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In the face of an unprecedented economic recession caused by the Covid-19 pandemic, the EU has set up the biggest stimulus in its history – a 750-billion-euro fund called “Next Generation EU” – to support economic recovery. This initiative is ground-breaking as it includes grants and loan facilities for member countries, financed by EU borrowing. It stresses the importance of maintaining economic stability and strengthening social cohesion within the EU, while critics argue that it will undermine financial discipline in the EU and create the conditions for a “transfer union” in which some member states live at the expense of others. This program is designed as a one-time, temporary intervention, but if successful, it will signal a new direction for EU fiscal cooperation.



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The EU's Big Pandemic Deal: Will It Be a Success?

In the face of an unprecedented economic recession caused by the Covid-19 pandemic, the EU has set up the biggest stimulus in its history - a 750-billion-euro fund called "Next Generation EU" - to support economic recovery. This initiative is ground-breaking as it includes grants and loan facilities for member countries, financed by EU borrowing. It stresses the importance of maintaining economic stability and strengthening social cohesion within the EU, while critics argue that it will undermine financial discipline in the EU and create the conditions for a "transfer union" in which some member states live at the expense of others. This program is designed as a one-time, temporary intervention, but if successful, it will signal a new direction for EU fiscal cooperation.

Clemens Fuest

The NGEU Economic Recovery Fund

As a response to the recession caused by the corona pandemic the EU has decided to create a large fund called "Next Generation EU" (NGEU) with a volume of EUR 750 bn to support the economic recovery. The fund will be financed by debt issued by the EU but backed by guarantees of the member states.

Views regarding the desirability of funds are divided. Its supporters argue that it is necessary for maintaining Europe's cohesion and the economic stability. Critics object that it will undermine fiscal discipline in the EU and set the stage for a "transfer union," where some member states live at the expense of others.

This paper discusses the financial flows implied by NGEU and the economic rationale for introducing it. The main results of the analysis are as follows. First, although spending financed through the fund will not start before the worst of the crisis is over, it still contributes to fiscal stabilization today, mostly through its effect on expectations. Second, the fund does not operate as an insurance device that would redistribute across countries according to their respective economic losses incurred due to the crisis. Instead, the fund redistributes from member states with high levels of GDP per capita to less affluent countries. Third, attempts to steer national governments toward political priorities defined at the European level such as the Green New Deal of the green and digital transformation of the economy are unlikely to be successful because money is fungible. The member states may replace national spending with money from NGEU and effectively use the funds for other

types of spending, to cut taxes or to reduce their debt. This is not necessarily a disadvantage because it is far from clear whether the economic recovery works best if the net recipients use the support they receive via NGEU entirely for additional public spending. Fourth, the critique that NGEU will undermine fiscal discipline in the EU budget is probably overblown because NGEU does not give the EU the right to finance future budgets with debt; repeating the debt financing operation would require unanimous support among the member states. But it is true that a similar debt-financed initiative will be more easily repeated in the next economic crisis.

The rest of the paper is structured as follows. The next section explains how much money is made available through NGEU and how it will be spent, followed by the third section which discusses whether NGEU can be justified on economic grounds. The fourth section turns to the issue of conditionality. The fifth section discusses the implications for future debt financing of EU level public spending, and the final section concludes.

HOW MUCH MONEY WILL BE MADE AVAILABLE AND HOW WILL IT BE SPENT?

To understand the financial dimension and relevance of NGEU, it is helpful to consider it in the context of the EU's general budget. Ta-



Clemens Fuest

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Table 1
MFF 2021-2027 and NGEU (Billion Euros)

	MFF	NGEU	Total
Single market, innovation and digital	132.8	10.6	143.4
Cohesion, resilience and values	377.8	721.9	1,099.7
Natural resources and environment	356.4	17.5	373.9
Migration and border management	22.7	-	22.7
Security and defense	13.2	-	13.2
Neighborhood and the world	98.4	-	98.4
European public administration	73.1	-	73.1
Total	1,074.4	750	1,824.4

Source: European Commission.

Table 1 provides an overview of the EU budget spending structure in the coming years as laid out in the Multiannual Financial Framework (MFF) for the period 2021-2027, as well as the spending planned for the new NGEU fund.

The overall volume of the budget and the recovery fund is significant, but the money will be spent over a period of seven years. Average yearly spending in the general EU budget amounts to roughly 1 percent of the EU's GDP, and the new recovery fund adds another 0.7 percent of GDP. Roughly half of the latter is dedicated to providing loans to member states. NGEU thus brings a significant extension of EU spending relative to the level before the coronavirus crisis. The overall level of public spending at the EU level is still limited if compared to budgets at the national level, but since it is spending on top of the national budgets, the question is warranted whether an extension of overall public spending in the EU, where the public sector is already much larger than in most countries outside Europe, is the right answer to the current crisis. What does NGEU mean for the level of public debt in Europe? In 2020, public debt in the EU will be equal to roughly 95 percent of GDP. The additional debt incurred to finance NGEU will raise the debt by 5.5 percentage points.

How about the spending structure? The "normal" EU budget continues to devote a significant share of its resources to agriculture, under the heading of natural resources and environment, although this share

has been declining over the last decades. NGEU in contrast focuses on the support of cohesion as well as "resilience." What does this mean? Figure 1 illustrates the different spending programs that constitute NGEU.

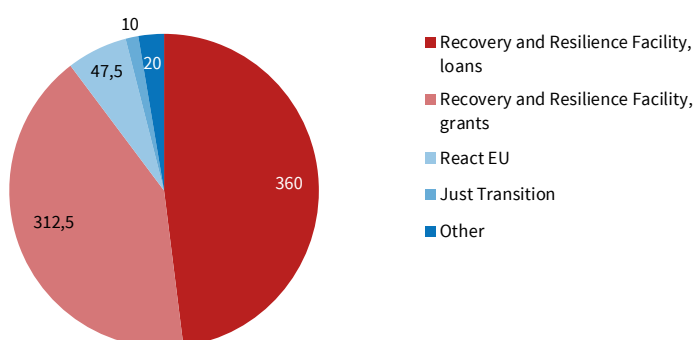
The Recovery and Resilience Facility is the core of NGEU. The money will be spent as follows. Each member state is expected to submit national recovery plans describing how it intends to support its respective economic recovery and how it will make it more resilient. Particular emphasis will be given to the objectives of the Green New Deal, in particular climate change, and to the digitization of the economy. The role of national recovery plans will be discussed further below. REACT-EU stands for Recovery Assistance for Cohesion and the Territories of Europe. Funds from this program will be made available to support job maintenance and to create new jobs, in particular measures countering youth unemployment. The funds can also be used to support health care systems or to help finance investment in small- and medium-sized enterprises.

The Just Transition Mechanism (JTM) is a tool mostly financed through the general EU budget but reinforced by NGEU. Its objective is to ensure that distributional issues raised by the transition toward a climate-neutral economy are addressed. This includes the consequences of higher CO₂ prices for the rural population, which depends more on road transport than the population in cities does, or job losses due to structural change away from carbon-intensive industries.

IS THERE AN ECONOMIC JUSTIFICATION FOR NGEU?

It is evident that introducing the recovery fund is primarily a political move. Some see it as a signal for solidarity among EU countries in times of a severe crisis, an investment in the EU's cohesion and mutual trust. Others take a more critical view and see the fund as a result of pressure exerted by a majority of EU member states on the rest of the club. Of course, this pressure would probably have remained without effect, if Germany had not decided to support the initiative and agreed to a joint Franco-German proposal for the fund.

Figure 1
Composition of Spending in the Fund NGEU (EUR bn)



Source: European Commission.

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Irrespective of the political motives behind this step, is there an economic rationale for the recovery fund? To discuss this, it is helpful to consider the NGEU fund in the light of the Musgravian public sector functions of stabilization, allocation and distribution (Musgrave 1973). According to the European Commission (2020a), it is the objective of NGEU to boost the recovery and to achieve a “greener, more digital and more resilient EU.”

The objective of “boosting the recovery” emphasizes that the fund has a macroeconomic stabilization function. While this is intuitive, given that the EU finds itself in the most severe recession of its history, the role of the NGEU for macroeconomic stabilization in the current crisis is probably limited. Spending from the recovery fund is unlikely to start before 2021. The peak of the crisis will hopefully be over by then. This means that fiscal stabilization during the crisis needs to come from other sources. Of course, funds made available in the near future affect expectations today; this stabilizes the economy while the crisis is still here.

In principle, individual member states are responsible for countercyclical fiscal policies in the EU. However, at least some of them may not be in the position to do so. In particular, member states with high levels of public debt may be reluctant to raise their debt levels further because they fear that investors in international capital markets may lose confidence. Currently, interest rates on government bonds are very low, so that the EU member states could finance stabilization policies themselves. To some extent, the low interest rates are certainly a consequence of the existence of the recovery fund. But even if financing conditions were a little more difficult for some countries, the ESM would be available to provide countries with credit, at least those who are members of the Eurozone. Some countries seem to find ESM loans politically unacceptable because the ESM is seen as an institution that is responsible for enforcing fiscal austerity, which is unpopular. ESM financial support to member states would indeed go along with conditionality, but the conditions would probably differ from what they were a decade ago. It should be noted, however, that the funds distributed by NGEU will also be conditional. These conditions will be discussed further below.

The objective of achieving a “greener, more digital and more resilient EU” suggests that the NGEU fund has an allocative function insofar as environmental protection and digitization are primarily about internalizing externalities and providing public infrastructures. From an economic perspective, a case can be made for more public goods provision, not just in environmental policy and digitization, but also in areas such as foreign policy and defense, research and development or foreign aid (Fuest and Pisani-Ferry 2019). However, this is not the focus of NGEU.

In terms of its contribution to allocative efficiency, it would be desirable for NGEU to draw a

clearer line between areas where public spending may be justified or needed and areas where private investors should act. For instance, if the program REACT EU aims at preserving and creating jobs in sectors affected by the crisis, such as tourism or travel, the question arises what exactly can be achieved through public policies. Whether hotels or travel agents create jobs is primarily an entrepreneurial decision. It is not clear how government intervention can improve these decisions. For instance, the view is widespread that there will permanently be fewer business trips after the coronavirus crisis because more meetings will take place online. Given this, it may be better to support creating new jobs in other sectors. Using public funds efficiently requires that they be employed in areas where private markets do not work properly.

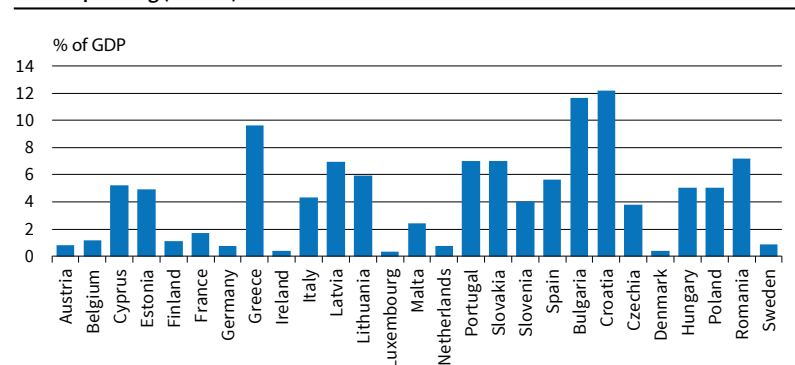
A key feature of NGEU is that it has a strong redistributive component. On the financing side, all member states will contribute to servicing the debt through the EU budget. Currently, the plan is to start paying down recently incurred debt in 2028 and to complete the repayment no later than in 2058. Precisely how the burden of repaying the debt will be distributed across member states is an open question. The EU intends to create new own resources to service the NGEU debt, but so far, nothing has been decided. If the GNI-based own resources are considered the marginal source of financing, the burden of financing will be distributed according to GNI.

The redistributive component is driven by the spending side. The EUR 390 billion that will be spent as grants will be allocated quite unevenly across member states, as illustrated by Figure 2.

While NGEU grants are less than one percent of GDP in Ireland, Germany or the Netherlands, they amount to between 10 and 12 percent of GDP in countries such as Greece, Bulgaria and Croatia. In Spain and Italy, it is close to 5 percent of GDP.

What is the economic logic behind the redistributive side? If the EU is hit by an economic shock and if different countries are affected differently, a common fund may act as an insurance device. One obvious objection is that insurance normally requires an insur-

Figure 2
NGEU Spending (Grants) Allocation in % of GDP



Source: European Commission; author's calculation.

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ance contract, which is signed before the damage happens. Such a contract did not exist. Introducing the fund can therefore be seen as a form of solidarity or aid based on an implicit insurance contract. Another issue is that an insurance device should redistribute monies based on the damage inflicted on each country, for instance, the decline in GDP caused by the crisis. This would lead to a situation where member states with lower per capita income might have to make payments to richer countries if their GDP loss is larger, which can easily happen. This is probably one of the reasons why distributing NGEU funds does not

place much emphasis on the insurance principle. In allocating spending to countries, the political decision has been made that 30 percent of the funds are distributed according to the decline in GDP expected for 2020, whereas 70 percent of the funds follow other criteria, in particular, the level of per capita income. There is no deeper economic justification behind this allocation other than the fact that a much larger weight on the decline in GDP might have led to the problematic redistributive effects mentioned above. Ultimately, the redistributive effects are best measured by the net balances of each country with respect to the grant component of the fund. Assuming that servicing the debt will be proportional to GNI, the net balances would be as illustrated in Figure 3. Translating these net balances into euros per capita leads to the result that the largest per capita transfer goes to Croatia, with just under EUR 1,300 per capita, followed by Greece at roughly EUR 1,250. The largest net contributors per capita are Luxembourg at EUR 1,290 and Ireland at EUR 1,090. Germany at EUR 800 per capita and France at EUR 370 are also significant net contributors, while Italy at EUR 480 and Spain at EUR 810 receive transfers.

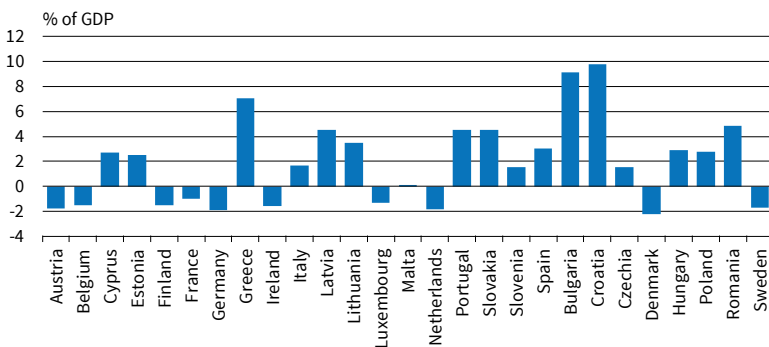
How are these net balances related to the loss in GDP during the crisis and the levels of per capita income? Figure 4 illustrates the relationship between the loss in GDP as measured by the difference between the growth of GDP in 2020 as forecasted by the IMF World Economic Outlook in October 2019 and the same forecast in October 2020.

There is on average a negative correlation between the GDP loss and net balances, but the correlation is very weak (see also EEAG 2020). NGEU is not primarily geared toward redistributing in favor of those countries whose economy was most affected by the coronavirus crisis. The key factor determining the redistributive effects is the general level of prosperity. Figure 5 shows that there is a strong negative relationship between per capita income and the net balance with respect to NGEU.¹

This implies that, as far as redistributive effects are concerned, NGEU is not really an insurance against the coronavirus shock but rather an extension of the EU's cohesion policies, which redistributes in favor of poorer EU countries.

To summarize, NGEU seems to have two major economic effects. First, it is a form of expansionary fiscal policy meant to stabilize the economy in the face of the shock caused by the coronavirus crisis. The money will probably not be spent before the crisis is mostly over. However, the prospect for the economically more vulnerable member states that they will receive these funds affects current expectations and extends their room for national debt-financed

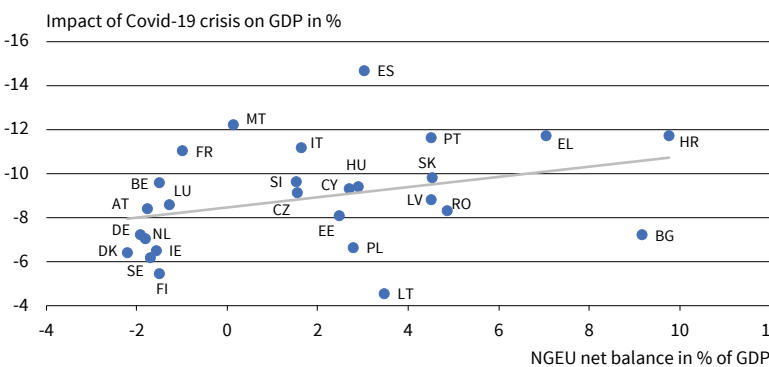
Figure 3
NGEU Net Balances



Source: European Commission; author's calculation.

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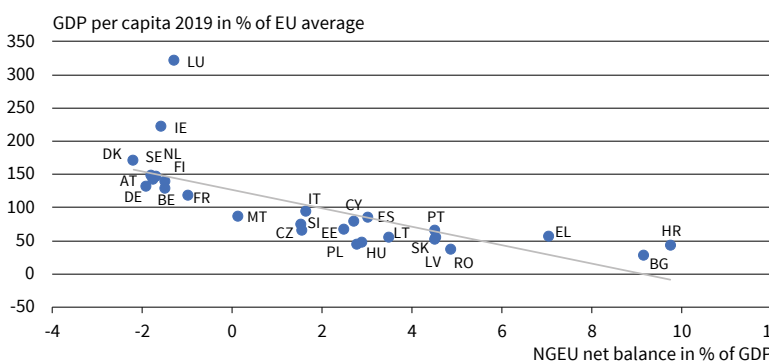
Figure 4
NGEU Net Balances and GDP Loss in 2020



Source: European Commission; IMF WEO; author's calculation.

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Figure 5
NGEU Net Balances per Capita Income



Source: European Commission; author's calculation.

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¹ A multivariate regression with the loss in GDP, the unemployment rate, the level of public debt and per capita GDP confirms the result that the latter is the only significant factor explaining the distributional effects.

stabilization policies. Second, the fund redistributes funds from countries with higher GDP per capita to the poorer member states, and to this extent, it may be considered an extension of the existing cohesion policies.

CONDITIONALITY AND EUROPEAN POLITICAL PRIORITIES

The European Commission has declared that it will consider NGEU not simply a device for increasing deficit spending in Europe and redistribute funds across countries, but also a way of steering public spending toward European political priorities, in particular, the Green New Deal and digitization. To achieve this, the European Commission has provided guidance to the member states regarding their national recovery plans, which are required for obtaining NGEU funds (European Commission 2020b). In their recovery plans, the member states are expected to focus on the following four objectives:

1. Promoting the Union's economic, social and territorial cohesion
2. Strengthening economic and social resilience
3. Mitigating the social and economic impact of the crisis
4. Supporting the green and digital transitions (European Commission 2020b)

These are rather general objectives, even if they are specified further in the guidelines. The member states will not find it difficult to relate a wide range of spending items to these objectives. The fact that member states will wield considerable discretion regarding the use of the funds is also reflected in the way the guidelines define investment:

“Member States should consider an investment an expenditure on an activity, project, or other action within the scope of the proposal that is expected to bring beneficial results to society, the economy and/or the environment [...] The proposal is therefore consistent with a broad concept of investment as capital formation in areas such as fixed capital, human capital and natural capital [...] Human capital is accumulated by means of spending on health, social protection, education and training, etc.” (European Commission 2020b, 13).

This implies that spending usually considered consumption, such as spending on health or social spending is defined as investment, confirming that member states will have a lot of discretion in using the NGEU funds.

The second challenge for those who think that NGEU can be used to steer national fiscal policies to favor European priorities is that money is fungible. For instance, member states can employ NGEU funds

for public investments that would have been financed from national sources anyway. The guidance document does try to address this problem and make sure that NGEU funds give rise to additional investment. Member states are invited to report the average level of spending on items they include in their recovery plan in preceding years. The trouble is that the member states will be able to argue quite convincingly that the crisis has affected their ability to invest like they did before. It is practically impossible to ensure that spending financed via NGEU would not have happened without the fund.

Of course, the fact that countries can use NGEU money to replace national funds is not necessarily a disadvantage. It is far from clear that it would always be wise to use the resources countries receive from NGEU to increase public spending. It may be more desirable to reduce taxes or to cut public debt. There is of course a strong interest of the EU as a whole that member states make efforts to improve the resilience of their economies and to reduce their dependence on external help. But it is not clear that the best way to achieve this is to increase public spending, and it is certainly difficult to steer this process from the outside.

DEBT FINANCING OF EU LEVEL SPENDING — A ONE-OFF OR THE NEW NORMAL?

Normally public spending at the EU level is not supposed to be financed with debt. Art 310 (4) of the Treaty on the Functioning of the European Union (TFEU) states:

“With a view to maintaining budgetary discipline, the Union shall not adopt any act which is likely to have appreciable implications for the budget without providing an assurance that the expenditure arising from such an act is capable of being financed within the limit of the Union's own resources [...]”

While various forms of debt financing have been used in the past to fund European projects, the magnitude of debt incurred to finance NGEU is new for the EU. The EU member states have agreed that the debt financing in the context of NGEU is a singular event and the debt will be repaid within a defined period of time as mentioned above. But critics of NGEU argue that, by agreeing to incur massive amounts of common debt, the EU has taken a step toward debt financing of its spending which is irreversible, and a threat to solid public finances in Europe.

There is no doubt that the decision to finance NGEU via a common debt instrument has made it much more likely that the operation will be repeated in the next crisis. Whether this is considered to be good or bad depends on views regarding the desirability of additional debt financed spending at the

European level during or after severe recessions. But it should be taken into account that the debt that finances NGEU is based on guarantees provided by the member states. As long as the EU does not have the power to tax, its ability to use debt to finance its spending will be severely restricted.

Under the EU's existing institutional framework, future initiatives to repeat the current debt financing operation will require unanimous support among the member states. This is a high hurdle. Whether it can be overcome will probably depend, among other things, on the perceived success of NGEU spending. In particular, the net contributors to NGEU will be reluctant to repeat the exercise if it turns out that NGEU has not contributed to making the net recipients more resilient and less dependent on external support.

CONCLUSIONS

The EU has reacted to the coronavirus crisis by creating the NGEU fund to support the economic recovery in the EU. Although spending financed through the fund will probably not start before most of the crisis is behind us, it still contributes to fiscal stabilization during the crisis, mostly through its effect on expectations and in particular by extending room for fiscal policy of economically vulnerable member states.

The fund does not operate as a pure insurance device that would redistribute from countries with below-average economic losses to those that suffered above-average losses. Instead, it redistributes from member states with high levels of GDP per capita to less affluent countries. NGEU also attempts to steer national governments toward political priorities defined at the European level such as the Green New Deal of the green and digital transformation of the economy. However, since money is fungible, the member states may also replace national spending by money from NGEU and effectively use the funds for other types of spending, to cut taxes or to reduce their debt. This is not necessarily a disadvantage because it is far from clear whether the economic recovery works best if the net recipients use the support they receive via NGEU entirely for additional public spending. It may be more productive to cut taxes or reduce government debt. Too little emphasis is placed on border-crossing spillovers of national spending plans. During negotiations about national recovery plans, the European Commission should strongly encourage cooperation across member states and projects with European relevance and visibility such as border crossing infrastructure projects (see also Pisani-Ferry 2020).

The fact that NGEU is financed by the issuance of common debt has raised concerns that debt financing of EU-level spending may become more widespread, undermining fiscal discipline. One should take into account, however, that comparable financing operations in the future can only take place if all EU member states agree; NGEU is not equivalent to introducing

the general right to use debt financing at the EU level; doing that would ultimately require giving the EU an independent power to tax. At the same time, it is likely that demand for repeating the current debt financing operation will come up during the next severe crisis. Whether in particular the net contributors will support this is likely to depend, among other things, on whether the NGEU funds are perceived to have been well spent. What that means is not easy to determine. It is clear that the fund should not start a regime that allows some countries to permanently live beyond their means at the expense of others. It may also be necessary that future funds created in crises place greater emphasis on the insurance aspect, that is, on losses countries have actually incurred as a result of the crisis. But if the main effect of the fund NGEU is to start a European tradition of helping neighboring countries in times of exceptional hardship, history will not judge it badly.

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Iain Begg

One Instrument, Many Goals: Some Delicate Challenges Facing the EU's Recovery Fund

There is no doubt: when the EU leaders agreed on the *Next Generation EU* (NGEU) recovery package, they broke new ground. It may not have been a Hamiltonian moment, mutualizing national debt in the way the United States did 230 years ago, but by allowing the EU level to borrow to fund public expenditure, a longstanding taboo has been shattered. The main instrument will be the Recovery and Resilience Facility (RRF), which can call on funds of up to €672.5 billion, of which up to €312.5 billion would be grants and up to €350 billion loans.

As explained on the Commission website,¹ “the aim is to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions.” To this end, all member states will be required to prepare national plans for using the RRF and each will have to allocate a minimum of 37% of the planned outlays to climate and 20% to “digital investments and reforms.” In addition, the plans should address other environmental goals.

These orientations, in turn, derive from the aims of the current European Commission to shift toward a new economic model, the “green deal” (von der Leyen 2019). As the title of a paper by Aiginger and Rodrik (2020, 190) signals, there is a “rebirth” of interest in industrial policy and a shift away from market liberalization to more explicit steering of the economy. They attribute this revival, in part, to strategic concerns about low growth in Europe and the emergence of China as a highly competitive rival. But they also find it to have been “further stimulated by disruptive technological change—from automatization to digitalization, industry 4.0, and the Internet of things.” Such considerations have influenced the focus of NGEU and other responses to Covid-19, in combination with the recognition of the difficulty of dealing with climate change and the threat to Europe falling behind in key technologies.

In parallel, a new term has entered the EU lexicon—strategic autonomy. It derives from concerns across a number of domains about dependence on others and a lack of influence on global affairs commensurate with the EU's economic weight. These concerns manifest themselves, notably, in vulnerabilities in the exercise of power by global rivals (Abels et al.

2020), and were given fresh momentum during the pandemic.

This paper assesses whether the sectoral priorities agreed for the NGEU can contribute to EU strategic autonomy and the implications for the underlying objectives of the policy. The next section looks at the aims of the RRF, then reviews how to interpret “strategic autonomy.” A discussion of the implementation of the RRF follows and concluding comments complete the paper.

THE AIMS OF THE RECOVERY AND RESILIENCE FACILITY

The Commission wants the use of the RRF to contribute to realizing the goals of the 2021 *Annual Sustainable Growth Strategy* (European Commission 2020a): a green transition; the digital transition and productivity; fairness; and macroeconomic stability. Much of the growth strategy, in turn, is written around what the RRF is intended to achieve, emphasizing that while reflecting national situations, the Facility will be “an opportunity to create European flagships with tangible benefits for the economy and citizens across the EU.” Intriguingly, one phrase repeatedly used is “open strategic autonomy,” albeit without explaining what it means. It features five times in, successively, paragraphs on the broad aims of digital economy initiatives, the circular economy, twice more in relation to “digital,” then in a section on connectivity. In addition, strategic autonomy—without referring to “open”—is used, somewhat more eccentrically, in a paragraph on how the single market can be enhanced by investments, including cross-border ones.

Three immediate implications emerge from these orientations for the RRF. First, it is not a straightforward macroeconomic stimulus package, although it will—inevitably—have a marked Keynesian impact. Pisani-Ferry (2020a, 4) estimates that the net transfers to some of those projected to benefit most will “exceed by far the aid worth 2.6 percent of recipient's GDP that the United States granted to Europe under the Marshall Plan.” Overall, the Commission (2020a) claims it will boost GDP by 2% by 2024 and create 2 million jobs, although it will not start until 2021 and for many projects, will likely



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¹ https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en#the-facility-and-nextgenerationeu.

emerge well beyond that date, and it does not, by design, have the urgency of national stimulus measures. However, with a second wave of Covid-19 infections triggering a renewed downturn, the macroeconomic significance of NGEU may be greater than foreseen when it was agreed, given the planned timing of the fiscal impulse.

The second is that investments will have to be targeted to fit into the narratives constructed in partial justification of NGEU. Because the RRF will have to fit within the regulations for the European Structural and Investment Funds (ESIF), conditions will have to be met that are quite apart from the “rule of law” provisions behind the objections raised by Hungary and Poland regarding final ratification. The outcome of the December 10-11 2020 European Council meeting appears to have fudged the rule of law issue sufficiently to unblock the implementation of NGEU, but the other conditions—including the project’s viability and the quality of oversight to ensure the funds are spent properly—will still need to be fulfilled.

