italian capitalism⁶² - and, at an international level, to the transformations of the tyre sector towards a growing concentration.

The financial needs related to the recovery of the Italian branches during the Seventies and, after the dissolution of the international alliance with Dunlop, the resources needed to compete alone on world markets led to a continuous redesign of the group's structure, aiming to progressively space out the parent companies from the operating ones, extending the control chain. This allowed to increase the capabilities to raise new financial sources, avoiding in the meanwhile the reduction of the family's control that could have derived from the frequent recapitalizations⁶³. It was not by chance that at the apex of Industrie Pirelli Spa crisis in 1977, the first voting trust of the limited partnership Pirelli & Co. was established⁶⁴; that, as a consequence of the reengineering of the first half of the Eighties, when Pirelli Spa gained again a central role in the control of the group, a second voting trust for this company was signed⁶⁵; and that, in the end, a third voting trust for Sip S. A. was established in 1990, in relation to the role assigned to the Basel parent company by

European multinationals see Jones and Hertner 1986 and Jones and Schröter 1993. For a comparison between European and US multinationals in the early years of their diffusion see Wilkins 1988.

⁶² On the nationalization of the Italian energy industry see Zanetti G. (ed.) 1994; on the power structure of Italian capitalism in the long run see Amatori and Brioschi 1997 and Segreto 1999.

⁶³ On the progressive extension of Italian large-size enterprises' control chains see Barca, Bertucci, Capello and Casavola 1997; in particular on the Pirelli case see also Brioschi, Buzzacchi and Colombo 1990, pp. 174-179.

⁶⁴ See Asp, CpLP, S. 2, b. Pirelli & C. - Sindacati azionari 1, f. sindacato Pirelli & C., Sindacato di azioni, December, 1 1977.

⁶⁵ With the reengineering of the first Eighties Pirelli Spa and Sip S. A. both owned 40% of the Basel-based Psg S. A., the latter in turn held all the operative firms. The limited partnership, Pirelli & Co. owned only 18% of both Pirelli Spa and Sip S. A.: alliances with "friendly" shareholders became prerequisite to maintain the control over the two parent companies. See Asp, CpLP, S. 2, b. Pirelli & C. 2, f. Posizione controllo P0, *Pirelli domani*, May, 10 1982.

the 1988 reorganization⁶⁶.

The lack of radical changes in the governance system had severe consequences on Pirelli's industrial developments. To succeed within sectors that were progressively concentrating it would be necessary to follow the concentration process itself, strengthening the group's position by mean of important merger or acquisition. The alternative should have been to focus on market niches or to abandon the traditional sector of activity. In order to preserve the ownership structure Pirelli tried to follow both this alternative but this led to a significant lost of identity by the group itself.

During the Nineties, after the so-called 1988 "telescopic reorganization", Sip S. A. controlled Pirelli Spa, which in turn controlled both the national and international operative firms. See Asp, CpLP, S. 2, b. Sindacato di blocco Sip S. A., Riunione costitutiva, Febrary, 2 1990.

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