Third, the political attractiveness of “green,” in relation to sustainability, and “digital,” with its connotations of being about the new and growing industries and activities of the future is undeniable. But there is an open question about what it could mean in practice. In some member states, the answer could be mainly infrastructure; in others, services, enterprise promotion or investing in skills.

WHAT IS, OR COULD BE, MEANT BY OPEN STRATEGIC AUTONOMY?

Strategic autonomy as a concept was given prominence in the European Global Strategy 2016,² together with the notion of “principled pragmatism.” The concept starts with a desire to be able to act independently of the global superpowers, but also implies the EU becoming such a power itself, translating into aims for increased “efforts in defense, cyber, counterterrorism, energy and strategic communications.” Motivations include disquiet about how the US has “weaponized” its pivotal position in the global financial system, alongside fears regarding China’s *Belt and Road Initiative* and the associated *digital silk road*. At issue is how Europe should seek to manage globalization.

At first glance, “open strategic autonomy” sounds like a contradiction in terms. It implies wanting to promote openness in trade, yet also wanting to promote or favor domestic producers—in this instance, those inside the EU—at the expense of foreigners. The Commission (2020b, 4) white paper “on leveling the playing field as regards foreign subsidies” explains that to “reap the full benefits of global trade, Europe will pursue a model of open strategic autonomy. This will mean shaping the new system of global economic

governance and developing mutually beneficial bilateral relations, while protecting ourselves from unfair and abusive practices.”

At issue is how subsidies or differing regulatory standards (unfairly) lead to competitive advantage for global rivals. There is nothing especially new in this concern, but what can also be discerned is a form of infant industry/strategic trade policy reasoning, hinted at in the proposals for a new industrial strategy (European Commission 2020c). Europe, as has been said many times, has been unable to nurture the dominant companies of the 21st century—e.g., Apple, Google, Facebook, Ali Baba, Samsung or Tencent—and risks entrenching a dependence on these global giants. Moreover, competitiveness is not always the only concern. The unease about the (predominantly American) digital giants stems, in part, from their control of data. Security considerations surfaced because of the success of Huawei as a provider of infrastructure associated with the rollout of 5G.

EUROPE LAGGING BEHIND

The Commission’s analysis of how to shape Europe’s digital future rightly emphasizes the complexity of the challenges: “a Europe fit for the digital age is a complex puzzle with many interconnected pieces; as with any puzzle, the whole picture cannot be seen without putting all the pieces together” (European Commission 2020b). In relation to the digital economy, the evidence of the gap between Europe and the other digital powers is striking. In a league table compiled by Forbes,³ the highest ranked European company by market value, at 19, is Deutsche Telekom, while four of the top five and eleven of the top twenty are US companies. Forbes explains the ranking as follows: “companies were scored on a variety of factors including sales, profits, assets growth and performance of the stock over the past year,” with the last component measured on a particular day. Ranked by sales alone, some other telecom companies, including Telefonica of Spain, would creep into the top twenty, but while telecom companies are manifestly part of the digital economy, their core business is often the networks and services, less so the leading-edge new technologies.

A similar exercise conducted by Thomson Reuters,⁴ looking at the top one hundred tech companies, is also revealing about Europe’s relative position. Their methodology is more complex, using an algorithm based on 28 variables drawn from eight clusters, to position a company. Conventional financial performance and innovation variables are prominent, accounting for six and four of the indicators, respectively. However, the approach is distinctive

² https://eas.europa.eu/archives/docs/top_stories/pdf/eugs_review_web.pdf.

³ <https://www.forbes.com/top-digital-companies/list/#tab:rank>.

⁴ <https://www.thomsonreuters.com/content/dam/ewp-m/documents/thomsonreuters/en/pdf/reports/thomson-reuters-top-100-global-tech-leaders-report.pdf>.

in including less-common factors, such as social responsibility, environmental impact and resilience to geopolitical risks.

North American companies are still strongly represented, accounting for 47%, but Asia is catching up, at 38%, leaving Europe languishing at just 14%. Nor is Asia largely a story about China, as is implied by analyses focusing on China, the US and Europe as the three poles of global competition. On the contrary, Japan and Taiwan each have thirteen entries—just one fewer than the whole of Europe—in the Thomson Reuters table and India has five, but China and Korea have three each. Moreover, among the European companies listed, three are headquartered in France, two are Swiss-based, and Sweden and the UK have one each, but there are none from southern, eastern or central Europe.

All such league table are open to the criticism that they either give too much credence, on the one hand, to share prices (to which more attention is usually paid in the US than in the EU) or sales, or (as with the Thomson Reuters indicators), to measures reflecting a particular view of what constitutes success or the potential to succeed. Yet these data are hard to ignore when they show Europe in such a poor light. The inference to be drawn is that timely action on the slow but steady decline in European technological standing is increasingly needed.

The position of some of these large companies is, in part, attributable to the size of their domestic markets, especially the telecom providers, but many of them also have a truly global reach, with ramifications not only for market dominance, but also tax revenues accruing to national governments. The problem facing Europe is fragmentation of effort with the largest companies often focusing on their national markets. This means the diverse economies of scope or opportunities to benefit from network externalities are more limited (Abels et al. 2020): Europe, in short, is a union of separate markets more than a single market.

SUPPLY CHAINS

An ostensibly different dimension of autonomy is reliance on supply chains susceptible to disruption. Action by China to lock down its economy in response to Covid-19 triggered a wave of concern in Europe (especially, but also elsewhere) about the extent of dependence on Chinese inputs. When the pandemic reached Europe later in the first quarter of, the fears intensified because so high a proportion of the likes of protective equipment and active ingredients for medications were imported from outside the EU, especially China. Although some domestic manufacturers were able to switch production to fill the gap, it took time and meant critical materials were unavailable at crucial times.

As demand for Covid-related products escalated worldwide, European leaders recognized the extent of

Table 1

The World's Twenty Largest "Digital" Economy Companies

Company	Country	Industry*
Apple	US	Computer hardware
Microsoft	US	Software & programming
Samsung Electronics	Korea	Semiconductors
Alphabet	US	Computer services
AT&T	US	Telecommunications services
Amazon	US	Internet & catalogue retail
Verizon Communications	US	Telecommunications services
China Mobile	Hong Kong	Telecommunications services
Walt Disney	US	Broadcasting & cable
Facebook	US	Computer services
Alibaba	China	Internet & catalogue retail
Intel	US	Semiconductors
Softbank	Japan	Telecommunications services
IBM	US	Computer services
Tencent Holdings	China	Computer services
Nippon Telegraph & Tel	Japan	Telecommunications services
Cisco Systems	US	Communications equipment
Oracle	US	Software & programming
Deutsche Telekom	Germany	Telecommunications services
Taiwan Semiconductor	Taiwan	Semiconductors

Note: The industry assignment is somewhat arbitrary when the company is involved in a range of activities, as many are. Source: Forbes.

their exposure, exacerbated by unseemly incidents where cargoes were allegedly diverted. For example, Berlin's Interior Minister, Andreas Geisel, accused the US of "modern piracy" and "Wild West methods" for intercepting a consignment of face masks in Bangkok, supposedly intended for the Berlin police.⁵ Similarly, the president of the Île-de-France region, Valérie Pécresse, criticized US agents for bidding up the price for masks, calling it a "treasure hunt."⁶ The lesson drawn was well-articulated by Emmanuel Macron in an interview on 23 April 2020 for *Le Figaro*,⁷ highlighting concerns about protective equipment and other medical supplies. He said, "there are many sectors where we need to strengthen our strategic autonomy," adding that "we need to reorganize our supply chains to reduce our dependence on the rest of the world."

Leaders such as European Council President Charles Michel are at pains to reject the idea that strategic autonomy equates to protectionism. In a speech in Bruegel, he sought to spell out the difference: "economic security also means securing our supply of critical resources: medical products, rare earth elements [...] and also microprocessors, which are so essential for our digital sovereignty—this is another key aspect of our strategic autonomy, which is vital for our digital transformation."

OWNERSHIP OF KEY COMPANIES

Some European countries, notably France, have consistently been wary of allowing foreign takeovers of

⁵ <https://www.berlin.de/sen/inneres/presse/pressemitteilung-gen/2020/pressemitteilung.915948.php>

⁶ <https://www.bbc.co.uk/news/world-52161995>.

⁷ <https://video.lefigaro.fr/figaro/video/emmanuel-macron-renforcer-notre-autonomie-strategique/6151652923001/>.

companies. In pre-Covid days, this approach often drew criticism from partner countries and from the European Commission for undermining the principles of the single market. To some extent, the opposition to takeovers stems from differing approaches to capitalism. Thus, in Germany, the Nordic countries, Poland and some of the other countries of central and eastern Europe, a global outlook has contrasted with a more protectionist one in southern Europe. Yet in Germany, the expression “*Heuschrecke*” (locusts) was used by SPD politician Franz Müntefering to describe predatory hedge funds that took over a company merely to strip its assets and, as part of its response to the pandemic, the German government took steps to protect some of its companies from takeover as share prices plunged.

How to deal with this, at one level, is a challenge for competition policy. Hitherto, the thrust of EU policy has (largely) been to favor the creation of a regime assuring a “level playing field.” This was tested when a merger between Alstom and Siemens was proposed, but there is evidence of a growing willingness to consider the EU’s position in global markets as a criterion for enforcing rules. The encroachment of large Chinese companies, especially when perceived to have benefited from their country’s strategic industrial and export policies, is seen as such a threat.

The digital economy dimension of NGEU is, arguably, consistent with these concerns. The digital economy is significantly different from more traditional sectors, including the prevalence of economies of scope, and network externalities and borders are hard to define. Moreover, it is an innovation-driven sector, leading Crémer et al. (2019, 127) to call for systematic efforts to “integrate innovation in competition policy practice, and, in doing so, to consider that erring to the disadvantage of innovation is likely to be particularly costly in the longer run.”

IMPLEMENTATION AND GOVERNANCE OF THE RRF

There is something of a *déjà vu* feel to the plans for the governance of the RRF. In the Lisbon strategy launched two decades ago, the much-quoted (and, subsequently, derided) line of transforming the EU into “the most competitive and dynamic knowledge-based economy in the world” by 2010 proved to be laden with hubris. A decade later, the Europe 2020 strategy sought to promote “smart, sustainable and inclusive growth.” Both strategies had grand ambitions to be transformative by establishing partnerships between the EU and national level. Headline targets were set, and, in Europe 2020, seven flagship initiatives were launched, ranging from a “digital agenda for Europe” to “an agenda for new skills and jobs.” National plans, subject to scrutiny by the Commission (laterally through the “European semester”), were required and member states were enjoined to incorporate “country-specific recommendations” (CSR).

Cohesion policy was recast to be charged with funding investment associated with the two strategies.

Although compliance with CSR can at best be described as patchy and the Europe 2020 “flagships” have had little obvious visibility in national policy-making, the plans for the RRF revisit these tools of governance. Thus, there will again be seven flagship initiatives encompassing infrastructure, provision of services, stimulation of new EU digital economy companies and re-skilling workers. National plans will be required, and the semester and CSR mechanisms will again be applied, with the Commission stipulating as an overarching principle that “proposed reforms and investment tackle one or more of the challenges outlined in the member state’s country-specific recommendations” (European Commission 2020c, 9). Union-wide goals are given prominence, with an insistence on national plans contributing to digital and green transitions. The RRF will operate alongside the cohesion policy and also function as an investment instrument.

One worry is the ability of many of the intended member state and regional recipients to generate additional projects able to meet the relevant criteria for exploiting the additional funds. There have been long delays, especially in countries expected to benefit most from the RRF, in using their existing allocations from the cohesion policy, and it should be noted that the EU’s “N+3” rule means spending from the 2014-20 budgetary cycle can continue up to the end of 2022. However, one advantage of the grants component of the RRF could arise from not having to find matching national funds. Even so, allocations risk being underused, as a result, low absorption rates “might represent a serious obstacle to the effective implementation of the NGEU” (Alcidi et al. 2020, 3).

In all of this, the vexing question of additionality will have to be confronted from two perspectives. On the one hand, if recipients see the new funding from the EU as an opportunity to cut domestically funded public investment, either to fund current spending or to lower taxes, the principle of additionality—EU funding adding to the domestic effort—would be undermined. Under ESIF, those receiving the largest allocations tend to use them to frame public investment strategies, but the very high proportion of the aggregate effort funded by “Brussels” suggests that the domestic contribution is often lacking.

Deadweight is the second perspective. If projects are highly likely to go ahead without public funding, the subsidy may not add to the stock of assets generated by private actors. This could mean the public support might be squandered. A counter-argument is that while a specific project might have gone ahead regardless, the provider (for example of modern digital infrastructure) may be able to improve quality or expand a project. Pervasive doubts about the public sector’s ability to pick winners are also germane to this issue.

CONCLUSIONS

The EU has multiple objectives for NGEU, all laudable in their own right, but must be wary of expecting too much from a single—and time limited—policy initiative. The parallels between the RRF and cohesion policy are instructive. The latter, often portrayed by the Commission (for example, in the seventh Cohesion Report—European Commission 2017, xxii) as “the EU’s main investment policy,” has been called upon to support action to counter climate change, to promote competitiveness and, more generally, to be the key instrument for delivering the Europe 2020 strategy. All this is in addition to the treaty goal of reducing regional disparities, leading to a potential for confusion (Begg 2010) and the need to reconcile difficult trade-offs.

Jean Pisani-Ferry (2020b) calls the NGEU “a high-risk gamble. If the plan succeeds, it will surely pave the way to further initiatives, and perhaps ultimately to a fiscal union alongside the monetary union.” He goes on to warn that “if the plan fails to deliver on stated goals, if political interests prevail over economic necessity, federal aspirations will be dashed for a generation.” As with the cohesion policy, the EU also has to be alert to the trade-offs inherent in a mandate for the RRF covering several objectives and the risks of disappointing some interests in a context of rapid structural change in the economy (Landesmann 2020).

Europe faces difficult choices in its approach to “strategic autonomy” in the light of Covid-19. It will have to examine the trade-offs between undue dependence on others, especially China, and the gains from the international division of labor. The tensions are evident, whether in relation to access to vital health equipment and drugs, or ownership and control of major companies. This is about managing globalization, on the one hand, and strategic growth policies reflecting societal objectives, on the other. The expectations and imperatives for a “green deal” are clear and the Commission is surely correct to argue that “Europe must invest more in the strategic capacities that allow us to develop and use digital solutions” (European Commission 2020b).

There are reasons to end on an optimistic note. The Covid-19 crisis has pushed decision-makers to rethink economic models and to discard outdated norms. It remains to be seen whether the “green deal” espoused by Ursula von der Leyen’s Commission can genuinely be transformative or whether the narratives about digital Europe become action, but there can be little doubt the opportunity is there.

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Economic Policy Responses to the Coronavirus Crisis — Stabilization and Insurance

The coronavirus pandemic has caused severe health and economic consequences. Lockdowns and various other containment restrictions have



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served to reduce the spread of the virus, but have exacted massive economic consequences arising from the closure of economic activity and imposition of explicit or implicit frictional costs on interactions between people, hindering basic economic mechanisms on both the production and the consumer side. Standard business cycle effects, released by

global declines in private consumption, investments and exports, further exacerbate the economic effects.

The crisis has vastly changed the economic policy discussion. New types of economic policies — pandemic emergency packages — have been deployed on top of the standard tools, including automatic stabilizers and discrete fiscal policy. Monetary policy expansions or quantitative easing programs have kept government borrowing rates low, as seen by the ECB's pandemic emergency purchase program.

But what are the appropriate fiscal policy responses in this situation? Single country responses may be insufficient, either because interdependencies are not sufficiently taken into account, or because lack of fiscal space is a barrier. If single-country responses are insufficient, is it then possible to establish multi-country initiatives?

The EU has responded to the crisis by launching the program Next Generation EU (NGEU). This initiative is trailblazing since it involves grants and loan facilities to member countries, financed by EU borrowing. This is set up as a one-off temporary intervention, but if successful, it signals a new direction for EU cooperation in the fiscal area. The motivation for the program also stresses the importance of strengthening social cohesion within the EU, and the labeling of the program signals its forward-looking perspective. Through this initiative, the EU aims to take a pro-active position to overcome the economic consequences of the coronavirus crisis, rather than being seen as a part of the problem as it was perceived during the financial crisis.

LOCKDOWN AND INSURANCE

The lockdown restrictions imposed to confine the pandemic were largely an unanticipated event. The

restrictions were motivated by externalities arising from the spread of the virus originating from too many and close contacts between people. These restrictions may thus be interpreted as an unanticipated “market-closure” shock; an event which is largely non-insurable.

The lockdown restrictions constrain the market mechanism, in the first place, in areas where close contact between customers and employees is important, and in workplaces where employees are in close contact. While the lockdown regulations address a health externality and thus have a collective justification, specific firms, workers and households bear the consequences and costs. Therefore, governments launched emergency packages, including direct support to firms to help cover loss of revenue, fixed costs, work-sharing arrangements, and liquidity and loan arrangements. These schemes are collectively financed via the public budget.¹

There are two key lines of arguments in support of these emergency packages, featuring some very unusual ingredients such as direct support to companies for loss of revenue and coverage of fixed costs. These are not standard toolkits, not even when there is a need to support activity or employment in deep recessions.

The first argument is that the lockdown restrictions are effectively an expropriation of market opportunities justifying compensation. This may be interpreted as an ex post insurance of an unanticipated aggregate shock.² Since firms and workers had no influence on the occurrence of this shock (no ex-ante moral hazard), there is no direct incentive problem in providing the support. The same may be argued with respect to workers prevented from working, where the usual coverage offered by the social safety net may be considered insufficient for this particular type of shock (there is no ex-ante moral hazard issue here, either).

The second type of argument for the support is that it is important to preserve production capacity to increase the likelihood that a V-shaped economic recovery is feasible when lockdown and other containment measures can be removed. Perceiving the health situation and the lockdown to be temporary, it is important to minimize the risk that the economic repercussions become permanent. The negative effects of

¹ A listing is available at <https://www.oecd.org/coronavirus/country-policy-tracker/>.

² This is well known from natural disasters – see Cebotari and Youssef (2020).

the lockdown restrictions cannot be avoided, but a quick recovery upon removal of the restrictions is only feasible if production capacity remains intact. Worker layoffs—breaking job matches—and firm closure, to be followed by hiring and reopening of (new) firms are associated with substantial transaction costs, time lags and loss of both real and human capital.

Support to workers also helps maintain consumption and reduces risks, and this makes it possible for aggregate demand to pick up swiftly when the economy reopens. Such support is in many cases given by temporary changes of the social safety net, e.g., extended unemployment benefit periods or increasing benefit levels. Basing support on the existing social safety net raises issues since it does not generally include atypical workers. Extending support to such groups, which typically do not contribute to the schemes, raises obvious moral hazard issues. The same applies in countries with voluntary membership of unemployment insurance schemes, and where providing an amnesty allowing for “retrospective” membership³ has been proposed.

In short, the emergency support is a means to prevent a temporary shock causing permanent negative effects on economic activity and employment. However, several ex-post incentive issues arise when such support is provided. If it is based on e.g., decline in turnover or employment, it is difficult to separate the insurable event (the direct effect of lockdown restrictions) from other events, including general business cycle repercussions or second-round effects released from the global recession triggered by the crisis. Such business cycle fluctuations are normally not insured at the firm level, since this creates obvious incentive problems and disrupts the market mechanism.

The emergency packages include both direct support and loan/credit facilities, and there is some variation across countries in the specific design of policy interventions. There are noteworthy differences between direct support and liquidity/loan arrangements. Liquidity/loan arrangements overcome a term problem but are effectively implying self-financing or insurance in the sense that e.g., firms are offered a possibility to even out the effects over time. In principle, the capability to self-insure could be built up ex-ante via consolidation and accumulation of buffers to handle negative, unanticipated events, or ex-post via capital markets in the form of loans. Due to the risk of a credit squeeze and the urgency of providing liquidity/loans to the large number of firms affected by the lockdown restrictions, public initiatives such as postponement of tax payments, loan guarantees and facilities are important and have been widespread.

³ As an example, a new temporary work sharing arrangement is only available for employees with unemployment insurance in Denmark. An escape rule for the uninsured is provided if they pay a higher contribution fee (retrospective payment) for a certain minimum period.

A key problem with the emergency packages and the unconventional measures deployed is the implied status quo bias. This applies in particular to measures covering part of fixed costs or loss of income and work-sharing arrangements. Incentive problems arise since firms and employees may have insufficient incentives to adjust to the new situation (ex-post moral hazard problem: the consequence of the shock is worsened). This creates a risk of locking-in of resources—both real and human—in activities and jobs that do not have a future. In short, these policies protect the current situation but may impair reallocations.

The direct support to specific firms and industries in the emergency packages also has implications for industrial and trade policies. These measures may have a home bias to support domestic firms. While this may be justified as a short-term response to the lockdown, it is essential to avoid that barriers to trade develop as a result. There is a need for coordination across exit plans to ensure a level playing field.

This may be less of a problem for loans, shifting the burden onto specific firms, workers and households. The advantage of this approach is that there is some credit assessment, although the borrowing is facilitated by government guarantees, ensuring that support goes e.g., to firms with a viable business model. There is a strong incentive for firms to adjust to the new and changed market opportunities, and there is not the same status quo bias as for direct support. The downside is the privatization of risk and thus less risk sharing. Servicing debt accumulated as a result of coronavirus-lockdowns is different than servicing debt arising as a result of traditional forms of investments in the firm. The latter would have future effects on business opportunities, improving revenues and/or reducing costs, whereas the “coronavirus debt” is more such as a sunk cost. In very competitive environments, incumbent firms with a coronavirus debt may be at a competitive disadvantage in terms of new start-ups. The different elements of emergency packages thus have pros and cons, which speaks for using a differentiated approach deploying a broad set of instruments, which is also the case in many countries. Thereby it is also possible to take large sector differences and needs into account.

Finally, on the political economy side, there is also an issue of time inconsistency. The special initiatives included in emergency packages are meant to be temporary solutions in an unusual situation. But such schemes create their own dynamics, and a pressure easily develops for prolongation. This applies not only to the direct support part, but also the loans part. If a debt problem arises for many firms, a political pressure for some form of bail-out arises. It is therefore critical that the schemes are launched with explicit sunset clauses. Direct support makes sense as temporary measures providing insurance in a special situation, but support over prolonged periods

will not only have large fiscal implications, but also stifle competition and adjustment with large costs.

ARE NATIONAL POLICY INITIATIVES SUFFICIENT?

A first line of defense in economic policy has been the emergency packages, as previously mentioned. They mainly work to keep production capacity and job matches intact, but do not as such create more activity. During a second phase, there is a need for more traditional fiscal policy to support aggregate demand.

Discussing fiscal policy, the automatic stabilizers are important. By definition, they kick in automatically and quietly and are therefore often overlooked in the discussion. While automatic stabilizers have the virtue of being rule-based and designed to work symmetrically across the business cycle, there are large differences in the size of automatic stabilizers across countries (Mourre, Poissonnier and Lausegger 2019). Despite calls for strengthening of the automatic stabilizers in the wake of the financial crisis, this has not happened. The automatic stabilizers are not a result of macro-design as such, but the net result of the design of the social safety net and taxation systems – see Andersen (2016) for a discussion. There is a clear correlation between the size of automatic stabilizers and the size of the public sector/welfare state. Consequently, there are huge country variations in the extent to which the automatic stabilizers counteract coronavirus shocks. Cross-country comparisons of policy interventions can thus not be gauged by just considering discrete policy changes.

Important caveats apply to the automatic stabilizers in the present situation. The coronavirus crisis obviously differs from the typical business cycle, and therefore activity is not primarily low due to lack of demand, but due to lockdown and containment restrictions. The automatic stabilizers do not target preservation of production capacity and job matches. Special and new types of interventions are needed for this purpose, as discussed above. An important lesson in terms of automatic stabilizers and insurance from previous crises is that they can cope with temporary but not permanent shocks and changes. In the design of the social safety net this concern is quite explicit. Unemployment benefits have a fixed duration, and various conditionalities built into the system serve to create incentives and make unemployed capable of finding a job (workfare and active labor market policies). This basic aspect applies to any form of insurance—whether national or multi-national—and it is therefore a key design question to ensure that there are sufficient incentives to change the situation for both employers and employees.

Designing fiscal policies in the current situation is not straightforward. While there is a general downturn and need to support aggregate demand, there are also some challenges. Risk and uncertainty concerning both health and economic developments give reason

for precautionary savings, which in turn may mute the traditional effects of fiscal policy on aggregate demand. Moreover, sectors are very differently affected, with some even expanding, hence, a general increase in aggregate demand is thus problematic. Moreover, identifying the fiscal policy changes with the largest multiplier – see e.g., IMF (2020) for a discussion.

Government borrowing is a key way by which risk can be diversified across generations. This gives the government scope for risk diversification beyond what can be achieved in the market, and it is therefore essential to the argument given above for diversifying the consequences of the coronavirus pandemic. This has both an intra- and intergenerational dimension.

For fiscal policy—discretionary and automatic stabilizers—fiscal space is required. The initial position of public finances differs significantly across EU countries; a few countries have managed to reduce debt levels after the financial crisis, but for many countries this has not happened. As an emergency measure, the EU activated the general escape clause of the Stability and Growth Pact (SGP), allowing member states to depart from the budgetary requirements in the European fiscal framework. At the same time, government borrowing rates are low, see discussion above. Both factors make room not only for allowing automatic stabilizers to work but also for discretionary fiscal policies to function. However, it is important to stress that the government budget constraint has not become irrelevant – see e.g., discussion in Lian, Presbitero and Wiriadinata (2020) and Andersen (2020). Many countries have high debt levels, and unsolved sustainability issues arising due to an aging population looming (European Commission 2020).

The situation also underlines the importance of fiscal space, that is, consolidation in good times to ensure space to deal with economic crises. High debt levels reduce fiscal space and the ability to cope with negative economic events. During the coronavirus crisis, countries with lower debt levels have been able to pursue more aggressive fiscal policies (Alerbarola et al. 2020).

National policy responses may be insufficient for many reasons. Lack of fiscal space may constrain policy initiatives. There may also be non-cooperative biases in policies, including that the positive spill-over effects to trading partners are not taken into account or that national policies have a home-bias focusing on helping domestic firms but impairing competition in the single market.⁴ This taps into the discussion of the lack of fiscal mechanisms in the EU, especially for euro countries. No such mechanism existed *ex ante*, but does it make sense to make one *ex-post* in the present situation? There are basically three arguments why there is a need for an EU initiative.

⁴ The EU Commission has temporarily allowed member states, under the state aid rules, to support businesses of all types to preserve the continuity of economic activity during and after the Covid-19 outbreak.

First, there is the insurance argument that countries have an interest in sharing and diversifying risk, as discussed above. Clearly, ex-post insurance is more difficult since the consequences of the event are known, and a pattern of net-contributors and beneficiaries arises. But still, such a scheme can have support since it may set an example for future situations where the roles have changed.

Second, there is the system argument that countries are interdependent, and it is in the interest of the better-off countries to contribute economic support to avoid a deep economic and political crisis. This applies to both fiscal and monetary instruments. The last thing needed in the current situation is a sovereign debt crisis, and the ECB purchase program is working to that effect. Single country fiscal policy initiatives may be both insufficient and inadequate since externalities/spill-over effects are not taken sufficiently into account.

Finally, there is a redistribution/solidarity argument to stand together in crisis time. That is what happens at the national level, and the question is whether it can also be brought to life at the EU level.

RISK SHARING ACROSS COUNTRIES

Even though the pandemic affects all countries, the specific country effects differ, both in the health and economic dimension. The health and economic effects are not one-to-one related for a number of reasons, including different exposure to the virus, different economic structures, policies and initial positions. As an illustration, Figure 1 shows the health and economic consequences by November 2020 assessed in terms of Covid-19-related mortality and the downward adjustment in GDP growth forecasts for 2020. It shows huge differences in consequences along both dimensions and there is no clear correlation between the economic and health implications. From an ex-ante perspective, Figure 1 illustrates the risk in terms of draws from a multi-dimensional distribution faced by all countries prior to the onset of the crisis. Ex-ante, it was not clear how given countries would be affected, but the same figure illustrates possible outcomes, and thus the scope for welfare gains from cross-country risk diversification.

The shock and its effects were not anticipated, and while national schemes may be powerful in providing insurance against aggregate shocks via the public budget and thus across time and generations, this is not exploiting the full scope for risk diversification.

Thinking of this from an ex-ante perspective, the question is how such an insurance arrangement for coping with a health shock affecting all European countries should look, see discussion in EEAG (2020). Ex-ante there is a common interest in establishing such an arrangement, but there will be uncertainty with respect to both the probability that such events occur and the consequences. The hazard

includes both the health consequences and the economic effects across countries, sectors and specific firms. The emergency packages implemented in various countries retrospectively replicate part of such an insurance contract, but leave risk diversification incomplete, in particular across countries. This leads to consideration regarding the need and scope for initiatives at the EU level.

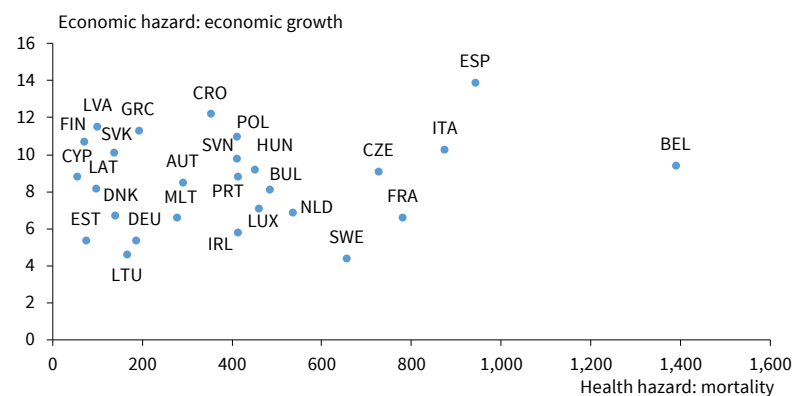
The EU system was not set up to offer automatic responses or leave room for discretionary changes to act for such purposes. The question is whether ex-post there is sufficient solidarity among member states to establish such arrangements. As a result of various political discussions, the EU has launched the program Next Generation EU (NGEU). A key element is the Recovery and Resilience Facility.

THE RECOVERY AND RESILIENCE FACILITY

The overall financial frame for NGEU constitutes EUR 750 billion (2018 prices), amounting to 5.5% of total EU GDP, and is split between grants (EUR 390 billion) and loans (EUR 360 billion). The program is financed by EU borrowing, and the repayment of the loans runs until the end of 2058. The key initiative is the Recovery and Resilience Facility (EUR 673 billion, grants: EUR 313 billion, loans EUR 360 billion), aimed at supporting recovery and resilience of member states, creating jobs and repairing the immediate consequences of the Covid-19 pandemic, while promoting green and digital transitions.⁵ Each recovery and resilience plan must include a minimum of 37% of expenditures related to climate, and 20% of expenditures related to digital transformation. The credit facility offers indirect support for countries facing high government borrowing rates. Loans to a

⁵ See https://ec.europa.eu/info/business-economy-euro/recovery-coronavirus/recovery-and-resilience-facility_en and https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_1659.

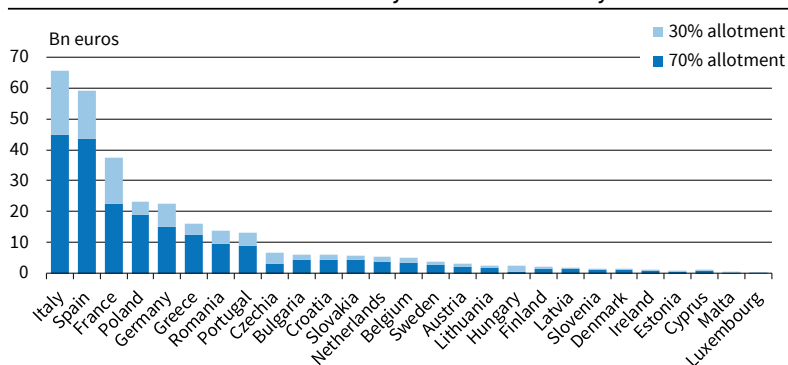
Figure 1
Health and Economic Consequences, EU Countries



Note: The health consequence/hazard is measured by the Covid-19 related deaths from the onset of the coronavirus pandemic until late November 2020; the economic consequence is measured by the decrease in forecasted GDP growth for 2020 between November 2019 and 2020 by the European Commission.
Source: Our World in Data; European Commission.

Figure 2

Allocation of the Grant-Part of the Recovery and Resilience Facility



Note: Recovery and Resilience Facility 613 billion euros; 30% allocation based on summer 2020 economic forecast.
Source: European Commission, Recovery Plan for Europe. © ifo Institute

member state cannot exceed 6.8% of its Gross National Income, unless special circumstances apply.

The grants are allocated based on two keys. A fraction of 70% depends on the population size, the inverse of its GDP per capita, and its average unemployment rate over the past 5 years (2015-2019); all variables are measured relative to the EU average. The remaining 30% are allocated based on population size, the inverse GDP per capita, and the observed loss in real GDP over 2020 and the observed cumulative loss in real GDP over the period 2020-2021, also relative to EU averages.

Economic support depends on member states preparing a national recovery and resilience plan setting out their reform and investment agenda for the years 2021-23, including explicit milestones and targets. The plan is assessed based on consistency with the country-specific recommendations of the European Semester, the extent to which it strengthens the growth potential, job creation and economic and social resilience of the member state and contributes to the green and digital transitions. The plan must include explicit milestones and targets, and the funding depends on meeting these targets. The governance mechanism allows single member states to raise objections if specific countries do not fulfil reform promises.

The scheme implies common risk sharing via the part of grants allocated depending on the effects of the coronavirus crisis. The part depending on initial conditions, e.g., GDP per capita, can be interpreted either as reflecting that given shocks are more severe and thus the gains from insurance larger, the worse the initial situation, or as redistribution from the more well-off to the less well-off member states.

The original proposal by the Commission had a fund at EUR 1,500 billion, which was later reduced to EUR 750 billion. According to the initial plan, the grant allotment was EUR 500 billion, but it was reduced to EUR 390 billion. Moreover, more weight in the allocation was given to the effects of the coronavirus crisis, and the explicit conditionality on reforms, monitoring of milestones and targets strengthened. From a

redistributive perspective, this was a classical battle between the net beneficiaries and net contributors. From an insurance perspective, it can be interpreted as more closely aligning the program to the consequences of the coronavirus crisis and addressing potential moral hazard problems by stressing the conditionality on reform efforts.

It is to be expected that countries will use the grants part first. The loan part is effectively an option. Most countries face low government bond rates at the moment, and hence the implicit subsidy via borrowing in the EU scheme is small. But this may change in the future, making the loans part more relevant.

The interesting question is whether the RFF will be successful. Already from the outset, the initiative is hampered by the lag in implementing the program, implying that the immediate effects are small. The grant part clearly provides temporary relief to some countries, but the critical issue is whether the program addresses shortcomings of national policies and whether the needed structural reforms are undertaken. It is in accordance with incentive problems of insurance arrangements to make support contingent on structural reforms (see also the discussion above). This is needed to prevent bailout situations from arising. For this to work, structural reforms must be precisely defined, and explicit monitoring and following-up mechanisms must be present. The present formulation of the RFF has a very broad interpretation of reforms, and it is a concern whether it will be possible to implement a sufficiently strong incentive mechanism. The track record for enforcement in the EU is not strong, as seen from e.g., the Stability and Growth Pact, rule of law and human rights issues. These problems are further attenuated by the fact that the initiative simultaneously intends to deal with the immediate consequences of the coronavirus crisis and set a trajectory for future developments.

Moreover, it is an open question whether the initiative ends up financing activities which would be undertaken in any case or, even worse, projects will little or no effect. This also applies to initiatives to support a green transition. The program may end up supporting national programs undertaken in any case, rather than activities with strong EU-network and spill-over effects which are given low priority by national governments. A dilemma in the facility is that the NGEU is intended to pursue objectives that can not sufficiently be achieved by member states alone, and yet it relies on membership initiatives. While this strengthens country-ownership to the specific initiatives, it does not ensure that policy interdependencies and network effects are taken sufficiently into account.

CONCLUSION

Unusual times call for unusual economic policy initiatives, as is the case with the emergency packages

following lockdown and containment restrictions. These schemes entail collective risk sharing and aim to protect production capacity and job matches. This is an important necessary condition for a swift recovery when the health situation normalizes. However, national initiatives are insufficient; they do not ensure efficient risk sharing and do not take spill-over effects to trading partners into account. EU initiatives can potentially address this problem and establish a cross-country insurance mechanism. The EU Recovery and Resilience Facility is an interesting initiative. It is trailblazing in the EU both in content, including both grant and loan elements, and its financing via borrowing. However, the main weakness of the scheme is that the efforts are insufficiently targeted to areas where national policies are insufficient. There is a high risk that the program will not make a sufficient impact by supporting initiatives that have been given low priority by single countries and in inducing structural reforms.

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Karsten Staehr and Katri Urke

The Coronavirus Pandemic and Next Generation EU in the Baltic States¹

The coronavirus pandemic made economic and social conditions worse in most EU countries at a time when many were still recovering from the global financial crisis and the European debt crisis. The leaders of the EU countries decided at a summit in July 2020 to launch a program that would make resources available to all EU countries to aid their recovery and resilience after the pandemic.

The program has over time been given different labels, but the official term ended up being Next Generation EU (NGEU), which is not very informative in itself, but may signal a fundamental change in how the EU operates (Picek 2020). The final agreement on the program and the EU budget for the years 2021–2027 was reached on 10 December 2020, though various details remain subject to ongoing negotiations and future decisions.

The sums of the NGEU are substantial. Allocations to the EU countries total 750 billion euros at 2018 prices, of which 390 billion euros are grants and 360 billion euros are low-interest loans. The 750 billion euros account for approximately 5.5 percent of the EU's total 2018 GDP, excluding the UK.

The NGEU funds will be distributed over several years starting in 2021. There are intricate rules governing the allocation to each country, and they generally mean that the South European and the East European EU countries will receive proportionately more than other EU countries. The Baltic states stand to receive substantial sums from the NGEU because of their income levels and macroeconomic situations.

The Baltic states did not play a major role in the negotiations leading up to the decision regarding the NGEU program. When the “frugal four,” consisting of Denmark, the Netherlands, Austria and Sweden, sought to reduce the size of the NGEU, the Baltic states did not join the initiative, despite the Baltic states' preference for small government and their traditional alignment with other Nordic countries.²

Their lack of support for the

frugal four may in part reflect how attractive they found the idea of receiving substantial additional funding from the EU in years to come.

This paper discusses the possible impact of the NGEU on the Baltic economies and asks whether the program represents a new opportunity or a distraction. It contributes to the debates on the program and its economic effects on the EU as a whole and in various EU countries.³ The paper may also be viewed as a contribution to the broader debates on the future of the EU and the prospects for further economic and fiscal integration (Dabrowski 2016; Picek 2020).

NEXT GENERATION EU

The European Commission will borrow up to 750 billion euros on the capital markets on behalf of the European Union to finance the Next Generation EU recovery program. These funds will then be used to provide support to the EU countries in the form of loans totaling up to 360 billion euros and grants of up to 390 billion euros (European Council 2020a). The amounts are defined in 2018 prices, so the actual payments in current prices will be higher.

The funds available under the NGEU are linked to the regular Multiannual Financial Framework (MFF), and the MFF instruments and programs will be used to distribute the new additional NGEU funds as loans and grants. The aim is to achieve a coordinated European fiscal response that supports long-term EU policies such as the European Green Deal, the digital revolution and enhanced economic resilience.

In total, 80 percent of the grants and the entire loan portfolio will be allocated to the Recovery and Resilience Facility (RRF), which is the core of the NGEU. The RRF is designed to finance investment and reforms in EU countries so that their recovery can be resilient and in line with the EU's digital and green priorities (European Commission 2020a). The remain-

ing 20 percent of the grants are divided between the new React-EU facility, which supports investments to aid the recovery, and various top-ups of such existing financing facilities,



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¹ The views expressed are those of the authors and not necessarily those of the Bank of Estonia or other parts of the Eurosystem.

² The Baltic states have in other cases been aligned with other North European countries that oppose fiscal transfers within the EU (The Economist 2018).

³ Staff members of Bruegel have written extensively on the facility (<https://www.bruegel.org/tag/next-generation-eu/>). The November/December 2020 issue of *Inter-economics* focuses on various aspects of the NGEU (<https://www.intereconomics.eu/archive/year/2020/number/6.html>).

including the Just Transition Fund, which compensates regions that are adversely affected by the EU's emissions policies.

To receive financial support under the RRF, each EU country needs to submit national recovery and resilience plans by the end of April 2021. These plans need to feature coherent packages of reforms and public investment projects that will reinforce the potential for growth of the country submitting them, its job creation, and its socio-economic resilience. A minimum of 37 percent of expenditures in the recovery plan need to be focused on green investments and reforms, and a minimum of 20 percent of the expenditure should foster digital transition (European Commission 2020b).

A total of 70% of the RRF grants needs to be committed in the years 2021 and 2022, and the remaining 30% by the end of 2023 (European Council 2020a, A15). The 2021-2022 commitments are allocated to each country using the inverse of 2019 GDP per capita, the 2019 population and the 2015-2019 average unemployment rate, all relative to the values for the EU excluding the UK (European Council 2020b, Annex I). However, the final size of the remaining 30% of the RRF grants for 2023 is uncertain, since it will only be calculated in June 2022 using the loss of real GDP in 2020 and the cumulative loss of real GDP in 2020–2021 (European Council 2020a, A16). This means that the recovery plans will be reviewed in 2022 to include the final allocation of the funds. Payments from the RRF and other NGEU funds will start in 2021 and need to be completed by the end of 2026.

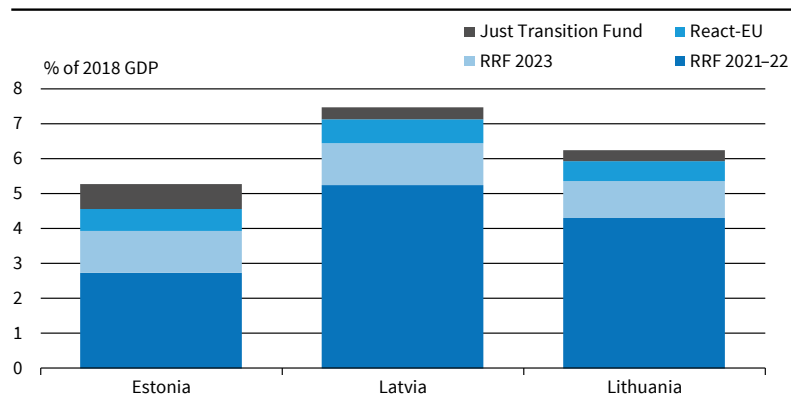
The EU countries can request RRF loans of up to a maximum of 6.8 percent of their GNI (European Council 2020a). How much of the RRF loans each country takes on remains to be seen. Since the EU is expected to borrow in the markets at more favorable interest rates than most EU countries can, the countries with the highest borrowing costs will benefit the most from using the RRF loan facility.

The funds that the European Commission raises on the capital markets will need to be repaid by the end of 2058 at the latest. At the time of this writing in early December 2020, the revenue side of the funding measures has not been decided. However, it is inevitable that new sources of own resources will have to be agreed upon to help repay the borrowing.⁴ It may be supposed that if no specific new revenue sources are decided upon, then the loans will either be turned over or the debt servicing costs will be rolled into the EU's general seven-year budgets.

The Baltic states are set to receive substantial funding from the NGEU. The grants available from

Figure 1

Pre-committed NGEU Grants to the Baltic States in 2018 Prices



Note: European Commission's preliminary calculations for 2023 based on the summer 2020 economic forecast. Source: European Commission (2020a); Eurostat (2020); authors' calculation. © ifo Institute

the NGEU under the preliminary allocations plan are worth a little over 5% of GDP in Estonia, 6% of GDP in Lithuania, and 7% of GDP in Latvia (Figure 1). The RRF funds represent the bulk of the expected allocations.

The Baltic states may also request RRF loans, but the amounts each country will request are not known at this stage. A fairly similar loan facility offering temporary support to mitigate unemployment risks in an emergency is SURE, which was introduced in spring 2020, and which benefits countries with high borrowing costs. At the time of this writing, Latvia and Lithuania had requested loans from the SURE facility, but it is of course not clear whether this indicates that they will also take on RRF loans in the future.

THE CORONAVIRUS CRISIS IN THE BALTIC STATES

The coronavirus pandemic came relatively late to the Baltic states and the numbers of new cases have, in proportional terms, been comparatively low. The total number of coronavirus cases as most 1 December 2020 was 0.98% of the population at the beginning of the year for Estonia, 0.96% for Latvia and 2.24% for Lithuania (John Hopkins 2020). The corresponding number was 1.33% for Germany, one of the least affected among the major countries in Western Europe.

The coronavirus pandemic has led to serious health emergencies and strained health care systems in the Baltic states. All three countries instituted comprehensive lockdowns in the spring of 2020. The restrictions were relaxed in the early summer months, but when the pandemic worsened in the autumn, new restrictions and partial lockdowns were put in place in November 2020.

The pandemic has had serious consequences for the Baltic economies, starting with the first quarter of 2020. The disruptions caused by outbreaks of the coronavirus and the lockdown of shops and various workplaces were negative supply shocks. Equally important, demand for exports, and consumption and investment declined substantially. The construction

⁴ In November 2020, the European Parliament and the EU countries in the Council agreed on which sources the possible new future revenues will be linked to. The European Commission will propose new revenue sources based on a carbon border adjustment mechanism, a digital levy and the EU Emissions Trading System. Additional own resources could include a financial transaction tax, a financial contribution linked from the corporate sector and a new common corporate tax base (European Commission 2020a).

sector remained open in all three countries during the lockdown, which helped soften the downturn.

At the time of this writing in early December 2020 it is too early to assess the longer-term consequences for economic growth, unemployment and financial balances. In the short term, the GDP had already started to decline in the first quarter of 2020 (Figure 2). The decline in seasonally adjusted GDP from the first quarter of 2020 to the second was 5.5% in Estonia, 7.1% in Latvia, and 5.9% in Lithuania. These declines were comparable to those in many Western European countries. Economic growth resumed at a rapid pace in the third quarter and large parts of the income declines were reversed in the third quarter of 2020.

The unemployment rate is lagging behind developments in GDP. Figure 3 shows quarterly data for the unemployment rate from 2015 to the third quarter of 2020. The unemployment rate increased substantially from the second quarter to the third, particularly in Estonia, where the large tourist sector was hit severely by the crisis, and where regulations on employment protection are less strict than in the other two Baltic states. Unemployment rates continued to rise in the third quarter of 2020, though at a lower rate than in the second quarter.

When looking at the dynamics of unemployment, it should be noted that the unemployment data do not cover workers who are furloughed. Moreover, the increasing unemployment risks do not have an equal effect on all the different parts of the populations. The coronavirus pandemic has disproportionately affected workers in the service sector and, to a lesser extent, the manufacturing sector, and these workers were often paid low wages before they were let go and may also lack the education and skills that could ease their return to employment (Eesti Pank 2020).

A LONGER PERSPECTIVE

It is instructive to consider the fallout from the coronavirus crisis in the Baltic states from a longer perspective. The Baltic states have seen very strong business cycles since they regained independence in 1991. GDP dropped dramatically in all three countries after the global financial crisis and unemployment rates followed in the opposite direction after a short delay. The economic downturn in the Baltic states due to the coronavirus pandemic has been severe but nevertheless relatively well contained in comparison to the experience after the global financial crisis.

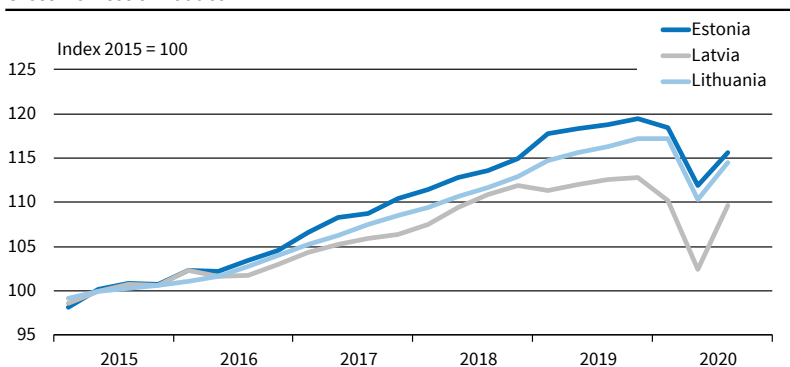
Figure 4 shows annual GDP growth in the Baltic states from 2000 to 2019 together with the forecasts from the European Commission for 2020 to 2022. The accumulated decline in output after the global financial crisis was around 20 percent of the GDP before the crisis, whereas the declines in output due to the coronavirus crisis are forecast to be between 2 and 6 percent of pre-crisis GDP and the downturn is forecast to last for only one year.⁵

The economic setbacks in the Baltic states following the coronavirus pandemic have been serious, but they are similar to, or milder than the setbacks that most other European countries experienced (European Commission 2020c). The impact on the Baltics has also been considerably less serious than the fallout they experienced after the global financial crisis. The global financial crisis affected almost all areas of private enterprise, whereas the coronavirus crisis has mainly affected tourism, the hospitality industry and culture. The construction industry faced serious difficulties after the global financial crisis, but it has held up well during the coronavirus crisis.

The losses in output in 2020 may be comparatively small partly because the macroeconomic stance was more balanced before the coronavirus crisis than it was before the global financial crisis. The Baltic states are members of the euro area, and the expansionary monetary policy of the European Central Bank has benefited them directly as credit

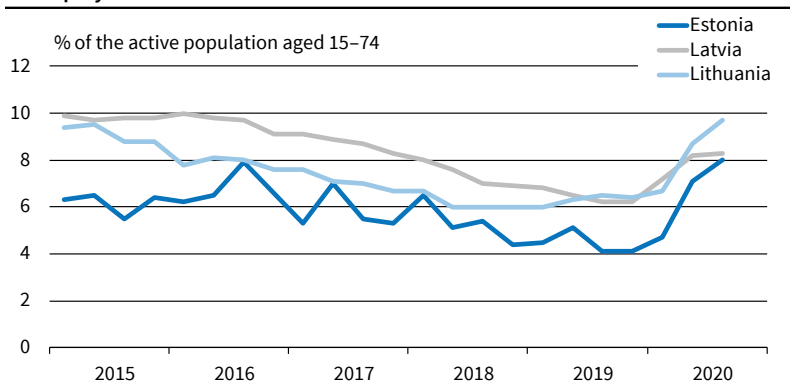
⁵ The unemployment dynamics follow a similar pattern. While the unemployment rates in the Baltic states have been creeping up during 2020, the rates are still well below the peaks of around 20% of the labour force following the global financial crisis.

Figure 2
Gross Domestic Product



Note: Seasonally adjusted quarterly data. Source: Eurostat (2020). © ifo Institute

Figure 3
Unemployment Rate



Note: Seasonally adjusted quarterly data. The unemployment rate is computed from labour force survey following the ILO methodology. Source: Eurostat (2020). © ifo Institute

conditions were eased, and indirectly through trade and financial flows.

The economic downturns associated with the coronavirus pandemic may also have been softened by expansionary fiscal policy. The three countries allowed the automatic stabilizers to operate and furthermore took discretionary measures in support of businesses and the unemployed. The European Commission projects the cyclically adjusted deficits in the Baltic states to be between 4 and 8 percent of GDP in 2020 (Ameco 2020).

The expansionary fiscal policies introduced during the coronavirus crisis have led stocks of government debt in the Baltic states to increase rapidly. Figure 5 shows gross government debt in percent of GDP where the data for 2020-2022 are once more projections by the European Commission. Estonia stands out for having a very low government debt stock before the coronavirus crisis, while the debt levels in Latvia and Lithuania were higher in consequence of their expansionary fiscal policies during the global financial crisis.

The ratio of government debt to GDP is projected to increase rapidly from its 2019 level. It is noticeable, however, that the stock of government debt in the Baltic states will remain among the lowest in the EU and it is projected to remain well below the debt ceiling of 60% of GDP as defined in the Stability and Growth Pact and the Macroeconomic Imbalance Procedure.

In conclusion, the coronavirus pandemic has dragged the economies in the Baltic states down, but the declines in output are much smaller than what was seen during the global financial crisis and also smaller than those in many other EU countries (European Commission 2020c). Monetary easing by the European Central Bank has helped them to avoid credit crunches, and expansionary fiscal policies have provided support to businesses and workers without jeopardizing fiscal sustainability. Meanwhile, the longer-term economic ramifications of changes in markets and business practices, the disruption of education and job training, and reduced business and public investment remain unclear.

NGEU AND THE BALTIC STATES

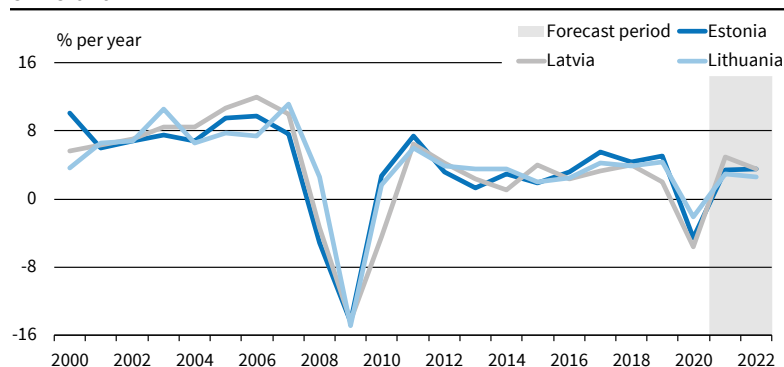
Public Finances

The NGEU was devised a few months after the coronavirus had reached Europe. Early proposals emphasized the need to ease fiscal pressures immediately in order to avoid a crash akin to the European debt crisis of 2009-2012, but the final version emphasized objectives like supporting recovery and resilience in the medium-term rather than the immediate financing requirements provoked by the pandemic (Heinemann 2020).

The absence of short-term support in the NGEU program has not had serious consequences. European governments have generally retained access

Figure 4

GDP Growth

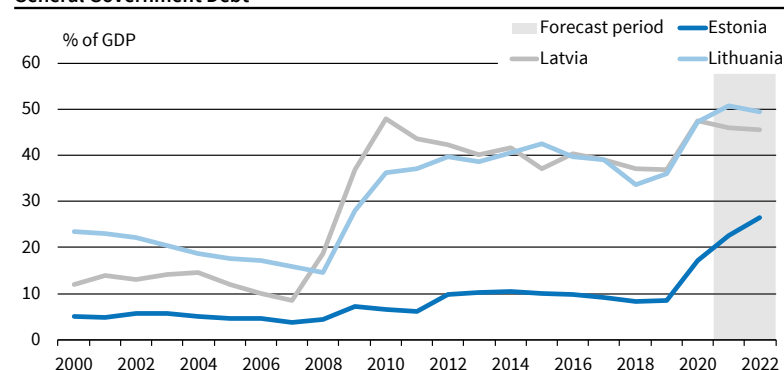


Note: Projections for 2020-22 from the Autumn Forecast 2020 of the European Commission (2020).
Source: Ameco (2020).

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Figure 5

General Government Debt



Note: Projections for 2020-22 from the Autumn Forecast 2020 of the European Commission (2020).
Source: Ameco (2020).

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to borrowing and interest rates have remained low, or even negative in many cases. The expansionary monetary policies pursued by the European Central Bank after the pandemic have helped allow European governments to retain access to private sector borrowing at low interest rates. Moreover, the coronavirus pandemic did not cause disruptions in financial markets in the same way that the global financial crisis did (Giese and Haldane 2020).

The payments from the NGEU will not start until 2021, but the facility may nevertheless have helped drive down risk premiums on government debt in anticipation of future grants and loans. It is difficult to be certain how this anticipation has affected the costs of government funding in the Baltic states, but the effect may be small.⁶

The Baltic states are projected to receive grants worth between 5 and 7 percent of GDP over the years 2021 to 2026, and the countries can borrow comparable amounts from the RRF facility. At first sight such large transfers over a relatively short period should ease fiscal pressures.

⁶ It is noticeable that Estonia, which did not issue government bonds until 2020, entered the market in 2020 and borrowed at very low interest rates.

How the *grants* affect the fiscal balances in the Baltic states will depend on how much of the required spending would have taken place anyway. The NGEU presumes that the spending is additional, in which case the net effect on the fiscal balance would be small. Given that energy transition, digitalization and modernization of the economy are high on the political agenda in all three Baltic states, parts of the spending might have happened anyway.

The *lending* facility of the RRF will affect the fiscal balance to the extent that it lowers the borrowing costs to the governments (Darvas 2020a). Since the interest rates on government borrowing are relatively low in the Baltic states, the possible savings from this source are likely to be small. This may change, however, if the risk premiums were to increase on government debt issued by the Baltic states, in which case, access to RRF borrowing might be highly beneficial.

Recovery and Growth

The NGEU is intended to support economic recovery and resilience in the EU countries. The focus is on medium-term objectives and the facility does not provide short-term crisis measures (Heinemann 2020). Some funding may be available in 2021, but the rules for obtaining funding mean that the NGEU funds will not start to be paid out in substantial amounts until 2022 (Darvas 2020c).

Projections of economic growth in the Baltic states suggest that the downturns will prove to be relatively short-lived and concentrated in 2020.⁷ This suggests that support from the NGEU is unlikely to play a role in the policy measures taken to contain the short-term fallout from the coronavirus crisis in the Baltic states.

The NGEU seeks to facilitate recovery over the medium-term by providing funding for investment in green technology, digitalization and other forms of modernization. Fornaro and Wolf (2020) show in a theoretical model how the pandemic can lead to a “stagnation trap” where the initial supply disruptions caused by the pandemic reduce demand, and this then leads to lower investments and a lasting depression of supply. Government spending to address the supply constraints would be very effective in such a case.

The NGEU program provides resources to the EU countries to expand investment and reduce the risks of supply constraints in energy, digitalization and other areas that can hold back economic growth. It may thus reduce the likelihood of the Baltic states entering a prolonged period of low growth after the coronavirus pandemic. The risk of such a scenario unfolding is difficult to assess. It is noticeable, however, that economic growth in the Baltic states was

unimpressive for several years after the global financial crisis, and this led to concerns that the crisis had altered the dynamics of growth in these countries (Staeher 2015). The debates on the risks of the Baltic states following a path of low growth receded as economic growth picked up starting in 2017.

Besides the immediate or direct effect on investment from larger domestic spending, the NGEU may also give rise to indirect or spillover effects, given that the program compels all EU countries to increase spending on a green economy, digitalization, and innovation (Picek 2020). Given the size and openness of the Baltic economies, the possible spillovers from introducing NGEU measures in other EU countries might be as important as the measures taken in the Baltic states themselves.

The possible positive effects of the NGEU in the medium-term rest in large part on the additional resources being spent effectively. As discussed previously, funding from the NGEU must be spent within specific areas and only after various administrative procedures have been observed. These rules are meant to ensure that the funding is well spent, but they may also represent roadblocks in some cases.

The effectiveness of the funding from the NGEU is framed by the same factors as the regular cohesion policy funding, including the spending strategy, the absorption capacity and institutional competence (Medve-Bálint 2018). One particular concern is the relatively short time frame for preparing and submitting projects to be funded by the NGEU. This may hamper the ability to identify projects promising high social returns and may lead national authorities to prioritize projects that are already available or easy to prepare (Darvas 2020b).

The thematic focus implies that whereas funding will be available for energy conversion and digitalization, funding for other projects with potentially higher social returns may not be available. This concern is probably not too worrying given the flexibility in public budgeting and the fact that many projects within the greening of the energy supply and digital transformation have been identified in the Baltic states. The operation of the NGEU hinges on identifying projects that promise high social returns.

Political Economy

Not only will the NGEU have economic effects in the Baltic states, but it may also change expectations about the role of the EU and could possibly change domestic policymaking in the three countries.

A key issue is whether support from the NGEU may lead to *moral hazard*, meaning that policymakers might start assuming that they will be able to get support from the EU whenever their countries encounter adverse economic conditions. This may make them less prudent in the future so that governments might not prepare sufficiently for economic difficulties. The

⁷ There were fewer imbalances in the Baltic economies at the outbreak of the coronavirus pandemic than at the outbreak of the global financial crisis.

risk of moral hazard may also be real in the Baltic states. The Baltic states are small open economies and they have experienced strong business cycles since they regained independence. It is important that governments be prepared for sudden downturns, so expecting that the EU will provide support in a crisis may be deleterious.

The NGEU program comes at a time when income levels in the Baltic states are approaching or exceeding those in many South European EU countries. This means that the regular support from cohesion policy is set to be reduced in the budget period 2021–2027, especially for Estonia and Lithuania. The NGEU is set to provide substantial additional support at a point when the countries were set to gradually ease away from receiving support from the EU.

The NGEU implies that the total support from the EU to each of the Baltic states will remain substantial for an extended period of time. The risk is that support from the EU will be seen as an entitlement or an entrenched right. Such entitlement risks creating aid dependence, where policymaking and public administration become oriented toward extracting and utilizing external funding (Brazys 2018).

Persistent external funding may lead the public to expect that they will receive public services and generous social transfers without having to pay the corresponding tax. Such expectations may complicate policymaking when the funding is eventually phased out. Varblane (2016) discusses these issues in the context of EU support to the Baltic states and argues that the countries should take steps to reduce their dependence on funding from the EU.

DISCUSSION

The coronavirus pandemic meant that 2020 was a year of health, social and economic crises in all the EU countries. The Next Generation EU program is meant to aid the EU countries in recovering from the crises and to improve their resilience to future ones. This paper discusses the coronavirus pandemic and the role of the NGEU for the Baltic states.

The NGEU program impacts the Baltic economies directly in various ways. The effects on the fiscal stance may be limited if funding from the NGEU is spent on new investments in green energy, digitalization and other recovery measures. It is difficult to assess how economic growth will be affected, since this will in large part depend on how the additional funding is spent. Finally, the NGEU may accentuate the existing reliance on external funding for policymaking in the Baltic states.

The NGEU may have limited direct effects for the Baltic states, while the indirect effects could be of greater importance. This is particularly the case if the NGEU contributes to economic development and improved resilience in the rest of the EU. The Baltic economies are, given their size and openness, highly

dependent on developments in their neighboring countries. Higher and more stable growth in the rest of the EU will therefore have immediate and positive effects in the Baltic states.

Next Generation EU represents a departure from previous policies and has potentially sizeable consequences for the role and operation of the EU. What consequences it will have for the Baltic states is difficult to pinpoint precisely, as may also be the case for the rest of the EU. The NGEU undoubtedly affords new opportunities as well as new challenges for all the EU countries, including the Baltic states.

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Jérémie Cohen-Setton and Shahin Vallée

Measuring the European Fiscal Stance After Covid-19 from National and European Budget Plans¹

After the panic of early March 2020, when the pandemic morphed first into a financial and then economic crisis, European governments were pressed to respond to the speed and magnitude of the Covid-19 shock. With national governments necessarily providing the bulk of the economic response, the European Union (EU) agreed to suspend the European fiscal rules and to modify State Aid rules.²



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After some costly hesitation the European Central Bank (ECB) announced an important Pandemic Emergency Purchase Program (PEPP), which had the effect of ensuring that all member states could expand fiscal policy as much as required by the circumstances. This program, and its subsequent extension and expansion have played a considerable role in loosening financial conditions and enabling fiscal expansions by national governments.

After weeks of European debates at the Eurogroup, the European Council complemented national emergency packages with an important European agreement for a new recovery facility rooted in the EU budget (called NextGenerationEU, NGEU) on 21 July 2020. The agreement provided a strong signal of coordination and mutual support through large common borrowing and the establishment of significant transfers, thus breaking two important past European taboos.

Despite these important breakthroughs, whether an adequate fiscal response will be delivered beyond 2020 remains an open question. According to our calculations based on national and European fiscal plans – the results of which are summarized in Figure 1 and explained in the remainder of the text – the strong expansionary European fiscal stance of 2020 will quickly dissipate and turn contractionary. Already in 2021, the almost complete withdrawal of emergency measures risk dwarfing the positive impulse from national and European recovery packages, whose expenditures are for the most part backloaded. After 2021, the positive contribution from NGEU will grow but is expected to remain insufficient to compensate for the large fiscal drag induced by a return to national and European fiscal rules.

These calculations are tentative. Estimating the overall euro area fiscal impulse from national budgets and from NGEU requires a number of assumptions, some of which may be disputed.

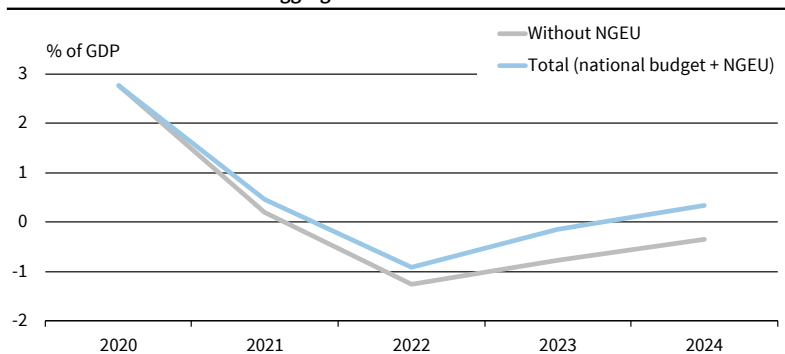
For 2020 and 2021, we for instance agree with the European Commission that an expenditure benchmark methodology is better than the structural balance methodology to obtain an estimate of the fiscal impulse from national budget plans.³ But we disagree with the Commission’s choice to fully remove emergency income support measures from the calculation of the fiscal stance because some of these measures do not simply substitute for already existing automatic stabilizers but also reinforce the level of support for a given level of output loss. In our view, adding and removing these enhancements in the social safety net thus constitutes a discretionary action, which should at least to some extent be reflected in fiscal stance indicators. Similarly, we disagree with the European Commission’s choice to remove emergency medical

¹ The authors would like to thank Dominik Buhl and Tarin Karzai for remarkable research assistance. They thank Xavier Debrun, Anne-Laure Delatte, and Lukasz Rawdanowicz for useful comments. All remaining errors are ours.

² In March 2020, the Commission adopted a Communication on the Activation of the General Escape Clause of the Stability and Growth Pact (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0112>). In a 12 March 2020 decision, the European Commission concluded that the Covid-19 outbreak qualifies as an “exceptional occurrence” for the purpose of Article 107(2)(b), which foresees exceptions to the general prohibition of state aid.

³ The expenditure benchmark methodology obtains the fiscal impulse by calculating the growth of spending (net of discretionary tax measures) in excess to potential growth. For 2020-21, it has several advantages over the structural balance methodology that obtains the fiscal impulse by calculating the change in the cyclically adjusted primary balance, net of one-offs. First, because the expenditure benchmark methodology is not affected by large shifts in tax elasticities. Second, because the expenditure benchmark methodology uses a medium-term reference rate of potential GDP growth in its calculations rather than the actual series of potential output for a given year, which has been shown to be very procyclical (Cohen-Setton and Valla 2010).

Figure 2
An Estimate of the Euro Area Aggregate Fiscal Stance



Note: Negative figures indicate a contractionary stance.
Source: European Commission (2020f); European Commission’s assessment of national draft budgetary plans; Darvas (2020b) for NGEU amounts; IMF WEO.

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measures from the calculation of the fiscal stance. The fact that the rationale for these expenditures will cease to exist as the pandemic recedes does not annul their impact on the fiscal impulse.

Obtaining an impulse from European policies also requires that we make specific assumptions about the speed of disbursements of NGEU grants and loans and their respective contributions to the fiscal stance. Some of the assumptions that we make may be disputed, but they're presented explicitly in the remainder of the text.

These calculations are also limited in scope. To fully assess whether the size of the fiscal support is adequate, one would have to also assess the efficiency of various stimulus measures and whether fiscal policy is adequately complemented by monetary support. While important, these considerations are beyond the scope of this paper.

THE FISCAL SUPPORT FROM NATIONAL BUDGETS AFTER 2020

The European Commission Likely Underestimates the Fiscal Drag Induced by the Removal of Emergency Measures

European governments have submitted their fiscal plans for 2021 on October 15th and the European Commission has offered its assessment in November. As part of its recommendations to the Eurogroup, it will also issue a formal recommendation with a possible specific target for the aggregate fiscal stance of the euro area (European Commission 2020f).

Based on these Draft Budgetary Plans, the Commission estimates that fiscal policy in the euro area will remain broadly supportive in 2021. Yet, as can be seen in Figure 2, this assessment depends critically on whether conventional indicators of the fiscal stance—here the impulse obtained using the expenditure benchmark methodology—are corrected for the introduction in 2020 and subsequent withdrawal in 2021 of sizable temporary emergency measures.

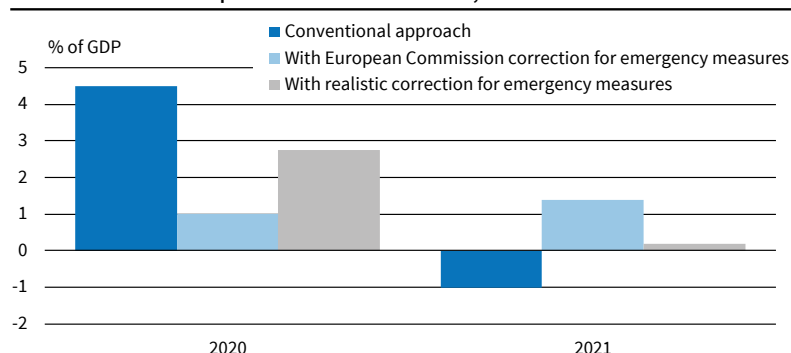
Indeed, without this technical adjustment for the planned unwinding of temporary emergency measures, conventional indicators of the fiscal stance would not point to a fiscal expansion of 1.4% of GDP in 2021 but to a fiscal consolidation of 1% of GDP.

The European Commission approach has the merit to provide a standardized way for measuring the different national fiscal policies. Prior to the European Commission's assessment and computation, member states had each accounted for emergency measures differently, with the French Treasury classifying them as “ad hoc and temporary measures” and excluding them from the calculation of conventional indicators of the fiscal stance, while other countries followed a more conventional approach and included them.

The European Commission disagreed with the French Treasury's accounting convention of classifying

Figure 2

The Euro Area Fiscal Impulse from National Policies, 2020–2021



Note: The graph shows the discretionary fiscal impulse based on the expenditure benchmark methodology. The conventional approach does not exclude emergency measures. The “European Commission correction” removes all emergency measures from the calculation of the fiscal stance. The “realistic correction” removes only 75% of income-support measures and does not remove emergency health spending. See text for explanations. In this graph, positive figures indicate an expansionary stance.
Source: European Commission (2020f).

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emergency measures as “ad hoc and temporary.”⁴ But in arguing that “excluding the temporary emergency measures from the calculation of the fiscal stance indicators leads to a more representative assessment of the underlying fiscal support to economic activity,” the European Commission effectively adopted the French convention for calculating the fiscal impulse.⁵

Saying that conventional indicators of the fiscal stance require some form of adjustment to reflect the nature of emergency measures is reasonable. After all, many emergency measures have simply replaced traditional automatic stabilizers like unemployment. But excluding all emergency measures from the calculation of the fiscal stance appears extreme.

To see why, it is useful to note that two relatively distinctive types of fiscal measures are included in the emergency measures category:

- (1) Measures aimed at providing income support,
- (2) Measures aimed at addressing the public health situation.

Income support emergency measures

Fiscal measures aimed at compensating workers and firms for income losses behave to a large extent like automatic stabilizers: spending increases when output declines and decreases when output recovers. And clearly, some of these measures have substituted for traditional automatic stabilizers like unemployment benefits (Cohen-Setton and Pisani-Ferry 2020). But like the extra unemployment benefits under the CARES Act in the United States, they also correspond to a discretionary and temporary improvement in

⁴ The Commission has a well-developed set of principles for defining what is a one-off measure for the purpose of fiscal surveillance, which “excludes compensatory payments to households or businesses not directly triggered by the pandemic and for which the government has a larger degree of discretion.” In addition, given uncertainties about the duration of these measures, most would not qualify as one-off in an ex-ante assessment – see https://ec.europa.eu/info/sites/info/files/economy-finance/opinion_on_dbp_france_analysis.pdf.

⁵ European Commission (2020f).

the safety net. And they are not automatic and could fail to be reactivated if a form of stimulus fatigue settles in.

Introducing and then withdrawing that improvement in the safety net affects the fiscal impulse. At a given level of slack in the labor market, the amount of support that individuals receive to compensate them from reduced hours of work is clearly not the same under the new and the old parameters of partial unemployment schemes. For some of these emergency measures like the *Fonds de Solidarité* in France for the self-employed and microentrepreneurs, the discretionary nature of the improvement in the safety net is even starker as the pre-pandemic safety net was essentially non-existent for this category of individuals.

Because the unwinding of work-sharing schemes for regular workers or the unwinding of grants to self-employed and very small enterprises will generate a decrease in support for a given level of economic activity, at least some proportion of these measures should be included in the calculation of the fiscal stance. What that exact proportion should be is open to debate. And it goes beyond the scope of this paper to provide a definitive number. But it should not be zero. Given the size of these emergency measures (Figure 3 shows that the removal of income support measures amount to almost 2% of GDP in France and Germany), considering that even a small share of these emergency income support measures correspond to discretionary changes in fiscal policy can have a meaningful impact on the overall size of the fiscal stance. In fact, assuming that only 25% of the total amount of income-support measures correspond to discretionary changes in fiscal policy would reduce the 2021 euro area fiscal stance estimated by the European Commission by almost one-third.

Medical emergency measures

What about emergency medical measures? Should they also to some extent be included in the calculation of the fiscal stance? That choice also matters since France and Germany currently plan to withdraw

emergency medical measures worth respectively 0.9% and 0.5% of GDP in 2021 (Figure 3).

Presumably, the rationale for removing emergency medical expenditures from the fiscal stance is that they fluctuate with the intensity of epidemic. And since the state of the economy is highly correlated with the public health situation, they too are countercyclical and almost automatic. Another reason for excluding these measures appears to be that “the appropriateness of their deployment should be gauged not in connection with the state of the economy but the state of public health and the restrictions it demands” (European Commission 2020f).

None of these reasons are convincing. The fact that extra expenditures on ICU beds and nurses were required to deal effectively with the health crisis did not make them automatic. Deploying them required new executive and legislative action. And the fact that the rationale for these expenditures ceases to exist as the pandemic recedes does not remove their effects on the fiscal stance. Like military buildups and draw-downs in the past, the introduction and withdrawal of medical emergency measures affect aggregate demand. Finally, the expenditures related to vaccination will be significant and are liable to come with an improvement in underlying economic conditions.

Altogether, the adjustment applied by the European Commission is thus likely to overestimate the actual fiscal support planned for 2021. In Figure 1, we adjust the conventional fiscal stance with what we consider to be a more realistic correction for emergency measures. More specifically and in line with the argumentation developed above, we keep all health-related expenditures and only exclude 75% of income-support measures from the calculation of the fiscal stance.

Doing this points to a much smaller fiscal impulse for 2021 at 0.2% of GDP. More fundamentally, it emphasizes the risk that recovery measures, namely in the form of extra investment expenditures and lower taxes, may not be enough to compensate for the drag associated with the unwinding of emergency measures.

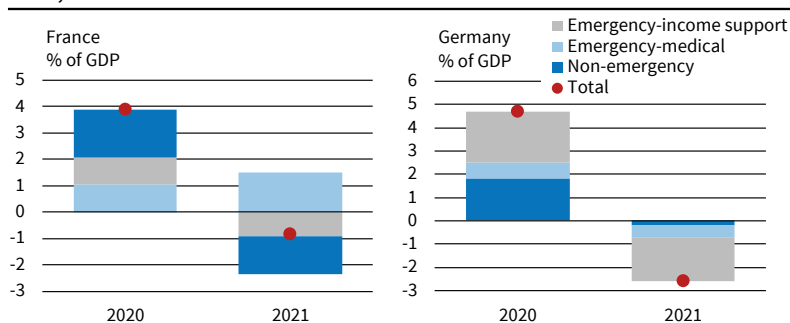
The Return to Fiscal Rules in 2022 Implies a Large Fiscal Contraction

The fiscal stance after 2021 also weighs on the strength of the recovery through the expectations channel. As this point, national budgetary plans appear consistent with a return to the pre-crisis fiscal framework starting in 2022. It is not clear to us that this is a realistic proposition but we attempt to measure the fiscal impulse that such a policy would produce.

With the general escape clause activated in both 2020 and 2021, no euro-area country would start 2022 under the corrective arm of the Stability and Growth Pact (SGP), also known as the Excessive Deficit Pro-

Figure 3

Main Discretionary Measures Reported in the French and German Draft Budgetary Plans, 2020–2021



Note: The graph shows the budgetary impact of new discretionary measures (% of GDP-change from previous year - positive sign for deficit increasing measures).

Source: European Commission's assessment of national draft budgetary plans.

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Figure 4

Matrix for Specifying the Annual Fiscal Adjustment towards the Medium-Term Objective (MTO) under the Preventive of the Pact

	Condition	Required annual fiscal adjustment*	
		Debt below 60% and no sustainability risk	Debt above 60% or sustainability risk
Exceptionally bad times	real growth <0 or output gap <-4	No adjustment needed	
Very bad times	-4 ≤ output gap < -3	0	0.25
Bad times	-3 ≤ output gap < -1.5	0 if growth below potential. 0.25 if growth above potential	0.25 if growth below potential. 0.5 if growth above potential
Normal times	-1.5 ≤ output gap <1.5	0.5	> 0.5
Good times	output gap ≥ 1.5	> 0.5 if growth below potential. ≥ 0.75 if growth above potential	≥ 0.75 if growth below potential. ≥ 1 if growth above potential

*All figures in percentage points of GDP.

Source: European Commission (2015).

cedure (EDP).⁶ The preventive arm of the SGP will thus determine the size of the required fiscal adjustment. When assessing compliance with the adjustment path, the European Commission can, in theory, consider several indicators. In practice, however, the change in the structural balance has been the indicator privileged.⁷

With the structural balance lower than the Medium-Term Objective for virtually all euro area countries in 2022, the baseline adjustment required is an increase by 0.5% of GDP per year. The required adjustment will, however, vary across economies depending on the economic cycle and the level of public debt in each country (Figure 4).

In its Autumn forecast, the European Commission (2020h) expects a negative output gap of 1.9% of potential GDP for the euro area and individual countries' output gaps ranging from -4.4 in Greece to 1% of potential GDP in Slovakia and Slovenia. In Italy, Spain, France, the Netherlands, and Germany the economy is expected to still operate below potential with negative output gaps of respectively 3.4, 2.5, 2.1, 1.8, and 1.1% of potential GDP.

Figure 5 shows the change in the structural balance as reported in Draft Budgetary Plans for the years 2022-2024. The planned fiscal paths for France, Germany, and Italy illustrate how the compliance with fiscal rules will start to shape fiscal policy choices starting in 2022.

Several features are noteworthy. First, the overall fiscal contraction planned for 2022 is large at 1.3% of GDP in 2022 for the euro area. Second, at least for Italy and Germany, the planned adjustment by their

respective governments appears larger than what is strictly required by the application of European fiscal rules. For Italy, that is because the Treasury assumes a strong recovery that will bring output equal very close to potential by 2022. But for Germany, the size of adjustment appears driven by the desire to not only comply with European rules, but also with the German fiscal rules starting in 2022.

Based on its projected change in the structural balance that it reports in its DBP, Italy is planning a fiscal consolidation of 0.9% of GDP in 2022. Given Italy's debt-to-GDP ratio and the Italian Treasury forecast of an output gap of -0.1% of potential GDP in 2022, this adjustment is in line with the requirement of an annual fiscal adjustment of more than 0.5% of GDP. But the Italian Treasury forecast for the output appears quite optimistic. In its latest forecast, the European Commission for example expects that the Italian economy will operate significantly below potential in 2022 with an output gap of -3.4% of GDP. In that situation, the rules only require that Italy consolidate by 0.25% of GDP. Why the government then expects to consolidate by even more in 2023 than in 2022 is unclear.

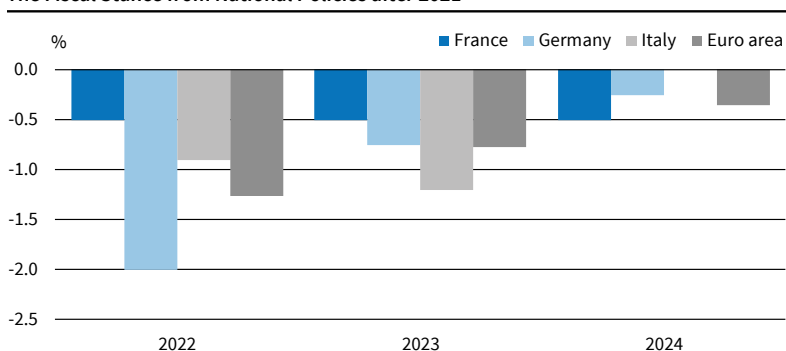
France does not directly provide information on output gaps beyond 2021 in its DBP. But the assumption that its structural balance will increase by 0.5% of GDP per year is both consistent with the fiscal adjustment specified for bad times when the economy is recovering fast, and for normal times (Figure 4). In fact, the matrix implies a 0.5% fiscal adjustment if the output gap is in line with the European Commission forecast of -2.1% of potential GDP in 2022 and the economy recovers fast. After 2022 and with normal times conditions applying, the European fiscal rules require a fiscal consolidation of at least 0.5% of GDP, which is broadly in line with what the French Treasury forecasts.

Germany is planning a particularly large and front-loaded fiscal consolidation in 2022. Clearly, part of this contraction reflects the fact that several emergency fiscal measures are planned to be fully withdrawn by the end of 2021 (see Table A1 in Appendix).

⁶ In 2020, only Romania, a non-euro area EU member state, is under the Excessive Deficit Procedure.

⁷ The preventive arm also requires member states to abide by the expenditure benchmark. But research by the EFB (2019) shows that the European Commission has privileged the use of the structural balance change criterion than the expenditure benchmark criterion when assessing compliance with the adjustment path. With the adoption of the six-pack reform in 2011, the debt anchor of the SGP was also operationalized with the requirement that when the debt ratio is above 60% of GDP, the excess over 60% must be reduced at an average annual rate of 1/20th. In practice, however, even a partial fulfilment of the preventive arm has been deemed sufficient to establish compliance with the debt criterion (EFB 2019).

Figure 5
The Fiscal Stance from National Policies after 2021



Note: The graph shows the fiscal impulse calculated as the (negative of) the change in the structural balance. In this graph, negative figures indicate a contractionary stance.

Source: European Commission's assessment of national draft budgetary plans.

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But the size of the shock is also driven by Germany's own fiscal rules, which require larger adjustments than the European rules and to which Germany seems committed. In addition, the government both at the federal as well as the state level has voted on a redemption path for the new debt incurred during the Covid-19 crisis.

Starting in 2022, the German government plans to comply with the debt brake (*Schuldenbremse*), thereby limiting the structural primary deficit of the federal government below 0.35% of GDP.⁸ The German DBP does not provide a forecast for the structural primary balance of each level of government. But the decline in the structural primary balance for the general government from 2.75 to 0.75% of GDP in 2022 is consistent with complying with debt rule and maintaining the same level of structural deficits for the other levels of government.⁹

Germany's return to its *Schuldenbremse* in 2022 will therefore play a considerable role in the aggregate fiscal stance of the euro area, regardless of whether the European fiscal rules are extended. In fact, in addition to Germany's size and mechanical contribution to the overall euro area fiscal stance, it will also influence other countries' fiscal stance in setting the terms of the fiscal debate across the euro area. If Germany starts to consolidate aggressively, it is difficult to imagine that the European Commission and other member states will ignore this precedent.

With the current suspension of fiscal rules until the end of 2021, the growing intellectual consensus for

⁸ Because the debt brake also has a cyclical component, the headline deficit will likely be higher in 2022 because output will remain below potential. This cyclical component is, however, small. In fact, it is determined by the formula $C = \eta \times (Y + a)$, where η is the budget semi-elasticity, Y is the output gap, and a is the adjustment to the federal government's current macroeconomic forecast. Using 2022 BMF estimates of $Y = \text{€}12.3 \text{ bn}$ and $\eta = 0.203$, C will only be $\text{€}2.5 \text{ bn}$ or 0.07% of GDP. Only a planned headline deficit of 0.42% of GDP for the federal government will thus be allowed under the debt brake.

⁹ The DBP forecasts no change in the headline deficit of the state and local governments and in the headline deficit of the Social Security funds between 2021 and 2022 despite the recovery in economic activity. This suggests a stable structural primary balance for these components of the general government.

reforming the current set of rules,¹⁰ the consultation launched by the European Commission in February 2020,¹¹ and the macroeconomic risks entailed by a return to the pre-crisis rules, now is the right time to have a serious discussion on how to reform the SGP or at the very least when and how to restore it.

EUROPEAN MEASURES ARE MACRO-ECONOMICALLY MODEST

The agreement regarding the Recovery and Resilience Facility on 21 July gave a strong sense of hope about a coordinated and mutual fiscal response from the EU. It clearly marked an important political breakthrough, yet behind the relatively large headline numbers our assessment is that many of the instruments will only generate a moderate fiscal impulse. It does not mean that the European dimension of the recovery plan is macroeconomically useless, but rather that its indirect political dimension, in particular in that it enables both national fiscal policy and expansionary monetary policy will matter more than its direct economic effect.

The Genesis of NextGenerationEU

After the suspension of state aid and fiscal rules as set out in the statement of the Eurogroup of 16 March, further elements of the policy response under consideration culminated in a decision by the Eurogroup on 9 April¹² that outlined what was then thought to be a comprehensive package. It was essentially built around three key building blocks:

- I. The use of the European Stability Mechanism (ESM) as a safety net to ensure governments could borrow and undertake their national fiscal response without fear of losing market access. The total size of borrowing made available for this facility would be limited at 2% of each eligible country's GDP or a total of some €240 bn.
- II. The mobilization of the European Investment Bank (EIB) to enhance its ability to provide guarantees to the private sector and improve its refinancing/liquidity situation. After several rounds of discussions, Eurogroup finance minister agreed to the creation of a €25 bn guarantee fund.
- III. The activation of SURE, a new lending facility proposed by the Commission on 2 April, which could provide financial assistance to member states

¹⁰ Blanchard et al. (2020) call for replacing fiscal rules by fiscal standards and applying a debt-sustainability test to countries' budgetary plans. Dullien et al. (2020) advocate an increase in the debt anchor to 90% of GDP and an expenditure rule for non-cyclical, non-investment expenditure coupled with a Golden Rule for public investment. EFB (2019) and calls for a simpler framework made of a debt "anchor" and a spending rule.

¹¹ https://ec.europa.eu/commission/presscorner/detail/en/IP_20_170.

¹² <https://www.consilium.europa.eu/en/press/press-releases/2020/04/09/report-on-the-comprehensive-economic-policy-response-to-the-covid-19-pandemic/#>.

in the form of loans to protect workers' unemployment benefits. The maximum amounts that could be drawn from this facility would be set at €100 bn.

While the Eurogroup celebrated this achievement as a breakthrough given the opposition of a number of member states to the use of the ESM, it was clearly understood that this package would not suffice. Already on 23 March, nine European leaders had pressed the President of the European Council to help devise a common European instrument able to issue debt and finance a significant part of the recovery effort. On 18 May, France and Germany¹³ agree to the need for a €500bn Recovery Fund backed by a new borrowing capacity at the European level. This is still met with stiff resistance, and the frugal coalition¹⁴ led by Austria and the Netherlands continues to oppose it until the adoption of the plan at the European Council of 21 July.¹⁵

Despite this political success, many questions remain about the European plan's true recovery potential in particular the extent to which it is drawn by member states, the use of the funds at they will be outlined in the National Recovery Plans to be submitted by April 2021 and assessed by the European Commission and the financing of the recovery plan over time, where the share of true own resources vs. national contributions will have significant impact on its intertemporal effects.¹⁶

Given this uncertainty over the timing and the extent of the measures surrounding the European Recovery and Resilience facility, national fiscal policy will play the central role in the recovery. In reality, the European Recovery and Resilience facility is more important politically and symbolically than economically. Indeed, by sanctioning politically common borrowing and transfers between member states, European leaders have enabled national fiscal policy to play its role fully.

¹³ <https://www.bundesregierung.de/resource/blob/975226/1753772/414a4b5a1ca91d4f7146eeb2b39ee72b/2020-05-18-deutsch-franzoesischer-erklaerung-eng-data.pdf?download=1>.

¹⁴ <https://www.euractiv.com/section/economy-jobs/news/frugal-four-present-counter-plan-to-macron-merkel-eu-recovery-programme/>.

¹⁵ <https://www.consilium.europa.eu/media/45109/210720-euco-final-conclusions-en.pdf>.

¹⁶ The ORD concerning the recovery plan and the budgetary framework for 2021-2027 has been approved in September 2020. It confirmed that the European Commission is allowed to borrow temporarily on capital markets in accordance with the NextGenerationEU recovery plan and the Multi-Annual Financial Framework. Furthermore, the ORD approved the new own resource ceiling to cover annual appropriations for commitment and for annual appropriations. Since 2018, the ceilings were set at 1.35% and 1.29% of the EU GNI. Both numbers were increased by 0.11 percentage in the light of Brexit. Hence, the permanent ceilings are set at 1.46% and 1.40%. However, due to the extraordinary circumstances of the Covid-19 crisis and the EU's borrowing plans, the Commission proposed increasing the ceiling temporarily to 2.0% of the EU GNI. Hence, this increase is not permanently and rather artificial since it is necessary to enable the EU to borrow the funds required for the recovery. According to the Council's (2020) timeline first proposals will be provided within the first semester of 2021 and legislation should be introduced latest by 1 September. If new own resources are introduced, the GNI contributions of the member states will be adjusted.

NextGenerationEU (NGEU): Overview of Programs

While there was an initial political debate as to whether the recovery plan should flow through the EU budget or through an ad hoc inter-governmental arrangement, there was, in particular from Germany, a strong pressure to uphold the unity of the EU, strengthen European institutions, and avoid another inter-governmental construct. This means that even though the recovery fund and its instruments are designed to be temporary, they are being developed and implemented via a budget that is permanent in nature.

The NGEU program authorizes the Commission to borrow up to €750 billion in 2018 prices until 2026 and repay this debt by 2058. The biggest share of the mobilized resources is provided as grants and loans to the member states through the Recovery and Resilience Facility (RRF), while the rest is allocated to existing or within the MFF newly created EU policy programs that are focused on a specific sector or objective (see Table A2 in Appendix).

NextGenerationEU: Grants and National Recovery and Resilience Plans

Perhaps the most macroeconomically important and the most hotly negotiated element of the recovery plan has been the portion of grants to be disbursed to member states and the sharing of these resources. Over the course of the negotiations at the European Council, this was widely perceived as the central piece of the package. Securing a large grant portion came at the expense of European instruments that would have been centrally decided by the European Commission.

As a result, it remains that even though some of the recovery plan is financed at the EU level, its delivery is largely decentralized. The National Recovery and resilience plans to be submitted by EU member states as well as the approval and monitoring by the Commission are meant to provide some coordination and validation but this is likely to be limited.

As a result, the allocation per member states is central and is determined through distribution key proposed by the Commission both in time and by country: "for 70% of the total amount of €312,5 billion available in grants, the allocation key will take into account the Member State's population, the inverse of its GDP per capita, and its average unemployment rate over the past 5 years (2015-2019), always compared to the EU average. For the remaining 30%, the formula will replace the 2015-2019 unemployment rate indicator by the observed loss in real GDP over 2020 and the observed cumulative loss in real GDP over the period 2020-2021" (European Commission 2020e).

Hence, the first grants favor countries that are more severely hit by the socio-economic crisis. The redistributive character of the program will create net beneficiaries and net contributors. This can be

Table 1

RRF Grants and Net Fiscal Effect

Country	Total RFF grant in € billion (2018 prices)	RFF grant in % GNI (2018 prices)	Contribution to EU budget in % of GNI (2018 prices)	Difference between RFF grant and contribution
France	37.394	1.5	0.67	0.83
Germany	22.717	0.64	0.67	-0.03
Italy	65.456	3.6	0.66	2.94
Netherlands	5.572	0.68	0.69	-0.01
Spain	59.168	4.72	0.66	4.08

Note: Data on member state GNIs and their contributions are provided by the European Commission data chart on EU expenditure and revenue 2014-2020. Source: European Commission (2020).

illustrated by comparing the total amount of grants received as a percentage share of the Member State's GNI and its contribution to the EU budget as a percentage share of its GNI (Table 1).

In what follows, we take the estimated grant components for Euro Area countries (Table 2) and add them to the fiscal stance obtained from national budgets. Assuming that the NGEU grants fully add up to the fiscal stance obtained from national budgets implies that none of the spending financed by NGEU grants would have otherwise happened (no substitution) and that none of the liabilities that these grants generate will be repaid before 2026 (no repayment).

Both assumptions are debatable. Indeed, at least some of the grant money is likely to be used for projects that would have otherwise been financed with

domestic sources of financing. And at least some of the NGEU grants will likely be repaid in the form of larger EU budget national contributions or through new European taxes before 2026 and thus subtract from the overall fiscal impulse. But these simplifications are useful for making the point that, even under these generous assumptions, the European fiscal impulse is small.

NextGenerationEU: Loans Only Provide Modest Fiscal Boost If Used

In addition to these grants, member states can apply for loans provided by the RFF for up to 6.8% of their Gross National Income (GNI). Member states might be inclined to do so if they can save borrowing costs un-

Table 2

Payments from NGEU Grants (Billion Euros)

	2021-2026	2021	2022	2023	2024	2025	2026
Euro area	331.9	30.4	43.8	79.3	91.8	52.9	33.7
% of GDP		0.3	0.4	0.6	0.7	0.4	n.a.
Austria	4.3	0.4	0.6	1.0	1.1	0.7	0.5
Belgium	7.0	0.6	1.0	1.6	1.8	1.2	0.9
Cyprus	1.3	0.1	0.2	0.3	0.4	0.2	0.1
Estonia	1.6	0.2	0.2	0.4	0.4	0.3	0.1
Finland	3.3	0.3	0.5	0.8	0.9	0.6	0.4
France	48.5	4.5	6.3	11.4	13.0	8.0	5.3
Germany	30.9	3.0	4.1	7.2	8.1	5.1	3.4
Greece	21.2	2.0	2.8	5.1	5.8	3.4	2.1
Ireland	2.0	0.2	0.3	0.5	0.5	0.3	0.2
Italy	89.3	8.0	11.8	21.5	25.3	14.0	8.7
Latvia	2.4	0.2	0.3	0.6	0.7	0.4	0.2
Lithuania	3.2	0.3	0.4	0.8	0.9	0.5	0.3
Luxembourg	0.3	0.0	0.1	0.1	0.1	0.0	0.0
Malta	0.4	0.0	0.1	0.1	0.1	0.1	0.0
Netherlands	7.7	0.7	1.1	1.8	2.0	1.3	0.9
Portugal	16.8	1.6	2.1	4.0	4.6	2.7	1.7
Slovakia	7.5	0.7	1.0	1.8	2.1	1.2	0.8
Slovenia	2.2	0.2	0.3	0.5	0.6	0.4	0.2
Spain	82.0	7.3	10.9	19.9	23.5	12.6	7.8
Non-euro area	88.3	8.8	11.6	20.9	23.6	14.6	8.8

Note: Amounts expressed in current prices. The calculations in Darvas (2020b) include not only the six components of NGEU grants (RRF, ReactEU, Just Transition Fund, EAFRD, rescEU, Horizon Europe), but also €5.6 bn in 2018 prices of InvestEU guarantees. Given the small number of guarantees, we did not attempt to remove the guarantee components from the total.

Source: Darvas (2020b) for NGEU amounts; IMF WEO October 2020 Database for EA forecasts of nominal GDP.

Table 3

RRF Loans and Net Fiscal Effect (Billion Euros)

		Scenario 1: full use of potential amount of 6.8% of GNI		Scenario 2: 50% use of potential amount of 6.8% of GNI	
Country	Bond yields (2019)	Amounts	Savings per year	Amounts	Savings per year
France	0.13%	169.35	0.22	84.67	0.11
Germany	-0.25%	241.3	-0.6	120.65	-0.3
Italy	1.95	123.46	2.41	61.73	1.2
Netherlands	-0.07	55.58	-0.39	27.79	-0.02
Spain	0.66	85.08	0.56	42.54	0.28

Note: Data on bond yields provided by Eurostat (Eurostat 2020).

Source: Darvas (2020a).

der the RFF, since the EU provides these loans under favorable terms. But like ESM loans, stigma appears to have been attached to the use of this facility, with several member states already indicating that they would abstain from drawing on these funds.

The fact that stigma remains attached to using a facility with very limited conditionality (commitment to abide by Country Specific Recommendations) speaks to the scars left by IMF and ESM programs during the sovereign debt crisis. Beyond the stigma and scars, the economic benefits appear in any case relatively modest for borrowing member states so long as the ECB carries on with its current purchase program and maintains low financing rates for member states.

While the intertemporal benefits of these borrowing (the net present value of the lower borrowing cost) is not small and could justify the effort (Darvas 2020a), the contemporaneous savings for each single year is rather moderate. Under current conditions, the financial gains from lower borrowing costs are in the millions (Table 3). Given these small financial gains and the willingness of markets to provide funding for member states, we do not think that the loan component of NGEU will generate new extra spending. Unlike for grants, we therefore do not add these amounts to the overall fiscal impulse for the euro area.

ESM Loans Will Not Be Used

The clear rejection of the ESM loans as a useful instrument to deal with this crisis is an important political turn. The fact that no member state wanted to use them, and that the ECB explicitly stated that it was not the right instrument for this crisis¹⁷ clearly undermines the case for its economic contribution to the recovery.

For all intents and purposes, very much like the RRF loans, an ESM loan would in any case only be macroeconomically useful if the ECB stopped containing government bond yields through its policies. Even if it stopped, it is natural that member states would always prefer instruments that appear or truly come with the least economic conditionality and political

cost. The ESM ranks last in this pecking order and it is therefore expected that none of the funds made available will be used during this crisis. This in turn raises more fundamental questions about the future of the ESM, especially now that it no longer has a monopoly over joint European borrowing (Guttenberg 2020).

SURE Program

The temporary Support to mitigate Unemployment Risks in an Emergency (SURE) is part of the EU's temporary and coordinated response to the coronavirus crisis. It allows providing financial assistance in the form of loans to support member states' sudden rise in public expenditure due to short-time work schemes or similar job-retention measures. In addition, the loans can also be used to finance health care measures related to the Covid-19 pandemic.

While this initiative was in the works for a while, it was legislated and implemented at remarkable speed. To provide SURE loans to member states, the European Commission was allowed to issue social bonds.¹⁸ The bonds are backed by voluntary guarantees of up to €25 bn from member states in accordance with their relative share in the EU's Gross National Income (GNI) from the 2020 EU budget. The implementation and usage of the loans granted is monitored by the Commission, which reports to the European Parliament (EP), the European Council, the Economic and Financial Committee, and the Employment Committee. But, unlike ESM loans, SURE have been broadly viewed as being offered without conditionality.

Of the €100 billion in loans made available by SURE, €90.3 billion have already been requested by a total of 18 countries. All requests have been approved and €31 billion have already been disbursed.¹⁹

¹⁸ Social bonds are a special bond framework that signals to investors that the resources mobilised will be used to address the socio-economic crisis caused by the pandemic (European Commission 2020d).

¹⁹ The amounts disbursed and requested are as follows: Belgium (€7.8 billion), Bulgaria (€511 million), Czechia (€2 billion), Greece (€2 billion/€2.7 billion), Hungary (€504 million), Spain (€10 billion/€21.3 billion), Croatia (€0.51 billion/€1 billion), Italy (€16.5 billion/€27.4 billion), Cyprus (€250 million/€479 million), Ireland (€2.5 billion), Latvia (€120 million/€192 million), Lithuania (€300 million/€602 million), Malta (€120 million/€244 million), Poland (€1 billion/€11.2 billion), Portugal (€5.9 billion), Romania (€4 billion), Slovakia (€631 million), Slovenia (€0.2 billion/€1.1 billion). Disbursements obtained from 11/07 and 12/1 European Commission press releases.

¹⁷ https://www.ecb.europa.eu/press/key/date/2020/html/ecb.sp201119_transcript-353ee9966e.en.pdf?e776a01e4d652a18ec61d-de92bfcd272.

That almost all financial resources provided under SURE are exhausted demonstrates that this assistance was needed.

Yet, its macroeconomic impact remains limited, not only because of its relatively small size, but also because the actual support from loans is much lower than from grants. Our simple calculation suggests that at the current level of interest rates, savings in interest costs for euro area member states are negligible. At the current 10-year yield rates, Spain and Italy for example only save around €23.5 million and €180 million in borrowing costs per year.²⁰ SURE is thus only marginally supporting Member States' responses to the crisis.

EIB Guarantees

In addition to SURE, the European Investment Bank (EIB) is taking part in the concerted EU response to the pandemic and its socio-economic consequences. The EIB provides credit lines and financial support to businesses in the EU, especially to small- and medium-sized enterprises (SME) facing severe liquidity and funding needs in the light of the pandemic.

The EIB created a €25 billion European Guarantee Fund (EGF) backed by member state contributions that are determined in accordance with their share in the EIB and other institutions. The EGF is expected to enable further lending of up to €200 billion from the private sector, but these leverage calculations are fraught with uncertainty. In addition, it is not clear that the EIB can focus on countries where domestic institutions lack the capability of providing similar and these resources are most needed. When compared to the corporate sector guarantees underwritten across the EU by governments and their promotional banks these numbers appear extraordinarily modest if not irrelevant (Figure 6).

²⁰ The calculation uses a simple geometric mean of November 10-year yields rates for Spain and Italy of respectively 0.11%, and 0.642%. Using the higher interest rates that these two countries faced back in March 2020 (1.25% for Spain and 2.39% for Italy) would have yielded savings of €266 million and €658 million per year.

CONCLUSION

Measuring the aggregate European fiscal stance after Covid-19 is difficult. National and European measures overlap. Traditional indicators of the fiscal stance are affected by a myriad of technical problems. And uncertainty remains about the time it will take to vaccinate the population and the resolve of governments to maintain fiscal support. The difficulty of the task is, however, no excuse to avoiding it and this paper tries to provide a transparent attempt.

According to our tentative estimates, after being strongly expansionary in 2020, European fiscal policy is expected to be only mildly expansionary in 2021 and turn sharply contractionary in 2022. This suggests that, despite NGEU and talks of national recovery packages, the necessary fiscal policy support is far from guaranteed beyond the acute phase of the crisis. Indeed, the policy response has allowed spending whatever it takes to allow a freezing of the economy without too many social ramifications and avoided the failure of otherwise healthy companies. But the fiscal plans for 2021 are probably not stimulative enough to encourage a rapid recovery especially if governments withdraw emergency support measures as currently planned.

At the European level, the recovery plan while symbolically meaningful has two fundamental weaknesses: it is largely based on loans rather than grants, and the grants part has come at the expense of truly European instruments. As a result, its delivery still relies on national fiscal planning and disbursement capacity. There are therefore still considerable execution risks that could upend the EU's recovery plans, dealing a blow to the general confidence financial markets have shown in the EU's crisis response.

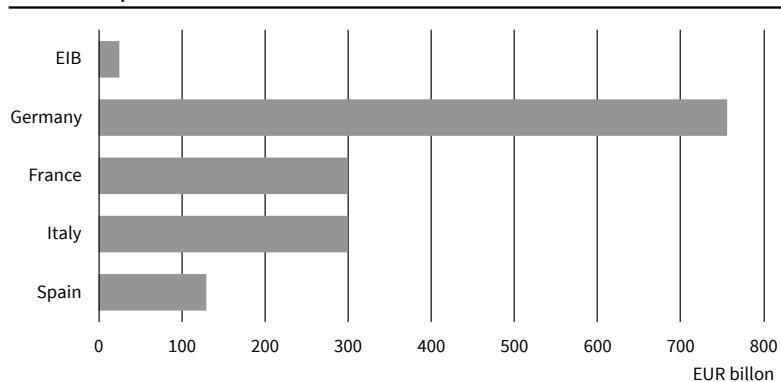
At the national level, member states still have to prepare National Recovery and Resilience Plans²¹ for 2021, whose assessment will in principle be rapid and uncontroversial, but which could open up debates and tensions if certain member states are not deemed consistent enough with the country-specific recommendations. Then they have to prepare their fiscal plans for 2022 that could be largely driven by the EU's return to the Stability and Growth Pact. These two important milestones could be central in determining the appropriateness of the European aggregate fiscal stance, which in any case is on course to be far smaller than that of other advanced economies.

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²¹ https://ec.europa.eu/info/files/guidance-member-states-recovery-and-resilience-plans_en.

Figure 6
Total Envelopes of EIB and National Guarantee Schemes



Source: EIB (2020).

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Table A1

Emergency and Non-emergency Measures in the Five Largest Euro Area Countries

Emergency measures aimed at addressing the public health situation:

Germany	Additional health spending for hospital beds and purchase of protective equipment (0.7% of GDP in 2020; 0.2% of GDP in 2021).
France	Additional expenditure to strengthen healthcare services (0.4% of GDP in 2020).
Italy	Transfers to lower levels of government (1.3% of GDP in 2020; 0.1% of GDP in 2021) and additional resources for healthcare, education and research (0.3% of GDP).
Spain	Creation of a Covid-19 fund to help regions ensure the provision of essential public services (1.4% of GDP in 2020; 0.1% of GDP in 2021), a transfer to finance higher health expenditures by the regions (0.3% of GDP in 2020; 0.1% of GDP in 2021), additional resources for the health ministry (0.1% of GDP in 2020; none in 2021).
Netherlands	Higher health care contributions (+0.1% of GDP in 2020).

Emergency measures aimed at compensating workers and firms for income losses:

Germany	Kurzarbeit, short-time work, scheme to keep people employed (until the end of 2021) (0.8% of GDP in 2020; 0.2% of GDP in 2021), support for SMEs (0.8% of GDP in 2020; 0.1% of GDP in 2021), and support for self-employed (0.6% of GDP in 2020; none in 2021).
France	Funding of a partial unemployment benefits scheme (1.4% of GDP in 2020; 0.4% of GDP in 2021), the creation of a solidarity fund and other support measures to provide direct support to small and very small enterprises as well as self-employed (0.8% of GDP in 2020).
Italy	A wage supplementation scheme and financial support scheme for the self-employed (2.1% of GDP), the compensation for losses experienced by firms (0.7% of GDP), budget provision for guarantees from the enlarged "SMEs guarantee fund" (0.5% of GDP). These measures have been reinforced with the second wave (0.3% of GDP).
Spain	A short-term work scheme, measures for the self-employed and for the workers ill with Covid-19 (3.0% of GDP in 2020; 0.4% of GDP in 2021).
Netherlands	Preserve employment (NOW, temporary emergency measure for employment opportunities, short-term work scheme paid to the employer, 1.8% of GDP in 2020); supporting self-employed (TOZO, temporary emergency measure bridging scheme for independent entrepreneurs and flex-workers, 0.4% of GDP in 2020); and compensate entrepreneurs in affected sectors (TOGS and TVL, income support for entrepreneurs in affected sectors, 0.4% of GDP in 2020).

Non-emergency measures aimed at fostering the recovery:

Germany	Stabilization of social security contribution rates, the reduction of supplement for green energy and a VAT tax cut (0.7% of GDP in 2020; 0.5% of GDP in 2021).
France	Hiring bonuses, additional public investment and subsidies to businesses (0.2% of GDP in 2020), permanent reduction in taxes on production (0.4% of GDP in 2021), permanent increase in mainly healthcare wages and increased health care expenditures (0.2% of GDP in 2021). Additional measures to reinforce the healthcare system (0.3% of GDP in 2021).
Italy	Suspension of the regional tax on productive activities (0.2% of GDP in 2020), lowering of social security contributions, extension of tax incentives in poorer regions (0.4% of GDP in 2021), tax credit for employment income (0.1% of GDP in 2021) and a new streamlined family bonus (0.2% of GDP in 2021).
Spain	Nationwide minimum income scheme (0.1% of GDP in 2020; 0.1% of GDP in 2021), salary increase in the public sector (0.3% of GDP in 2020; n.a. for 2021), pension revalorizations (0.1% of GDP in 2020; 0.1% of GDP in 2021).
Netherlands	Permanent reduction of the lower income tax rate, an increase in the labor tax deductibility, a reduction in the lower corporate tax rate.

Source: Draft Budgetary Plans (2020).

Table A2

The Programs Underlying NextGenerationEU

Program	Implementation	Resources ^(a) (€bn in 2018 prices)
Recovery and Resilience Facility (RRF)	70% committed in 2021-22, 30% in 2023. Actual payments will however be disbursed from 2021 to 2026. ^(b) Member states prepare a national recovery and resilience plan consisting of a reform and investment strategy for 2021-2023 allowing for a green and digital transition and taking into considerations the country specific recommendations by the European Commission. The national RFF plans will be reviewed and adapted in 2022 for final allocation of funds in 2023. The Commission assesses national plans within two months of submission and Council approves assessment (QMV). Each member state can take up a loan up to 6.8% of its GNI. Countries repay the loans they issue but benefit from favorable terms. The timeline for commitments and payments is the same as for grants. Pre-financing for the RFF is scheduled for 2021 and amounts 10%.	672.5 Loans: 360 Grants: 312.5
Recovery Assistance for Cohesion and the Territories of Europe (ReactEU)	Funding for cohesion policies and aid for deprived regions while commitments to high-income member states are capped. The allocation key is based on the experienced decrease in GDP and the level of as well as the change in total and youth unemployment. Provides funding for employment subsidies, short-time work schemes, youth employment measures and liquidity and solvency for SMEs. Allocated to projects via member states' managing authorities.	47.5
Horizon Europe	EU's investment program in Research and Innovation to facilitate technological advancement, digitalization and an eco-friendly economy.	5
InvestEU	Provision of an EU guarantee for the EIB and national promotional banks to support and strengthen i) investment in sustainable infrastructure, ii) R&I and digitalization, iii) SMEs and midcaps, iv) social investment, and v) the development of strong and resilient value chains.	5.6
European Agricultural Fund for Rural Development (EAFRD)	Support for rural areas, agricultural and forestry sectors (co-financed by member states) to help structural changes required by European Green Deal.	5
Just Transition Fund	Alleviating socio-economic impacts of regions that are most affected by transition to a green economy due to large carbon-intensive sectors and industries or coal mining.	10
RescEU	Grants and procurements managed by the European Commission that shall be used to strengthen infrastructure for health emergency responses.	1.9
		TOTAL: 750

Note: ^a Numbers based on the Final Conclusion of the July 21, 2020 European Council. These numbers are still valid as 11 November 2020, but may evolve following negotiations with the European Parliament; ^b A commitment is a promise to pay, not a disbursement.
Source: Authors' compilation.

Anna Gelpern and Nicolas Véron

European Banking Reform Should Embrace a Unitary Approach to Failed Banks¹

The banking union is intended to pool the instruments of the banking sector policy at the European level. Otherwise, bank failures can require expensive bailouts that wreak havoc on national budgets during a crisis, undermining the integrity of the euro area. The implementation of the banking union began in 2014, with the assumption of bank prudential supervision by the European Central Bank (ECB). The pandemic posed a major test, but ECB banking supervision has passed it so far by quickly granting banks leeway to absorb pandemic-related losses, while suspending their dividend distributions to preserve their capital.

EU BANK FAILURES NEED TO BE MUCH BETTER MANAGED

Still, the bank crisis management framework remains a halfway house. Most of it is enshrined in the Bank Recovery and Resolution Directive (BRRD) of 2014. In a number of bank failures since that legislation went into effect, the BRRD has fallen short of its principal goal of forestalling taxpayer bailouts. Hence, the growing consensus for more significant reform (Restoy, Urbaski and Walters 2020).

Several officials, including those at the Bank of Italy, the German finance ministry, and the Single Resolution Board (SRB)—the Brussels-based EU agency that acts as a hub for BRRD implementation in the euro area—have proposed a new EU bank liquidation regime as a centerpiece of reform, with implicit or explicit references to the FDIC model (De Aldisio et al. 2019; BMF 2019; König 2020b). There is an inescapable irony to invoking the FDIC for that.

Established in the 1930s, the US Federal Deposit Insurance Corporation (FDIC) insures deposits, undertakes bank supervision, and oversees the apportioning of costs to creditors, investors, depositors, and others when a bank fails, a process known as bank “resolution.” Its success helped inspire the process established by the BRRD in the first place. But unlike in the US, EU legisla-

¹ An earlier version of this article was published by Bruegel (<https://www.bruegel.org/2020/10/europes-banking-union-should-learn-the-right-lessons-from-the-us/>) and, in slightly revised form, by the Peterson Institute (<https://www.piie.com/blogs/realtime-economic-issues-watch/european-banking-reform-should-embrace-unitary-approach-failed>).

ABSTRACT

Six years after starting the banking union, the European Union has reiterated its members’ commitment to “make further concrete progress on the Banking Union by the end of the year” (Donohoe 2020). EU officials are right not to let Covid-19 derail necessary debates over this objective. But the reinvigorated discussion has become increasingly confused when it comes to dealing with failed banks. There is a danger that the EU could cite experience with the US Federal Deposit Insurance Corporation (FDIC) to make its already fragmented regime even more fragmented. That would be a mistake. A closer look at the FDIC model highlights the value of a unitary process for resolving all deposit-taking banks, no matter how large or small.

tors decided that the BRRD resolution procedure would apply only to banks judged as implicating the public interest after a “public interest assessment” (PIA).

That assessment is guided by the vaguest of criteria. Whereas the FDIC is the sole resolution authority, regardless of the size or systemic importance of a bank, or whether it has a state or federal charter, the BRRD left it up to national regimes to resolve a failing bank that receives a negative PIA. The FDIC is also responsible for the as-yet untested Orderly Liquidation Authority for systemically important nonbank entities, including large bank holding companies. For banks, the FDIC has no equivalent to the BRRD’s PIA process that might allow it to hand over the failing



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institution to a less squeamish entrepreneur. The incentive structure resulting from a multiplicity of potentially overlapping regimes goes a long way in explaining the dysfunction behind recent bank failure controversies.

Dealing with a failing bank is thankless business, especially if one lacks access to unlimited public resources to bail out the various stakeholders. The resolution process under BRRD severely restricts bail-out options. Some national insolvency regimes are less stringent and leave the door open to generous bailouts. This process puts pressure on the authority in charge of making public interest assessments to make a negative PIA and keep the ailing bank out of EU resolution.

For example, in June 2017, the SRB gave a negative PIA on two mid-sized banks in the Veneto region of Italy, followed by their administrative liquidation under Italian law. The latter process was managed by the Bank of Italy, with generous financial support from the Italian government. This was in line with the letter of BRRD but at odds with its spirit: when presenting that legislation on 6 June 2012, European Commission President José Manuel Barroso stressed that it would “help protect our taxpayers [...] from the impact of any future bank failure” (European Commission 2012). It defies common sense to declare that a bank does not implicate the public interest only to have it benefit from more, not less, public financial support.

Unlike the SRB, the FDIC cannot wash its hands of a failing bank—there is no one else to handle the mess. The unitary structure lends itself to formal and informal public accountability and has led to continual reform and gradual improvement in the FDIC’s practice over several cycles of bank failures that now span more than eight decades (FDIC 1984, 1997, 1998 and 2017). For its part, the SRB has not only defended its decision regarding the two Veneto banks but has also elevated it to a point of general policy, with the SRB chair emphasizing that BRRD resolution was “for the few, not the many” (SRB 2019; König 2020a). This position leaves many significant banks in the banking union beyond the reach of one of its key institutions, contrary to the expressed initial intent of BRRD legislators (European Commission 2019).

The absence of a common deposit insurance authority in the euro area compounds the regime arbitrage problem. As its name indicates, the FDIC manages deposit insurance for all banks in the United States. By contrast, the 21-country banking union (19 countries in the euro area, plus Bulgaria and Croatia) has national deposit insurance regimes (in some countries, several of them), national resolution authorities, national institutions in charge of insolvency processes, plus the SRB: countless cooks in the bank failure kitchen, whereas the United States has only one.

EU REFORMERS SHOULD TAKE THE TIME TO DRAW ON THE CORE STRENGTHS OF THE US FDIC MODEL

We used the FDIC as a starting point for our analysis, further detailed in a paper published last year for the European Parliament (Gelpern and Véron 2019). This short article does not aim to address all dimensions of the technically complex matter. We nevertheless submit three suggestions for the EU reform debate.

First, policymakers should not rush for a piecemeal solution at a time when pandemic-related risks loom large. Completing the banking union before the pandemic was arguably the most important priority of the European commissioner for financial services (Véron 2019). But now, the more immediate priority is to address the Covid-19 crisis, including implementing the Next Generation EU blueprint for pooled borrowing by the EU and financial transfers to its neediest members. If recovery stalls and economic deterioration leads to bank failures or requires bank recapitalization, that will probably be before any significant banking union reform can be enacted, so they will have to be handled with the existing legislation anyway.

Second, EU reformers should consider the tradeoffs embedded in the design of the FDIC and its evolution over time, including stronger protection of all deposits, even uninsured ones, but also lesser implicit protection of other creditors—the FDIC’s track record establishes that its pledge not to bail these out is credible, at least for institutions up to a fairly significant size (Washington Mutual, resolved in 2008, had around USD 300 billion in assets).

Third, the EU’s take-away should be to learn from the FDIC’s history and pursue an integrated approach to the banking union: a unitary regime to handle all bank failures, amending and improving the BRRD resolution concept, encompassing reform of mandatory deposit insurance that would integrate it under the SRB. All things being equal, a European system that would match the FDIC’s performance would entail a lower future fiscal impact of banking crises. To be sure, it would still entail financial risk-sharing through the deposit insurance and resolution mechanism and its necessary public backstop, but Next Generation EU will facilitate that by giving the EU financial firepower of its own.

Advocating a new EU bank liquidation regime, somewhere between EU resolution and national insolvency procedures, evokes the ill-starred Council of Pisa in 1409, which decided to elect a third Pope to solve the conflict of two competing Popes and in so doing exacerbated the Western Schism. The solution came several years later at the Council of Constance, where all three papal claimants resigned and gave way to a single newly elected Pope. European reformers should go directly for the Council of Constance

approach, drawing on the core substantive strengths of the FDIC model. If that requires more time for careful debate and preparation, it will be time well spent.

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Stefan Lautenbacher, Stefan Sauer and Klaus Wohlrabe

How Difficult Is It for Managers to Predict Their Future Business Development? A New Measure of Perceived Business Uncertainty

ABSTRACT

This article introduces the *ifo Business Uncertainty*, a measure of how difficult it is for managers to predict the future business development of their firm. The indicator is based on a new monthly question in a representative survey of the German economy, the *ifo Business Survey*. It captures the perceived uncertainty of managers, because it could affect their investment and hiring decisions, and thus the business cycle. We show that our new measure of perceived uncertainty increased sharply at the beginning of the Covid-19 crisis. Since then, it has decreased somewhat, but it remains at an elevated level. Moreover, we compare the *ifo Business Uncertainty* to a second indicator of firms' subjective uncertainty and find that they are almost perfectly aligned. Last, we show that the relationship of the *ifo Business Uncertainty* with the *ifo Business Climate Index* is strongly negative.

Economic uncertainty is a much-discussed topic in politics, central banks, and macroeconomic research. It is widely believed that uncertainty contributed to initiating and worsening the Great Recession. Moreover, in the past decade, uncertainty has also often been cited to explain the slowing of the economy, for instance, during the eurozone sovereign debt crisis, the Brexit negotiations, and the trade war between the US and China. Theoretically, uncertainty can affect the economy through various channels. On the

one hand, it can increase risk premiums in financial markets and thus the cost of financing. On the other hand, greater uncertainty can make households and firms more cautious and may cause them to postpone decisions that are not easily reversed. If households are reluctant to buy durable consumer goods, such as cars and furniture, and businesses postpone investments and new hires, overall economic demand can be weakened.

Since uncertainty is not directly observable, various proxy measures have been developed in the past. These include, for example, implied or realized volatility of stock market returns, the dispersion of business expectations, and counts of uncertainty-related keywords in newspaper articles (Bloom 2009; Bachmann et al. 2013; Baker et al. 2016). However, these measures sometimes show large differences (Kozeniauskas et al. 2018). It is also an open question how well they are aligned with the *actual perceived* uncertainty of decision-makers in the economy. Their uncertainty is crucial, since it can influence consumption and investment behavior. For this reason, in recent years, surveys have been increasingly used to measure the subjective uncertainty of households and firms. Concerning firms, since April 2019, the *ifo Institute* elicits the uncertainty of managers in its monthly business survey with the following question:

Predicting the future development of our business situation is currently

easy rather easy rather difficult difficult

A possible advantage of this question is that it captures uncertainty indirectly. The words “uncer-



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tainty” or “uncertain” do not appear in it. Their use might blur the measurement if these terms have negative connotations for respondents. A possible bias in the answers is thus avoided.

Figure 1 shows the percentages¹ of the four answer categories in the answers of all participating companies over the time since the question was originally introduced. A large part of the answers is usually concentrated in the two middle categories “rather easy” and “rather difficult.” The share of respondents who find it difficult to predict their firm’s future business development initially fluctuated around 10%. In March and April 2020, however, with the outbreak of the Covid-19 crisis, there was a sharp rise in this percentage to over 40%. Although it then dropped again noticeably, it is still much higher than before the pandemic.

IFO BUSINESS UNCERTAINTY INDEX

Based on these percentages, we can calculate an indicator of uncertainty in the German economy using the following formula, which is intended to reflect the degree of uncertainty in the four categorical answers:

$$\text{Uncertainty} = 0 \cdot \text{share}(\text{easy}) + 1/3 \cdot \text{share}(\text{rather easy}) + 2/3 \cdot \text{share}(\text{rather difficult}) + 1 \cdot \text{share}(\text{difficult})$$

The value range of the indicator thus lies between 0 and 100, whereby 100 reflects the greatest uncertainty, which would be indicated if all firms chose the “difficult” category. A value of 0 would of course mean that the firms are able to predict their business development without any problems.

Figure 2 shows the ifo Business Uncertainty in the German economy since April 2019. The indicator has consistently remained above 50, which marks the center of the uncertainty scale. Together with the answer shares in Figure 1, this suggests that there is a certain base level of uncertainty among managers regarding the further course of their business. Even before the Covid-19 crisis, i.e., in comparatively quiet economic times, it was not easy for managers to predict their future business development. In March and April, the Covid-19 crisis caused a significant increase in uncertainty, peaking out at 73.8 in April. Despite the decline over the following months, in October 2020, the indicator is currently still at a noticeably higher level than before the pandemic outbreak. In addition to this uncertainty measure, since July 2017, uncertainty has also been elicited using a direct question in the ifo Business Survey.

We assess the uncertainty with respect to our business development in the next 6 months as follows: the respondents can indicate their subjective uncertainty on an approximately continuous scale, the ends of which are labeled “low” and “high.” Scale values range

¹ The methodology for calculating these shares is the same as for the other indicators from the ifo Business Survey. For a detailed description, see Sauer and Wohlrabe (2020).

Figure 1

Share of the Four Uncertainty Categories in All Answers

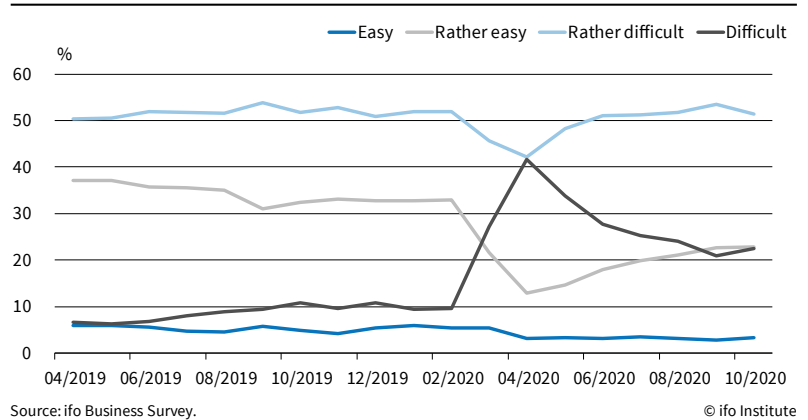


Figure 2

ifo Business Uncertainty for the German Economy

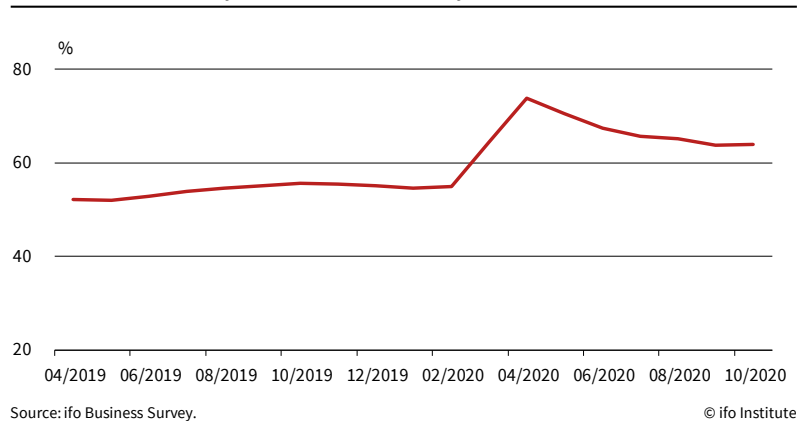
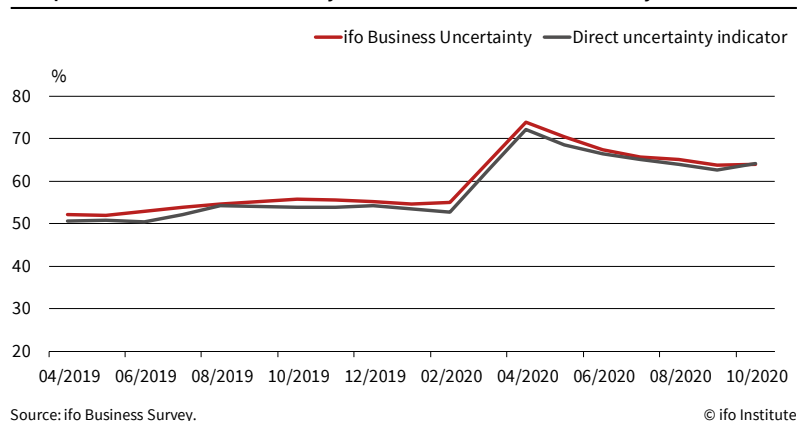


Figure 3

Comparison of the Two Uncertainty Measures for the Overall Economy

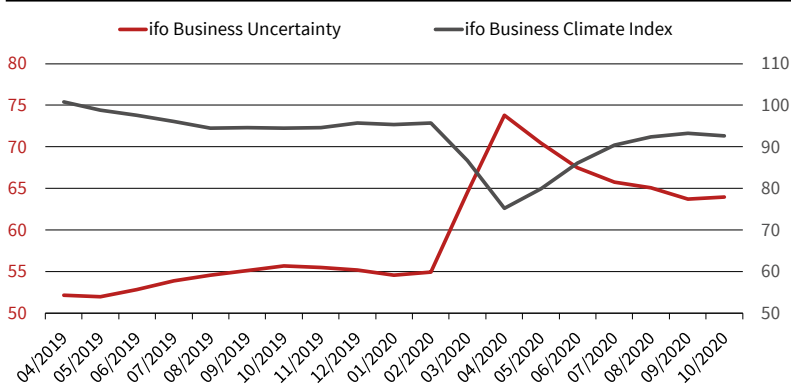


between 0 and 100, whereby higher values correspond to greater uncertainty. The weighted average of the answers to this direct question yields a second uncertainty indicator.

Figure 3 shows that the (short) time series of the two uncertainty indicators are almost identical. This suggests that the two different underlying questions of the indicators measure the same perception, which validates the results of the ifo Business Uncertainty. Moreover, it implies that managers seem to have a

Figure 4

Comparison of the ifo Business Uncertainty Index and the ifo Business Climate



Source: ifo Business Survey.

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good understanding of the concept of uncertainty: if business leaders find it more difficult to predict their future business situation, on average they also rate their own uncertainty as greater. Lautenbacher (2020) discusses these measures of uncertainty in detail and additionally compares them with firms' business expectations for the next six months and their current business situation based on the same survey. He finds that the more pessimistic managers are about their future business development and the more negatively they assess their current business situation, the more uncertain they are. There are also two special cases. First, even in a business situation rated as "good," uncertainty can be high if a deterioration in the situation is expected. Second, managers remain uncertain in a business situation rated as "bad" even if they expect the situation to improve.

Based on these findings, it is not surprising that the new uncertainty measure also has a strong negative correlation with the ifo Business Climate Index (see Figure 4). After all, the index is constructed as the average of the assessment of the business situation and business expectations. A deterioration in the business climate is thus typically accompanied by an increase in perceived uncertainty. If the business climate index rises, managers tend to find it easier to predict the future development of their business situation.

SUMMARY

This article has introduced a new uncertainty measure, the ifo Business Uncertainty. It is based on managers' perceptions of how difficult they find it to predict the business development of their firm. As such, it measures uncertainty at the decision-maker level, where it may affect investment and hiring, and, at an aggregate level, the business cycle. The ifo Business Uncertainty peaked at the beginning of the Covid-19 crisis before it decreased somewhat and remained at an elevated level until October 2020. The indicator moves almost perfectly concurrently with a sec-

ond measure of firms' subjective uncertainty and it is strongly negatively related to the ifo Business Climate Index. The new uncertainty measure will be published regularly by the ifo Institute in the monthly press releases for the ifo Business Climate Index and can be downloaded from the ifo website.

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Tadeusz Kowalski

The Post-2015 Institutional Shock in Poland: Some Empirical Findings

The system transition initiated in Poland in 1989-1990 required the restoration of market mechanism and institutions. An equally difficult task was the construction of the foundations for the rule of law and open civil society (Kowalski 2019). In the sphere of common practices and democratic rules, Poland and the neighboring post-socialist countries showed a certain path dependence (Artur 1989; David 2005; Kowalski 2013). According to the Democracy Index (DI), Czechia only counted among the full democracies in 2006 and 2010 (belonging to the top 20 in the DI, Figure 1).

Other countries, including Czechia in 2014 and 2017, were classified as flawed democracies. Czechia systematically achieved the highest position among all the Central European Countries included in Figure 1.

STYLIZED FACTS ON THE STATE OF DEMOCRACY AND THE JUDICIAL SYSTEM IN POLAND

The fundamental component of modern democratic states is an independent and efficient judicial system. The Polish Constitution of 1997 provides for the independence of the judicial system. This was reflected in the fulfilment of the Copenhagen Criteria and the 2004 accession of Poland and other CEE countries to the European Union. Both the very principle of judicial independence and its efficiency became primary issues highlighted immediately upon the PiS's victorious electoral campaign.

Table 1 presents data from "The EU Justice Scoreboards." The methodology allows for unbiased international analyzes of judicial systems and the identification and assessment of the trends. Table 1 shows that in 2010 and 2014—the years preceding the change of government—Poland's position was relatively high in relation to Czechia, Slovakia and Hungary, as well as to other European Union member states. In 2016-2017—the period of the legislative and executive responsibility of PiS (Table 1, rows 1, 2, 3)—the situation in Poland either did not improve or even worsened in all three dimensions when compared to other countries.

Table 1 also shows some quantitative measurements of public expenditure on the judicial system. In terms of expenditure, Poland ranked tenth in the European Union along with several other EU coun-

ABSTRACT

The aim of this article is to discuss and assess the post-2015 institutional environment in Poland. As early as December 2015, the newly elected conservative President and the parliamentary majority began to implement their vision of the state. It included a new law-making culture and an overhaul of the judicial system. These changes were supplemented by a sweeping nomenclature in public institutions and state-controlled companies. The new political establishment took full control of public media. The analyses are focused on the institutional shock to the judicial system. The changes are studied through the prism of manager perceptions of the practices of public institutions, law-making and law-enforcement. The primary data were collected annually with the use of surveys conducted on a carefully selected group of middle and high-level managers with a university degree. The picture of 2016-2018 derived from the survey is analyzed and compared with earlier years. There was not only a lack of significant improvement in the main areas of interest of the coalition but in many cases, it deteriorated. Particularly noteworthy is the general perception of increased uncertainty in all the institutional spheres analyzed in the article.

tries. Expenditure on courts in relation to GDP in Poland amounted to 0.5% of GDP and ranked among the highest in the EU. Before 2015, the efficiency of Polish courts and the scale of public expenditure on the courts was above average, with relatively lower costs in nominal terms but relatively high expenditure in relationship to GDP.

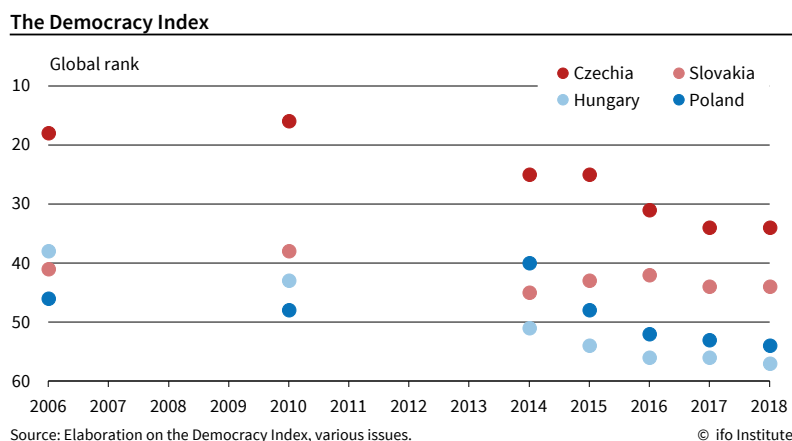
Table 1 indicates certain shortcomings in Poland's judicial system. However, compared to countries with a similar heritage and institutional determinants, the Polish judicial system was relatively efficient. Therefore, objective reasons for the attack on judges and judicial independence that were led by PiS and its government did not exist (Mazur and Żurek 2017).



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Figure 1



CHANGES IN THE INSTITUTIONAL FRAMEWORK

The Practice of Staffing Public Institutions

The main task of the newly established regime in the institutional sphere was to replace people employed in public television, Polish radio, public administration and state-owned companies. The expulsion was facilitated by the amendment to the Civil Service Act, speedily passed on 30 December 2015.¹ The scale and scope of the staff replacement had no precedent in

¹ The Act of 30 December 2015 Amending the Civil Service Act and Some Other Laws, Journal of Laws of 2016, Item 34.

the post-1990 history of Poland (Kopińska 2018). Despite statutory regulations and often contrary to the letter of the law, the purge in public administration included mid-level or even low-level civil servants. Aside from exploiting or circumventing existing regulations, the following methods were used: institution-oriented changes to the law, sector-wide changes to the law, reorganizations and mergers of institutions (Kopińska 2018).

The Practice of Law-making and the Attitude toward the Justice System

The 2015 electoral victory paved the way for an unrestricted use of a specific, short-cut law making by initiating an amendment or a submission of a bill through parliamentary drafts. Such proposals signed by a group of members of parliament did not require any prior, formal considerations and consultations before submitting the bill to the Sejm. This short-cut law led to laws that were pushed through the Polish parliament because this new law eliminated public consultation and suppressed discussions both in parliamentary commissions and during parliamentary plenary sessions. This kind of law-making caused a decrease in the quality of new acts of law. Poland viewed the marginalization of the Parliament and the President as the guardians of the constitution. Simultaneously, an informal PiS collegiate, an extra-parlia-

Table 1

Selected Characteristics of the Judicial Systems of Czechia, Poland, Slovakia and Hungary

	Description	2010	2014	2016	2017
1	The time needed to resolve civil, commercial, administrative and other cases	PL (3)	PL (5)	H (5)	H (5)
		H (7)	H (5)	PL (6)	PL (7)
		CZ (9)	CZ (15)	SK (10)	SK (10)
		SK (15)	SK (17)	CZ (15)	CZ (15)
2	The time needed to resolve litigious civil and commercial cases	CZ (3)	H (8)	SK (5)	CZ (7)
		H (6)	CZ (9)	CZ (8)	SK (8)
		PL (8)	PL (12)	H (10)	H (10)
		SK (18)	SK (21)	PL (12)	PL (11)
3	The time needed to resolve administrative cases	SK (1)	H (2)	SK (2)	H (4)
		PL (3)	PL (3)	CZ (8)	PL (6)
		H (6)	SK (16)	H (10)	SK (14)
		CZ (nda)	CZ (18)	PL (12)	CZ (16)
4	General government total expenditure on law courts (€ per head)	PL (10)	PL (16)	PL (17)	PL (17)
		CZ (17)	CZ (19)	CZ (19)	CZ (20)
		H (19)	SK (19)	H (21)	H (23)
		SK (nda)	H (20)	SK (23)	SK (26)
5	General government total expenditure on law courts (as a percentage of GDP)	PL (1)	PL (2)	PL (2)	PL (2)
		CZ (3)	CZ (3)	H (3)	H (6)
		H (3)	H (3)	CZ (4)	CZ (14)
		SK (3)	SK (3)	SK (5)	SK (20)
6	Number of judges per 100,000 citizens	CZ (7)	CZ (5)	H (3)	H (5)
		H (7)	H (5)	CZ (4)	CZ (6)
		PL (8)	SK (6)	PL (6)	PL (10)
		SK (9)	PL (6)	SK (8)	SK (11)

Note: nda—no data available. Figures in parentheses indicate the position of each country among all EU countries for which Eurostat publishes data. In rows 1, 2 and 3, the lower the number, the better the relative position of a country compared to other EU member states. The data in rows 4, 5 and 6 show the relative position of the countries in the order of highest values respectively of the expenditure (rows 4 and 5) and the number of judges compared to other EU countries.

Source: The EU Justice Scoreboard, various issues.

Table 2

Public Institutions and the Functioning of Legislation in Poland

Symbol	Question	Answer variants
I.1	Please apply the following statement to your country: 'Laws and regulations are so complicated, unclear and sometimes even contradictory, that it is impossible to adhere to them on a regular basis. Therefore, civil servants can always find ways and means to give you a hard time (long delays, arbitrary decisions).' This happens:	
I.2	Assume that you are confronted with clearly unfair procedures or outright demands for bribes by a civil servant. Would you try to resist and fight back by appealing to their superior or to an administrative court? You would (...) fight back:	- never 1 - rarely 2
I.3	Please apply the following statement to your country: 'As an entrepreneur, you are always afraid of committing a minor "error" here and there in the eyes of the regulatory bodies because these "errors" can be abused by civil servants in order for them to gain a position of power (and to build a case to blackmail you).' This is (...) the case:	- sometimes 3 - frequently 4 - mostly 5 - always 6
I.4	If you know the civil servant you have to deal with personally, can this speed up the procedure? Knowing the civil servant personally will (...) speed up the procedure:	
I.5	If you know the civil servant you have to deal with personally, can this influence their decision (e.g., amount in taxes, issuing a business license)? This will (...) influence the decisions of civil servants:	

Source: Borner et al. (1995).

mentary, non-governmental center of power emerged (Zielonka 2018).

The simplified law-enactment process was also used to overhaul the judiciary system. All the key elements of the judicial system—i.e., the Constitutional Tribunal (CT), the National Council of the Judiciary (NCJ), the Supreme Court (SC) and the system of ordinary courts—became targets of a coordinated legislative action. All the changes were presented to the general public as fundamental steps in the indispensable state reform process.

The Constitutional Tribunal was the first judicial body to become the object of verbal attacks from the parliamentary majority, the government and the President. They were reinforced by the public television channels controlled by PiS. The CT's position became marginalized through the unconstitutional election of three illegally appointed CT judges and by appointing a new President of the CT in an unlawful manner. The CT became subordinated to the parliamentary majority and ceased to act as a guardian of the constitutionality of legislation.

The National Council of the Judiciary was also "reformed" in a similar political climate. In line with the Constitution, the function of the NCJ is to uphold the independence of courts and judges and plays a key role in the process of appointing judges. The law was pushed through parliament and passed on 8 December 2017, and enabled a replacement of NCJ members and thus, in fact, subordinated this body to the will of the parliamentary majority.

Finally, the Supreme Court also became the target of a state propaganda campaign. The law enacted on 8 December 2017 to regulate the Supreme Court initiated an attempt to reconstruct and purge the SC (Sweeney 2018). This new act of law violated the Constitution and thus the Supreme Court's independence. The most important "reforms" included a change in the court's structure with the creation of two new chambers: the Disciplinary Chamber and the Extraordinary Control and Public Affairs Chamber, and the

introduction of extraordinary rights of appeal. The new law shortened the term of office for some judges by lowering their retirement age.

In the years that followed, PiS also introduced changes in the system of ordinary courts. These changes further violated the principle of the separation of powers. In practice, the Ministry of Justice as a political executive body gained the freedom to interfere in the staffing of the management of courts and thus was able to influence the careers of individual judges. The Minister obtained the potentially strongest tool of power and repression against judges in the new law report (2018): "control over the creation of bodies responsible for conducting disciplinary proceedings against judges and prosecution in these proceedings, but also the possibility to directly influence any disciplinary case from the request to initiate proceedings to the request to conduct them, even when the disciplinary ombudsman does not see [any] reason to do so."

These post-2015 changes to the judiciary introduced in Poland by the legislative and executive powers were the object of unequivocal criticism from judges and their professional associations. There were numerous street demonstrations to defend the independence of judges and courts. As early as December 2017, the EU advisory body—the Venice Commission—unambiguously and unequivocally recognized the constitutional crisis in Poland caused by the executive branch, the legislature and the President. The Venice Commission considered that the new Polish laws on the system of ordinary courts and the President's draft laws on the SC and the NCJ "put the independence of all parts of the judiciary in Poland at serious risk[s]." Moreover, the Venice Commission states that the Law on the SC "contributes to a weakening of the independence of justice as a whole." The situation raised concerns in the European Commission (EC). These concerns referred not only to the actions presented above but also to the systemic implications of the reorganization and political control over the

Table 3

Law-making in Poland

Symbol	Question	Answer variants
S.1	As an entrepreneur, do you regularly have to cope with unexpected changes in laws and/or policies that could seriously affect your business? Changes in the laws and policies are:	- completely predictable 1 - highly predictable 2 - fairly predictable 3 - frequently unpredictable 4
S.2	As an entrepreneur, are you officially or unofficially informed (through the press, business association, etc.) about new laws and/or plans to change the existing laws or policies? You are (...) informed:	- mostly unpredictable 5 - completely unpredictable 6
S.3	In case of important legal changes affecting your business, can you voice your concerns (...) indirectly and/or are you directly consulted? You are (...) consulted:	- never 1 - rarely 2 - sometimes 3 - frequently 4
S.4	Do you expect the government to stick to announced major policies (e.g., new tax law, an infrastructure project, a budget goal)? The government's announcement is (...) credible:	- mostly 5 - always 6

Source: Borner et al. (1995).

public prosecutor's office and even over the National School of Judiciary and Public Prosecution. The EC first attempted to consult the Polish authorities and—when these consultations failed—EC used another tool—recommendations. The lack of an adequate response from the Polish government to the recommendations led the College of Commissioners of the EC to refer the Polish government to the Court of Justice of the European Union under Article 7(1) of the Treaty on European Union.

INSTITUTIONAL CHANGES IN POLAND—THE PERCEPTION OF MANAGERS

The Scope and Methodology of the Study

To collect primary information on perception of the functioning of public institutions, law-making and law enforcement in Poland the Borner et al. questionnaire (1995) was used. The survey includes sixteen questions or statements (Tables 2–4). In this paper, the data for 2014–2018 is analyzed with the results of 2014–2015 used as the background for comparisons.² The respondents used the scale ranging from 1 to 6 to answer the survey questions, and used the 1-to-3

² The annual survey was done on a non-random, targeted sample of over 140 managers with higher education. It was conducted electronically ensuring the full anonymity of respondents.

Table 4

Law Enforcement in Poland

Symbol	Question	Answer variants
E.1	Imagine that a private conflict is brought into court with the evidence very clearly in your favor. Do you have confidence that the assigned judge will enforce the law objectively? Courts can (...) be trusted to enforce the law objectively according to transparent rules:	
E.2	Please apply the following statement to your country: 'The party who pays more (e.g., bribes or for better lawyers) will win the case. Even if the evidence is clear, money can change the result. This is (...) the case:	- never 1 - rarely 2 - sometimes 3 - frequently 4
E.3	Is it irrelevant which individual judge decides on a case? Is it advantageous to know the assigned judge? If you know the assigned judge personally, this will (...) influence the procedure and result:	- mostly 5 - always 6
E.4	If you were treated unfairly in court (i.e., because of bribery demands or a decision you deem "incorrect"), would you fight this by appealing to a higher court? You would (...) appeal:	

Source: Borner et al. (1995).

scale to answer questions pertaining to uncertainty. In total, the survey questions cover the institutional environment that might influence—from the economic perspective—transaction costs, investment risk and uncertainty, and exert an impact on social capital (Acemoglu and Robinson 2012; Alesina and Giuliano 2015; Helpman 2008; Kowalski 2013; Pistor 2019).

The Survey

The first group of questions (Table 2) refers to public institutions and the functioning of legislation in Poland. The second concerns the perception of the law-making process (Table 3). The third group of questions and statements concerns the perception of law enforcement in Poland (Table 4). Each part of the survey ended with a question on the overall assessment of trends in the development of uncertainty for the area concerned (Table 5). Thus, manager responses for 2018 reflected their perception of the past from the perspective of the present year's experiences.

The Results

Table 6 summarizes the trends in the arithmetic mean of responses to the survey questions. The assessment of the course of changes in 2016–2018 is shown against 2014 and 2015 - the two last years of

Table 5

The Perceived Changes in Uncertainty in the Institutional Environment in Poland

Symbol	Question	Answer variants
I	Do you think that during the last 10 years, uncertainties in dealing with government agencies have (...)?	- increased 1
S	Do you think that during the last 10 years, uncertainties in law-making have (...)?	- remained about the same 2
E	Do you think that during the last 10 years, uncertainties in law enforcement have (...)?	- decreased 3

Source: Börner et al. (1995).

the previous Sejm's term of office. In the sphere of public institutions and the functioning of law, a dominant picture of stagnation or one-time improvement (see I.4 and I.5 for 2017) prevailed.

In the overview of law enforcement for individual years, no clear improvement and even a decline (Table 6; question S.1) or continuation (Table 6; questions S.2 and S.3) was marked. One exception is the perception of the credibility of government announcements (Table 6; questions S.4). In this sphere, the respondents noted an improvement in 2015. In the following years, they maintained their 2015 ratings.

Part three of the survey—Law Enforcement—refers to the perception of judicial practices, and directly concerns the areas that were targeted during the electoral campaign and were the objects of a publicly funded PiS crusade against judges after the formation of the new government. Despite the political pressure and the government-controlled media, the vast majority of judges resisted, showed perseverance and continued to work and adjudicate according to the rules of good practice and the letter of the law. The respondents provided the highest scores in the sphere of judge neutrality (Table 6, question E.3). In the three other spheres, i.e., judge objectivity (Table

6, question E.1), financial influence (question E.2), and confidence in the appeal system (question E.4), the responses were more varied. In the entire sample of twelve 2016–2018 annual evaluations, five showed an improvement, five no change or minor change compared to the previous year, and two showed a decline.

Table 7 presents annual cross-sections of uncertainty perception. The results clearly indicate that, according to managers, uncertainty in the functioning of public institutions, law-making, law enforcement increased as early as in the year of presidential and parliamentary elections. In all the following years and all three areas, the perceived uncertainty continued to grow.

CONCLUSIONS

Poland was one of the leaders of economic and institutional transition among the CEE countries from 1990–2015. Privatization, the separation of powers, the independence of the central bank and an apolitical civil service—responded to citizens' hopes for an efficient economy and a rule of law.

The judicial system and judicial independence were key topics of the victorious presidential and par-

Table 6

Changes in the Perception of Institutional Environment Quality in Poland in the Years 2016–2018 Based on Annual Surveys Compared to 2014–2015

Survey questions	2014	2015	2016	2017	2018
Public institutions and the functioning of law					
I.1. Laws and regulations are so complicated...	+/-	+	-	+/-	+/-
I.2. Assume that you are confronted with clearly unfair procedures...	+	-	+/-	+/-	+/-
I.3. You are always afraid of committing a minor error...	+	+	-	+/-	+/-
I.4. Knowing the civil servant personally will speed up the process...	-	+	+/-	+	-
I.5. Knowing the civil servant personally can influence the decision...	+/-	+	+/-	+	+/-
Law-making					
S.1. Do you regularly have to cope with unexpected changes in laws...?	+	-	-	-	+/-
S.2. Are you officially or unofficially informed...?	+/-	-	+/-	+/-	+/-
S.3. In case of important legal changes...	+/-	-	+/-	-	+/-
S.4. Do you expect the government to stick to announced major policies...?	-	+	+/-	+/-	+/-
Law enforcement					
E.1. Courts can be trusted to enforce the law objectively according to transparent rules...	+	+	-	+	+
E.2. The party who pays more (...) will win the case...	+	-	+	+/-	-
E.3. Is it irrelevant which individual judge decides on a case?	-	+/-	+	+/-	+
E.4. If you were treated unfairly in court (...), would you fight the decision by appealing to a higher court?	+	+	+/-	+/-	-

Note: + improvement compared to the previous year; +/- no change or a very minor change (less than/equal to 0.1) compared to the previous year; - decline compared to the previous year.

Source: Own surveys.

Table 7

Changes in Uncertainty Perception in Poland in 2016–2018

	2014	2015	2016	2017	2018
Uncertainty in the sphere of public institutions' functioning	+	–	–	–	–
Uncertainty in the sphere of law-making	+	–	–	–	–
Uncertainty in the sphere of law enforcement	+	–	–	–	–

Note: + improvement: decrease in uncertainty; +/- no change or minor change (less than/equal to 0.05) compared to the previous year; – decline compared to the previous year: increase in uncertainty.

Source: Own surveys.

liamentary electoral campaigns in 2015. The judiciary then became the object of systematic actions of the new parliamentary majority leading to unconstitutional changes in the system's organization and functioning. As a result, Poland experienced a negative institutional shock starting in 2015. The perception of the scale and nature of the changes in this area, with their future negative implications, were effectively neutralized by the favorable external and internal economic situation.

The survey results are not favorable to the right-wing coalition. The picture of its first years in power not only signals a lack of significant improvement in the main areas of interest of the coalition but in many cases, it indicates a decline. Particularly noteworthy is the general perception of increased uncertainty in all the three institutional spheres analyzed in the article. In the view of the scale of the institutional shock and the state capture, the opinions and changes in the perception of the surveyed stakeholder group are somewhat surprising. It could have been expected that managers who were more highly educated would show a more refined ability to identify current and future threats stemming from the subordination of judicial bodies and abolition of the modern civil service.

The case of post-2015 Poland shows how, without persistent and deep interest throughout the population, in a very short time, the judiciary system, without changes being made to the Constitution, might be overhauled and actually subordinated to the executive powers. The case of post-2015 Poland also signals the importance of civic education and development of a modern civic society. Without better education and strong independent mass media, populist rhetoric based on manipulation of emotions and facts might become a common political practice. The cases of Hungary and Poland also highlight the key role of the European Union institutional framework. It also indicates the need in the EU to work out a system of early institutional warnings to prevent such developments in the future.

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Deforestation and Migration

In recent years, the deforestation of rainforest locations all over the world has increasingly attracted public attention. Forests are public goods that create positive externalities, keep our ecosystem in balance, promote biodiversity around the world and are vital for the preservation of animal species and their habitats. They also store CO₂, mitigate climate change, protect water catchment areas and prevent soil erosion. In many parts of the world, forests still serve as habitats for ancient civilizations and indigenous tribes.

WHY AND HOW DOES DEFORESTATION AFFECT MIGRATION?

But what is the value of forests? In recent decades, forests have increasingly been perceived as an obstacle to growth in rural areas and their productive value has been questioned (Deb 2014). Even if forests can be used to produce forest products such as medicinal plants, handicrafts or honey, they are usually not as profitable as alternative production activities (te Velde et al. 2006). Although forests generate firewood and noble wood, their investment periods are long. Depending on country and conditions, productive forestry has a life cycle of five to 28 years (Frey et al. 2018). Therefore, in many places forests have had to give way to other productive activities, such as agriculture and livestock farming. Paraguay, for example, is the world's fourth-largest soybean exporter and produces 8 to 9 million tons of soybean per year (Nepon 2019). Brazil is the largest exporter of beef. One third of all beef exports worldwide come directly from the Amazon region (McAlpine et al. 2009). And Mexico is the world's largest producer of avocado. About six out of ten avocados consumed worldwide originate from the Central American country (Ayala 2020).

Figure 1 gives an initial insight into the loss of forest area in the north of Latin America in recent years.

Figure 1

Forest Area Loss from 2001–2015 in Latin America



Note: The red area indicates forest area loss.

Source: Hansen/UMD/Google/USGS/NASA; Earthstar Geographics; Esri, HERE, Garmin, FAO, NOAA, USGS Link: <https://arcg.is/zraTO>.

ABSTRACT

This article deals with the relationship between migration and deforestation. Based on the existing literature, it outlines how these factors can interact. It then illustrates these interactions using the example of three countries in South America that have experienced a particularly high deforestation rate in recent years: Brazil, Mexico and Paraguay. The study shows that the interactions between migration and deforestation are diverse and can have many reasons. Migration can be both a consequence and a cause of deforestation. Further research is needed to further understand possible measures that mitigate the potential negative effects of migration on forests on the one hand, and to reduce migration flows caused by deforestation on the other. We recommend a more productive use of forests and mechanisms that internalize associated externalities, such as CO₂ generation or ecological values.

The positive externalities generated by forests for our society are not taken into account in the process of deforestation. In the case of Paraguay, for example, Ramstein et al. (2019) estimate a CO₂ price of USD 180.5/tCO₂, while a World Bank guideline assumes a price of 40 to 80 USD in 2020 (World Bank 2017b). But forests generate even more social benefits, from disease prevention to water purification and flood mitigation. For some population groups, they provide cultural value of aesthetic or spiritual nature and offer places of refuge. According to FUNAI estimates, at least 68 unreached tribes still live in the Brazilian Amazon (van Boehout Solinge 2010). For this population group, land and resources are inextricably linked to their livelihood and worldview.

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DEFORESTATION AND JOBS

If forests disappear, the values associated with them disappear too. It is therefore obvious that deforestation and the destruction of forests will lead to migration in many parts of the world. In addition, the alternative production models that are implemented instead of forests are usually introduced by large corporations and generate few jobs in rural areas since they are often highly technical (Oxfam 2020; Azevedo-Ramos 2007). Bustos et al. (2016) find that a one percent increase in the area cultivated with genetically modified soybeans reduces the share of agricultural workers in Brazil by 0.09%. Furthermore, while state investments can favor large companies in their production, they can also economically damage parts of the rural population (Garrett and Rausch 2016). The quality of life of the rural population is declining as they are exposed to harsher weather conditions, have to walk longer distances to collect firewood or to hunt animals. Other food sources become increasingly inaccessible due to the degradation of the (rain) forest, too. Hunger and emigration are the consequences, especially among the poorer population groups. According to the WWF (2013), the strong growth observed in Paraguay in recent years is based on an economic model that leads to the concentration of land, resources, wealth and power among a few, while small farmers are not prioritized or supported by national policies.

On the other hand, deforestation can also create jobs. Economic conditions for the rural population in Indonesia have improved (Afriyanti et al. 2016) due to rainforest deforestation and palm oil production. In the deforested area, agriculture is based on booming export goods. In Ghana and Burkina Faso, for example, forest-free areas are considered economically more valuable than forested areas (Pouliot et al. 2012). In Bolivia, the profits from timber and soybean production outweighed the costs of cleared forest areas in the short term, thus improving the living conditions of the population in rural areas (Kaimowitz et al. 1999). This could subsequently lead to rural-rural or even urban-rural migration of people in search of work opportunities and unused land.

However, Kaimowitz et al. (1999) stress the short-lived nature of economic progress due to rising marginal costs. Increased agricultural activity, which went hand in hand with the deforestation of the rainforest in Malaysia, reduced the poverty rate enormously. Once the rate fell below a certain point, however, the rate of deforestation was reduced. As soon as the rural population achieved a certain level of prosperity through palm oil production, they began to pursue more productive activities in urban areas (Miyamoto et al. 2014). This again may also lead to migration flows in the long term.

DEFORESTATION AND CLIMATE CHANGE

A further connection between deforestation and migration emerges via climate change. The European Parliament refers to migrants displaced by natural disasters or climate change as climate refugees or climate migrants. Migration as a consequence of climate change is well known and has been highlighted in the scientific literature for several years, especially in relation to sub-Saharan Africa, as well as countries in Latin America (Barrios et al. 2006; Gray and Bilborrow 2013). Deforestation is no exception to this and is similar in its form as a determinant of migration. In the short term, the rainforest deforestation becomes a threat to indigenous peoples and can result in their involuntary migration. In the long term, the consequences may be more far-reaching than the direct effect on the rainforest. Areas that are cleared, for example, for pasture use for livestock breeding, cause an increase in mean surface temperature and lower precipitation (Nobre et al. 1991). Such anomalies in precipitation and temperature have an impact on the financial situation of the population in these areas, which can cause voluntary migration (Cattaneo et al. 2019).

MIGRATION AS A CAUSE OF DEFORESTATION

Juniwaty et al. (2019), in turn, explain that, conversely, migration also affects forests and their use. One reason for this is that rural populations change due to migration. If, for example, it is mainly men who migrate and women who stay behind in villages, the use of the forests changes, since women demonstrably pursue different productive activities in forests than men. On the other hand, immigration from cities or other rural areas also affects the use of forests. Juniwaty et al. (2019) also address the importance of educational migrants. When family members migrate for education, this generates costs for rural households, which can lead to an intensification of agriculture and thus to deforestation. With regard to migration to rainforest areas, Thiede and Gray (2020) show that migrant women in Latin America are increasingly moving to areas with few indigenous inhabitants. Amacher et al. (1998) find that migrants in the Philippines prefer regions where there is a lot of state-owned forest available and good transport routes. At the same time, these are characteristics that particularly encourage deforestation. Carr (2009) describes that especially forest areas with low population density are exposed to massive deforestation, since control over illegal logging is more difficult to enforce in such areas. Amacher et al. (2009) also point out that migration increases the supply of labor, thus lowering wages and making forest clearing more profitable for companies. Remittances also play a role. While some scientific analyses show that monetary remittances are invested in agriculture and livestock

Table 1

Channels of Interaction between Migration and Deforestation

Type of migration	Deforestation
<i>Migration as a driving force for deforestation</i>	
Urban-rural migration/ international migration	In search of better job opportunities and unused resources, migrants from urban areas settle in regions with a lot of land in order to transform it productively.
Urban-rural migration/ international migration	Migration leads to changes in the socio-economic characteristics of the remaining population, using the forest in different ways.
Educational migration: rural-urban migration	Family members who migrate from rural areas generate costs that can be covered by income from productive activities generated from deforested land.
Remittances	Remittances generate additional income, which can take away the pressure on generating profits from deforestation but can also be transformed into investments in the intensification of agriculture.
<i>Migration as a consequence of deforestation</i>	
Rural-urban migration/ International migration	The transformation of the forest into alternative means of production, such as agriculture or livestock farming, can lead to job losses and poverty, especially in connection with high mechanization and loss of property and land.
Disaster-induced migration	Deforestation leads to aggravation of climate change through flooding, temperature increase, and habitat destruction.
Culturally-induced migration	Especially with regard to indigenous peoples, the cultural and spiritual habitat is being destroyed, resulting in migration.

Source: Authors' compilation.

farming and accelerate the deforestation process (Angelsen et al. 2020; Bakehe 2019), others show that the additional income reduces agricultural activity in favor of forest conservation (Afawubo and Noglo 2019; Hecht 2008).

In summary, there are two overarching dynamics that influence the interaction of migration and deforestation, namely, migration both as a driver of deforestation and as a consequence of it. Table 1 provides an overview of the different interactions between migration and deforestation.

Only a few scientific papers have so far examined the impact of deforestation on migration in more detail. Migration flows that result from deforestation can be internal migration from and to rural areas and rural cities, but also generate international flight movements. Data on migration directly caused by deforestation is scarce. However, population movements caused by natural disasters can provide an indication of this. In 2019 there were 54,000 new disaster-related refugees in Paraguay, 16,000 in Mexico and 295,000 in Brazil (IDMC 2020a and 2020b). The IDMC puts the number of global refugees due to disasters in 2019 at 24.89 million.

In the following, we provide insights into three countries that have experienced high rates of deforestation in recent years. How do deforestation in Mexico, Brazil and Paraguay and their migration flows interact? What are their dynamics? What do they have in common, and how can we counteract the negative effects that result from them?

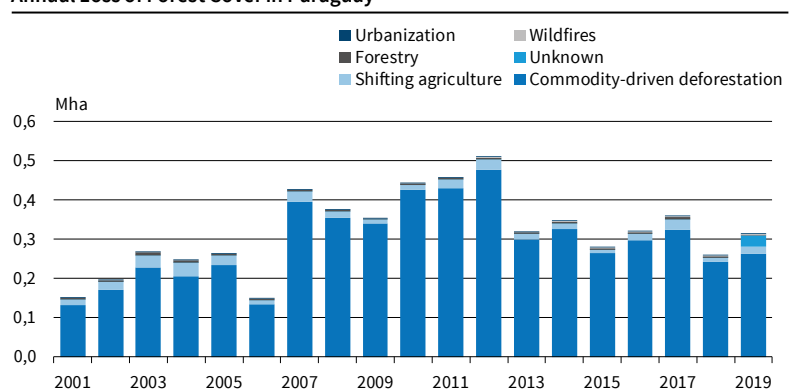
DEFORESTATION IN BRAZIL, MEXICO AND PARAGUAY

Paraguay's deforestation rate was the highest in South America until 2004. An analysis by the Earth

Observation Center (2018) indicates that between 1999 and 2016, 750,000 hectares of the Atlantic tree cover were deforested. Today, only 15% of it remains in the Eastern region of Paraguay (PROFOR 2019). Moreover, almost 20% of the Gran Chaco region has been converted for agricultural purposes. Data from Global Forest Watch shows that 93% of deforestation between 2001 and 2019 was due to resource-related logging. In 2019, approximately 262,000 hectares of land were deforested. In 2001, the figure was 131,000 hectares. 100% of deforestation occurred in natural forests, equivalent to 289 million tons of CO₂ (between 2013 and 2019). The rate of reforestation, on the other hand, is low in the middle range in international comparison, with a rate of 8,940 hectares in 2010. Figure 2 shows that deforestation in Paraguay is mainly due to raw materials. According to the WWF (2020), there were 900,000 hectares under soybean cultivation in Paraguay in 1990 and 3 million hectares in 2012. A similar picture emerges in the livestock sector. Be-

Figure 2

Annual Loss of Forest Cover in Paraguay

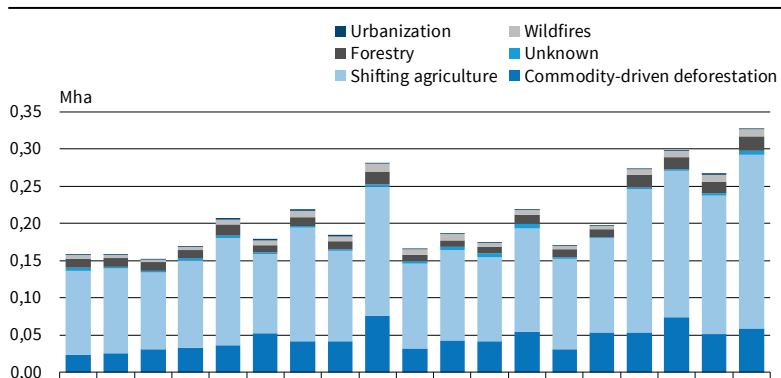


Source: WWF (2020).

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Figure 3

Annual Loss of Forest Cover in Mexico

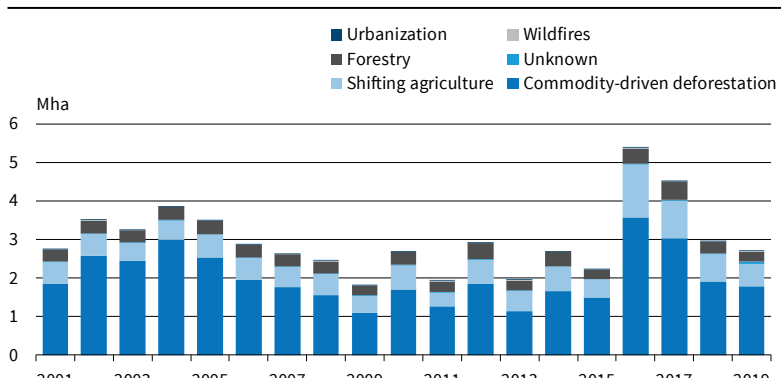


Source: WWF (2020).

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Figure 4

Annual Loss of Forest Cover in Brazil



Source: WWF (2020).

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tween 2005 and 2017 the meat export increased from 186,000 tons to 397,000 tons (UNA 2017).

In 2010, 49.8 million hectares of Mexico’s territory were covered with forest. This corresponds to a total forested area of 26% of the country. Over the following nine years, the aggregate forest declined by 321,000 hectares (Global Forest Watch 2020). A continuous increase in the decline of forested areas can be observed over the last 20 years. This corresponds to an equivalent of 83.3 million tons of CO₂. The reforestation rate is 633,000 hectares during the period 2001

to 2012, representing 0.79% of the global reforestation during this period. Most of the forest loss is attributed to the relocation of agriculture. The causes of temporary or permanent deforestation in this category are small or medium-sized farms. In the southeast of the country, which is heavily affected by deforestation, the main reason are slash-and-burn clearances to gain agriculturally usable land (Diaz-Gallegos et al. 2010).

Since the Brazilian National Space Research Institute INPE began measuring in 1988, annual deforestation rates in Brazil have varied between 2.91 million hectares (the peak in 1995) and 457,100 hectares (the lowest value in 2012) (Arima et al. 2014). After several years of relaxed pressure on activities associated with Brazilian rain forest deforestation, the deforestation rate has been increasing again since 2013. Between August 2018 and July 2019 alone, over 1 million hectares of the Brazilian rainforest disappeared (Barlow et al. 2020). For the period from August 2019 to July 2020, INPE’s Real-Time Rainforest Monitoring System (DETER) even reports an increase in deforestation of 34.6%, compared to DETER’s previous year’s figures. Data from Global Forest Watch shows that resource-related deforestation contributed to about 67% of Brazil’s forest loss between 2001 and 2019, while about 20% was converted to agricultural land. With 7.59 million hectares deforested between 2001-2012, Brazil records the fourth largest amount of reforested land in the world during this period.

Deforestation has various reasons, which are summarized in Figure 5. Migration plays a role primarily in the expansion of agriculture, as do other indirect factors. Migration interacts with deforestation in the areas of demography, economy, politics and culture.

DEFORESTATION AND MIGRATION: A FEW INSIGHTS

In 2015, Paraguay counted 171,000 refugees due to catastrophes, the highest number to date.¹ According to the IDMC (2020b), the number of internal refugees was at 54,000 in 2019.

Deforestation and Migration in Paraguay

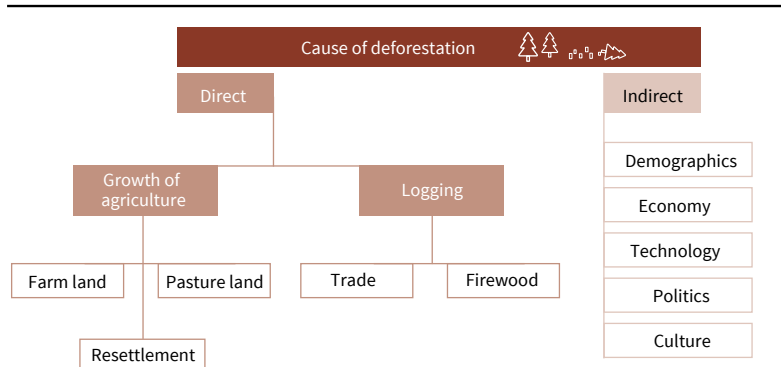
Between 1997 and 2002, the IOM (2020) reported 272,000 internally displaced people in Paraguay. At the same time, the number of emigrants (10-12% of the population) significantly exceeded that of immigrants (3-5%). The former are predominantly young (20-30 years old) and female (60%).

A CDE study (2015) analyzes the dynamics of said migration movements based on both qualitative and quantitative data. It points to the unsustainable production system as a main driver of internal migration, which leads to the concentration of resources, creates few employment opportunities and contributes

¹ Strong floods in Southern Latin America caused large migration movements.

Figure 5

Direct and Indirect Factors of Anthropogenic Deforestation



Source: Geist and Lambin (2001).

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to urbanization and rural impoverishment. Census data from 1982 indicates that 57.25% of the population live in rural areas. That number had dropped to 43.28% in 2002. Comparing agricultural data from 2002 to 2008, we can observe the disappearance of 38,000 smallholders from rural areas (equivalent to 613,000 hectares of land) within a 6-year period. The qualitative interviews conducted as part of the study indicate a lack of incentives and opportunities in rural regions as one of the main causes of migration, and the inaccessibility of affordable credits, the extension of soy production through commercial firms and the disappearance of the wood industry are important factors. Consequently, small farmers frequently sell their rural property and seek their fortune in urban centers (see CDE 2015). Moreover, the increasing pressure on the indigenous population and their territorial property induces additional migration movements.

Deforestation and Migration in Mexico

Between 1940 and 1970, migration movements in Mexico are defined by a combination of push and pull factors. The rural population was economically restrained by a shortage in capital to invest in agricultural machinery. A main cause lies with policy decisions, eventually leading to the “ejido-system”,² shifting profits from smallholders to big landowners.

Small farmers tried to compensate for the lack of capital with additional labor input—usually in the form of family growth. As a result, the cultivated land was divided among more heirs, which ultimately made the rural population even more vulnerable to economic shocks and encouraged emigration. At the same time, the industrial sector boomed in urban areas and offered employment opportunities (Janvry et al. 2015). These factors triggered rural-urban and international migration movements.

In 1950, 26% of Mexicans lived in cities that had more than 15,000 inhabitants—50 years later, the percentage had reached 61%. In their sample analysis from 2000, Villarreal and Hamilton (2012) find that women from rural areas account for a disproportionately large percentage of emigration. Moreover, younger people move at significantly higher rates. Furthermore, urban emigrants tend to be more educated than rural emigrants. Until 2015, the trend toward emigration from rural areas to metropolitan regions continued. From 1995 to 2010, most people moved to Mexico City, to border cities such as Tijuana and Ciudad Juarez, or to cities experiencing an economic upturn, like Cancún. Migration between smaller cities subsequently intensified from 2010 to 2015 (Pérez-Campuzano et al. 2018).

To escape poverty in rural areas, the affected population frequently seek employment as seasonal

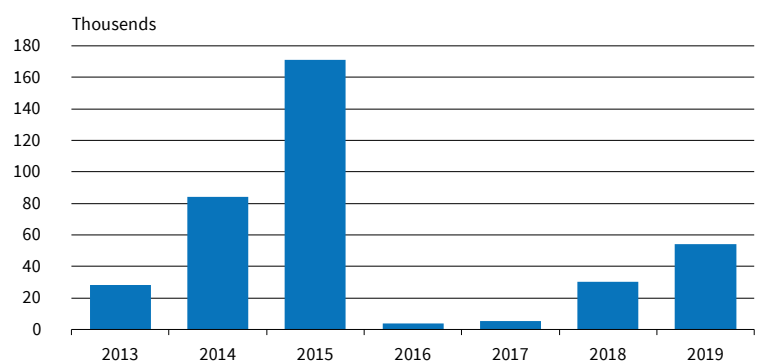
workers. In addition, some carry out illegal slash-and-burn activities as a means of improving their dire economic situation (Vidal et al. 2014). For households, migration is considered a strategy to diversify income. The need for economic security can thus be identified as one of the main drivers of migration. Otherwise, flooding in Mexico is often a cause of disaster-related flight. Still, the interaction between migration and deforestation cannot be conclusively assessed. In some areas, emigration has a positive effect on forest cover, while in other areas the effect appears to be negative (Schmook and Radel 2008).

Deforestation and Migration in Brazil

In the 1960s and 1970s, the so-called Brazilian “economic miracle” caused large migration flows from Brazil's poverty-stricken northeast to the cities in the southeast, where employment prospects were superior (Lima Amaral 2013). The percentage of the urban population, which in 1950 was only 36% of the total population, grew to 81% in 2000. In 1970, for the first time, more people lived in Brazilian cities than in the countryside (Matos and Baeninger 2001). This period marked Brazil's transformation from an agrarian to an urban society.

Figure 6

Number of Internally Displaced People (Paraguay, 2019)

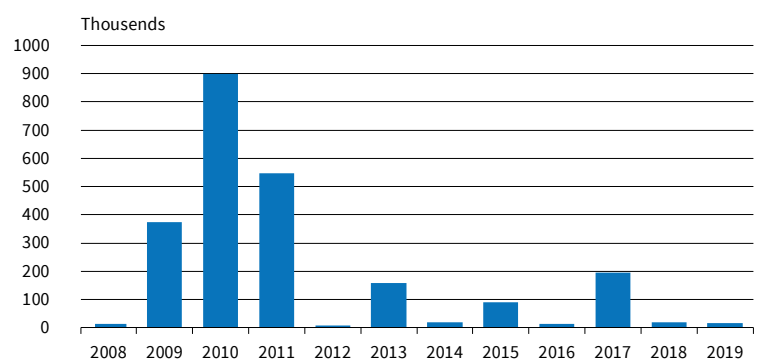


Source: IDMC.

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Figure 7

Number of Internally Displaced People (Mexico, 2019)

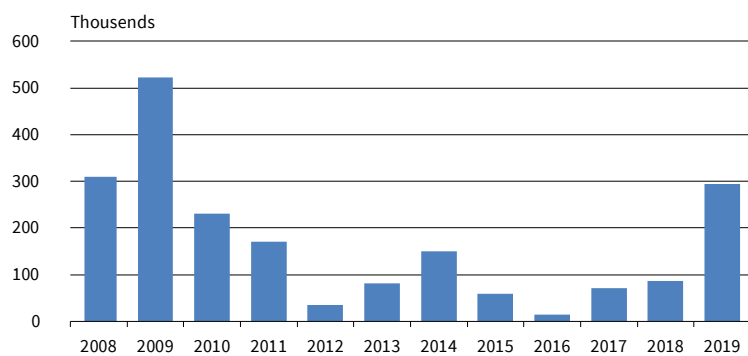


Source: IDMC.

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² During the Mexican Revolution, large areas of land were collectively held in so-called “ejidos.” Only its members held rights to cultivate the land. Land areas were not tradable.

Figure 8

Number of Internally Displaced People (Brazil, 2019)

Source: IDMC.

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On the one hand, higher wage levels in the metropolitan areas of southeastern Brazil (Rio de Janeiro and São Paulo) are offset by higher price levels, which is why the high net migration figures in the southeast declined significantly from the 1980s onward, particularly due to the withdrawal of low-skilled workers. Instead, the migration figures in the border regions increased. From 1970 to 2004, Brazil's north, where most of the Amazon rainforest is located, has seen a consistently positive migration balance (Amaral 2013). One reason for the migration flows could be the availability of land, which has thus contributed to deforestation. In fact, as described above, Brazil's Amazon rainforest has seen a simultaneous increase in deforestation rates. Most of the internal migrants, however, do not move to rural regions, but rather to cities like Manaus or Belém (Egger 2019).

According to the population census from 2010, Brazil had 4.6 million internal refugees between 2005 and 2010 (Baptista et al. 2018). Surprisingly, only 32% of migrants moved to metropolitan areas (2009-2010). Nevertheless, wages in the South still exceed those in the rest of the country by 31% in 2015 (Firpo and Pieri 2018).

To conclude, all three countries have experienced strong migratory movements, especially from the countryside to the city, as well as international and urban-rural migration. Some explanatory factors are shown in Table 1. However, further studies are needed to establish a causal link. Still, the interaction between migration and deforestation through changes in production processes and employment opportunities, and loss of habitable space are clear, and likely inevitable.

DEFORESTATION AND MIGRATION— WHAT CAN WE DO ABOUT IT?

How should one try to counter these reciprocal effects? There are several starting points in order to prevent deforestation and migration that arises from it. One possibility would be to protect tracts of forest by nationalizing them. Another would be to assign a

monetary value to the positive externalities that forests bring about or to foster productive forest-related activities, e.g., through subsidies. In the following, some examples for the latter are elucidated.

Paraguay: A Project for Sustainable Biomass Growth

In cooperation with the United Nations, the government of Paraguay launched the “Poverty, Reforestation, Energy and Climate Change” project (PROEZA) in 2018. The USD 90 million project aims to achieve climate goals and reduce poverty. In order to generate sustainable biomass growth, the government of Paraguay is relying on market mechanisms and incentivizes landowners to reforest. Approximately 14,800 households among indigenous population groups are estimated to benefit directly from the project and others from indirect impacts of the initiative (Green Climate Fund 2017). Start-ups are also discovering business opportunities in Paraguay and are taking advantage of fallow land as a sustainable investment opportunity. Rapidly growing eucalyptus is to generate long-term profit and at the same time afforestation is to be generated as a positive externality (Trecoin 2020). Culturally induced migration can thus be reduced both by the PROEZA project and by commercially successful business ideas. Assigning forests a productive value leads to the creation of jobs, which in turn could discourage people from emigrating, or even lead to people to migrate to these areas.

Mexico: Establishing a Forestry Commission and Sustainable Forest Management

On 4 April 2001, the Mexican government created the “Comision Nacional Forestal” (CONAFOR 2020) as part of the Secretariat for Environment and Natural Resources. The goal of the institution is the development, promotion, conservation and restoration of Mexican forests. Among other things, the Commission participated in the international initiative for “Reducing Emissions from Deforestation and Forest Degradation” (REDD+). During the six-year project, progress was achieved in the agricultural and forestry sectors. However, the ecological effects of the project are attributed to the long-term effects of existing achievements. Furthermore, REDD+ financing created temporary jobs (Bauche 2015). For a more effective development of the project efforts, indigenous population groups were consulted (Špirić 2018). The commercialization of forest areas as well as direct cash flows to poor population groups as part of the project can, similar to remittances, trigger negative or positive impacts on the migration dynamics in the affected areas.

To counteract recent developments in deforestation and logging, the World Bank is also involved in Mexico. It launched the “Forest and Climate Change”

project: 2 million hectares of forest area were put under sustainable management. The financing for this project amounted to USD 460 million. The project focused on capacity strengthening of institutions, creating knowledge of sustainable forest management and developing alternative sources of income. The World Bank is also involved in the “Strengthening Entrepreneurship in Productive Forest Area” initiative, which is considered an extension of the “Forest and Climate Change” project. The focus lies on the sustainable commercialization of forested areas for the forest-dependent population (World Bank 2020). This, in turn, reduces rural exodus, since it mitigates economic hardships of the rural population.

Brazil: Instruments for Afforestation

Between 1950 and 2017, 405 projects were initiated in Brazil to combat deforestation and promote the recultivation of forest areas. Half of the initiatives were launched by forestry companies. Another 48% were commenced by family-owned agricultural enterprises. Only 2% of all projects could be attributed to governmental and non-governmental organizations. However, politically imposed environmental protection permits were not always adhered to (da Cruz et al. 2020). In addition, the Amazon region in Brazil continues to be affected by illegal slash-and-burn agriculture. In 2014 each hectare of forest planted contributed USD 2,228 to Brazil’s GDP. According to the World Bank (2017), an afforestation process covering an area of 12 million hectares could create up to 215,000 new jobs.

Toward the end of the twentieth century, the Brazilian government established several institutions and commissions that enabled adoption of (protective) regulations concerning the Amazon region. Political instruments were used to preserve the rainforest and to support sustainable reforestation. The most significant contribution was made with the “Action Plan for the Prevention and Control of Deforestation in the Legal Amazon” (PPCDAm). The initiative was divided into three phases: from 2004 to 2008, from 2009 to 2011 and from 2012 to 2015. Three main objectives were defined: (1) territorial and land use planning, (2) environmental protection and its oversight, and (3) promotion of sustainable productive activities. The annual deforestation area was reduced by 84% from 2.77 million hectares in 2004 to 450,000 hectares in 2012. Biodiversity and control over public land have also been improved (Pires and Majano 2015). These measures show how effectively climate change can be tackled and thus reduce the number of refugees caused by disasters. Brazil, under the government of Jair Bolsonaro, is currently undergoing a change of direction in its environmental policy for the Amazon region. It is not yet possible to assess the impact that the politically induced weakening of the Brazilian environmental agency IBAMA, the strengthening of cattle

breeders and plantation owners, and the end of the expansion of protection zones for indigenous people will have on the rainforest and climate change.

CONCLUSION: MIGRATION AS A CONSEQUENCE AND CAUSE OF DEFORESTATION

Deforestation and migration are highly relevant topics in the current Covid-19 context. Not only does Covid-19 affect the quality of life and security of millions of refugees, but also the deforestation of the rainforest (López-Feldman et al. 2020). In 2020, deforestation has increased by 59% in areas with indigenous inhabitants, according to Greenpeace (2020). The WWF (2020) states that the deforestation of the rainforest under Covid-19 has doubled so far. In March alone, the rainforest shrank by 650,000 hectares. Other studies show that the development of virus variants is favored by conducting deforestation (Afelt et al. 2018).

This issue is also highly relevant in the context of climate change. The acceleration of climate change through deforestation is widely accepted and known. This, in turn, leads to climate refugees, and the destruction of the habitat of indigenous peoples. Other starting points for the interaction of deforestation and migration are the conversion of forests into alternative productive activities and the associated loss or generation of jobs. In other cases, people settle in forest-rich areas in search of unused resources. Another possible channel is through remittances leading to income that could be used for or against deforestation.

Using three examples, namely Paraguay, Mexico and Brazil, we have shown that the interactions between migration and deforestation are manifold. Migration can be seen both as a consequence and a cause of deforestation. The exact interactions and causal relationships require further research in order to mitigate the potential negative effects of migration on forests and to reduce the migratory movements generated by deforestation. It is recommended that forests be used in a more productive manner and to internalize forest externalities, such as CO₂ generation and ecological values. Forests play a crucial role in the formation of a sustainable and future-oriented production model.

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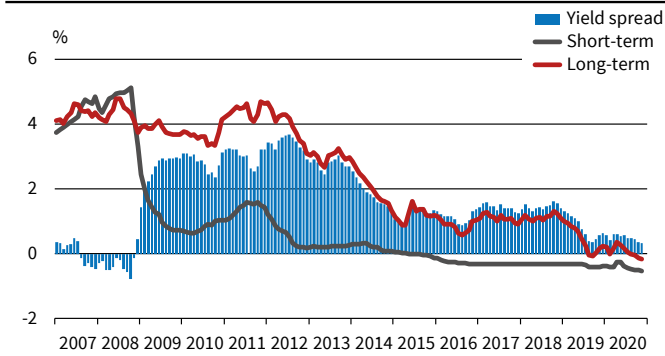
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Statistics Update

Financial Conditions in the Euro Area

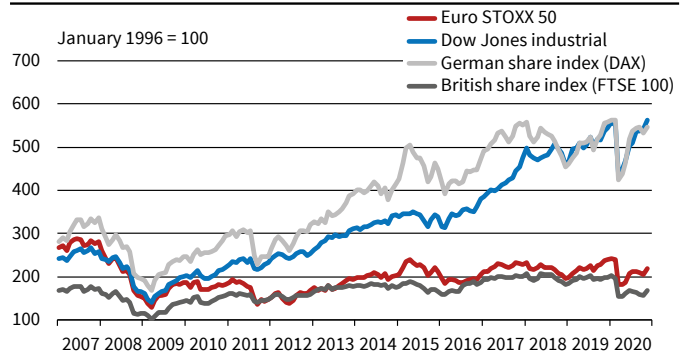
Nominal Interest Rates^a



^a Weighted average (GDP weights).
Source: European Central Bank; calculations by the ifo Institute. © ifo Institute

In the three-month period from September 2020 to November 2020 short-term interest rates decreased: the three-month EURIBOR rate amounted to -0.52 in November 2020, compared to -0.49% in September 2020. The ten-year bond yields also decreased from -0.03% in September 2020 to -0.18% in November 2020, while the yield spread reduced from 0.46% to 0.34% between September 2020 and November 2020.

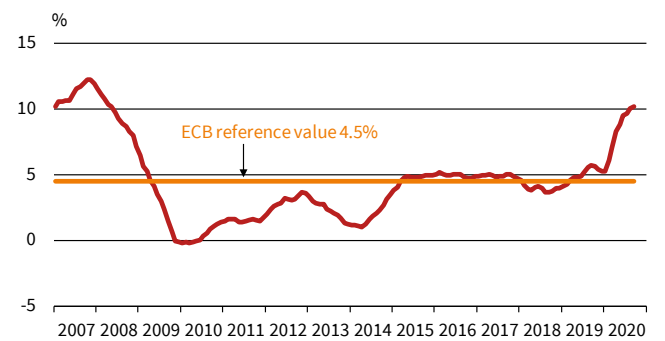
Stock Market Indices



Source: Deutsche Börse; Dow Jones; FTSE; STOXX. © ifo Institute

The global fears about the spread of the Coronavirus, oil price drops caused by an oil price war between Russia and the OPEC countries, and the possibility of a recession led to the stock market crash in March 2020, and global stocks saw a severe downturn in this month. Yet the German stock index DAX grew in November 2020, averaging 12,961 points compared to 12,603 points in October 2020, while the UK FTSE-100 also increased from 5,851 to 6,223 in the same period of time. The Euro STOXX amounted to 3,391 in November 2020, up from 3,180 in October 2020. Furthermore, the Dow Jones Industrial continued to increase, averaging 29,160 points in November 2020, compared to 28,005 points in October 2020.

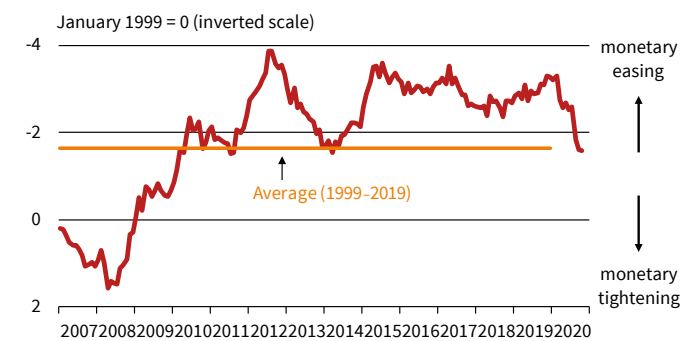
Change in M3^a



^a Annual percentage change (3-month moving average).
Source: European Central Bank. © ifo Institute

The annual growth rate of M3 slightly increased to 10.5% in October 2020, from 10.4% in September 2020. The three-month average of the annual growth rate of M3 over the period from August 2020 to October 2020 reached 10.1%.

Monetary Conditions Index

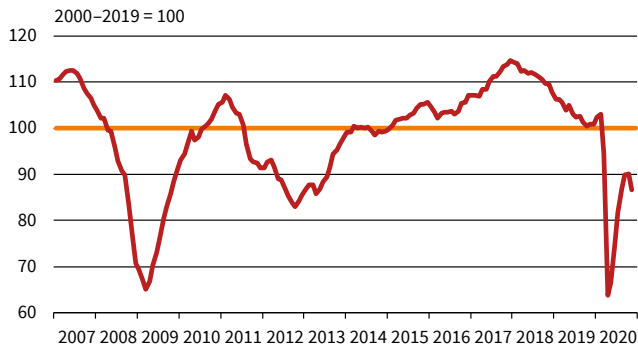


Source: European Commission. © ifo Institute

Between April 2010 and July 2011, the monetary conditions index had remained stable. Its rapid upward trend since August 2011 had led to the first peak in July 2012, signaling greater monetary easing. In particular, this was the result of decreasing real short-term interest rates. In May 2017 the index had reached one of the highest levels in the investigated period since 2007 and its slow downward trend was observed thereafter. A continuous upward development prevailed since October 2018 was abruptly stopped in March 2020 as the Covid-19 crisis started. A continuous decrease of the index was observed also in October 2020.

EU Survey Results

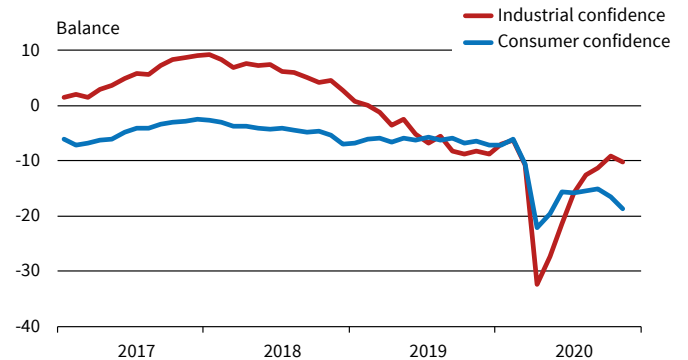
EU27 Economic Sentiment Indicator
Seasonally adjusted



Source: European Commission. © ifo Institute

In November 2020 the Economic Sentiment Indicator (ESI) fell in the euro area (-3.5 points down to 87.6) and the EU27 (-3.6 points down to 86.6). After the recovery of the ESI between May and September and the broad sideways movement in October, the drop is the first one since the indicator fell sharply in the first Covid-19 wave.

EU27 Industrial and Consumer Confidence Indicators
Percentage balance, seasonally adjusted



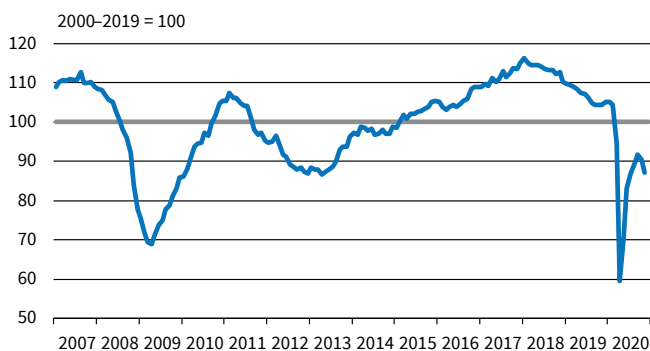
Source: European Commission. © ifo Institute

* The industrial confidence indicator is an average of responses (balances) to the questions on production expectations, order-books and stocks (the latter with inverted sign).

** New consumer confidence indicators, calculated as an arithmetic average of the following questions: financial and general economic situation (over the next 12 months), unemployment expectations (over the next 12 months) and savings (over the next 12 months). Seasonally adjusted data.

In November 2020, the industrial confidence indicator decreased by 1.0 in the EU27 and by 0.9 in the euro area (EA19). The consumer confidence indicator also decreased by 2.2 in the EU27 and by 2.1 in the EA19 in November 2020.

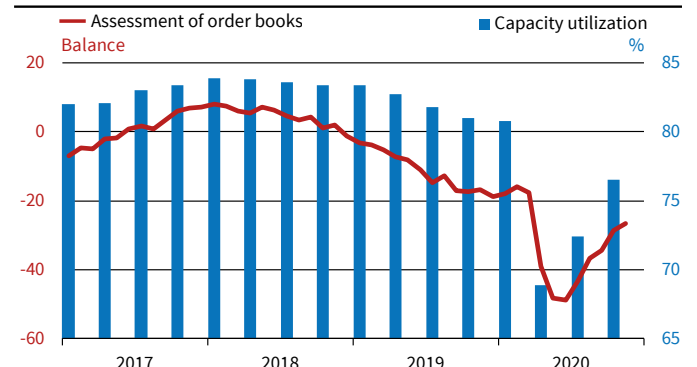
EU27 Employment Expectations Indicator
Seasonally adjusted



Source: European Commission. © ifo Institute

In November 2020 the Employment Expectations Indicator (EEI) posted the second monthly decline in a row (down by 3.3 points in both regions to 86.6 in the euro area and 87.2 in the EU27).

EU27 Capacity Utilisation and Order Books in the Manufacturing Industry
Seasonally adjusted

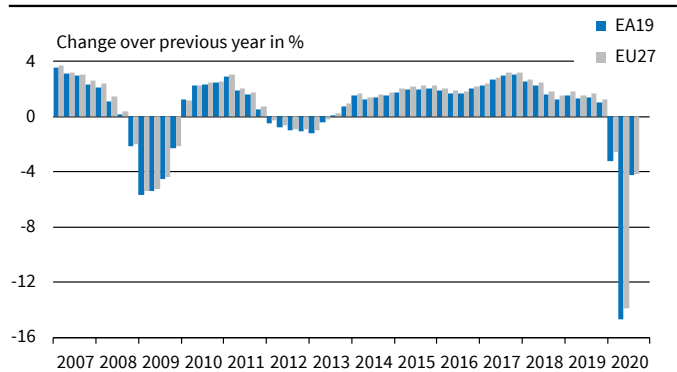


Source: European Commission. © ifo Institute

Managers' assessment of order books reached -26.6 in November 2020, compared to -28.7 in October 2020. In September 2020 the indicator had amounted to -34.5. Capacity utilization stood at 76.6 in the fourth quarter of 2020, up from 72.4 in the third quarter of 2020, again showing the improvement from the Covid-19 shock.

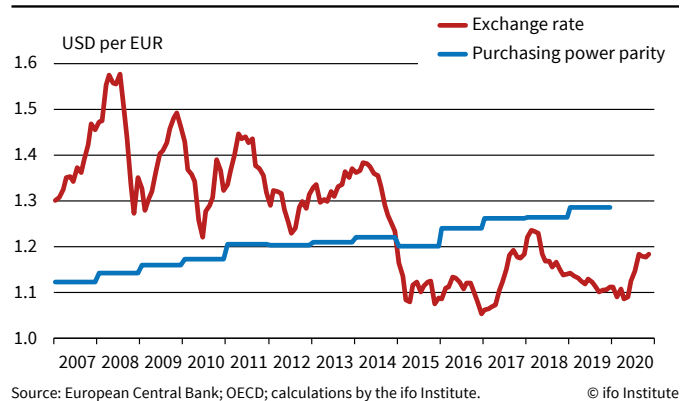
Euro Area Indicators

Gross Domestic Product in Constant 2015 Prices



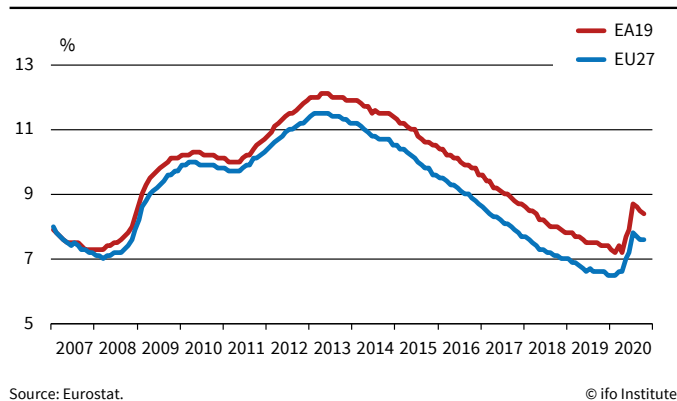
According to the Eurostat estimates, GDP increased by 12.5% in the euro area (EA19), and by 11.5% in the EU27 during the third quarter of 2020, compared to the previous quarter. These were the sharpest increases observed since 1995. In the second quarter of 2020, GDP had decreased by 11.7% in the EA19 and by 11.3% in the EU27. Compared to the third quarter of 2019, i.e., year over year, seasonally adjusted GDP decreased by 4.3% in the EA19 and by 4.2% in the EU27 in the third quarter of 2020.

Exchange Rate of the Euro and Purchasing Power Parity



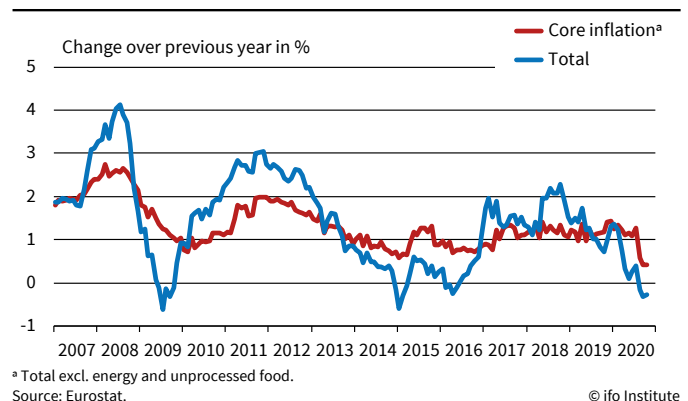
The exchange rate of the euro against the US dollar averaged approximately 1.18 \$/€ between September 2020 and November 2020. (In August 2020 the rate had also amounted to around 1.18 \$/€.)

Unemployment Rate



Euro area unemployment (seasonally adjusted) amounted to 8.4% in October 2020, slightly down from 8.5% in September 2020. EU27 unemployment rate was 7.6% in October 2020, stable compared to September 2020. In October 2020 the lowest unemployment rate was recorded in Czechia (2.9%), Poland (3.5%) and Malta (3.9%), while the rate was highest in Greece (16.8%) and Spain (16.2%).

Euro Area Inflation Rate (HICP)



Euro area annual inflation (HICP) amounted to -0.3% in October 2020, stable compared to September 2020. Year-on-year EA19 core inflation (excluding energy and unprocessed foods) amounted to 0.4% in October 2020, again stable compared to September 2020.