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Path to Recovery: Dangers of Cliff Effects

Compilation of papers



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Path to Recovery: Dangers of Cliff Effects

Compilation of papers

This document was requested by the European Parliament's Committee on Economic and Monetary Affairs.

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The Challenging Cliff-Edge

Charles WYPLOSZ



Abstract

From an economic policy viewpoint, the harder part will come once the pandemic is over. The crisis will leave many scars that are likely to significantly slow growth down. Countering these effects will require continuous and well-targeted fiscal policy support. Monetary policy, which provided adequate support during the crisis, will have to eventually normalise its interest rates. The ECB could play a crucial role in reducing the large debts that fragilize several member countries.

This paper was provided by the Policy Department for Economic, Scientific and Quality of Life Policies at the request of the committee on Economic and Monetary Affairs (ECON) ahead of the Monetary Dialogue with the ECB President on 18 March 2021.

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LIST OF ABBREVIATIONS

APP	Asset purchase programme
ECB	European Central Bank
EP	European Parliament
EU	European Union
GDP	Gross domestic product
GFC	Global financial crisis of 2008
HICP	Harmonised Index of Consumer Prices
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
PEPP	Pandemic emergency purchase programme
QE	Quantitative easing
TLTRO	Targeted longer-term refinancing operations

EXECUTIVE SUMMARY

- **Designing fiscal and monetary policies for COVID-19 times was the easy part.** Fiscal policy options were simple and clear. Monetary policy played a supporting role indeed, all governments in developed countries promptly adopted qualitatively similar measures, although the amounts involved vary significantly. Central banks also broadly moved in the same direction, depending on their starting points. How and when to end these policies, the cliff-edge effect, is much more complicated.
- **Demand after the pandemic may follow a see-saw pattern.** A powerful rebound is expected when households spend the sizeable savings that they have accumulated during the pandemic. Once this is done, however, the recovery might peter out. Governments may be tempted to prematurely withdraw fiscal policy support during the early rebound period.
- **Short-run effects of the pandemic may turn out to be long-lasting because of the scarring effects of the pandemic.** Consumption patterns may have changed and saving may remain high. Unemployment has been remarkably subdued so far but may burst once the support measures come to an end. International trade may be hit by concerns about global chains. Firms may not return to pre-COVID-19 investment spending as many emerge weakened from the crisis or are facing more difficult markets due to changed consumption patterns.
- **The fiscal policy relief measures will have to be withdrawn promptly once the pandemic is over,** not because they require large deficits but because their objectives will not be justified anymore.
- **The purpose of fiscal policy will change.** Relief and recovery supports are quite dissimilar in their aims and instruments.
- **A prompt end to relief measures amounts to a highly contractionary fiscal policy stance.** Monetary policy is unlikely to be able to substitute for an ill-timed retrenchment of fiscal policies. What is needed is that fiscal and monetary policies move in tandem.
- **Monetary policy will have to play a complementary, supporting role to fiscal policies.** It should ensure that the financial markets absorb the impact of pent-up bankruptcies. This will call for a continuation of the current policy: low interest rates, abundant liquidity, support to bank lending and a backstop to public debts.
- **The more difficult part will come later, when the recovery is sustainable.** The ECB should be the first to tighten its stance. After a decade of very low, indeed negative, interest rates, it will have to recover its ability to conduct standard policy by steering its interest rate well above the effective lower bound.
- **However, this will only be possible if fiscal policies play a supporting role to monetary policy normalisation.** That will mean longer-lasting budget deficits, a stance most likely to prove highly controversial.
- **The controversy will centre around the large debts of many countries.** Large public debts are indeed a source of fragility. Currently low interest rates have somehow reduced the risks but they are unlikely to remain so low forever.
- **Reducing public debt should be considered as a serious option.** This can be achieved in the euro area without defaults, without inter-country transfers and without providing incentives for fiscal indiscipline.

1. INTRODUCTION

No one foresaw the COVID-19 pandemic, an event that hopefully occurs once in a century. The measures taken during the epidemic are unprecedented and their consequences are nearly impossible to foresee with any degree of precision. In addition, most less-developed countries will not reach herd immunity for at least another year, possibly more. This will make it possible that further virus mutations will be resistant to vaccines and treatments. Uncertainty remains a major difficulty for policymakers, both as they manage the sanitary crisis and as they look forward to what comes next.

Sometime later this year, we can hope that all of Europe will have reached herd immunity. Thanks to the widely adopted relief policies so far, the economic damage will have been limited. Current policies, however, will not be justified anymore. The combination of scarring – long-lasting effects of the crisis – and high uncertainty means that policymakers must stand ready to introduce recovery policies at the time when they withdraw the pandemic-relief policies if we want to avoid a cliff-edge effect that provokes a new recession on the heels of the previous one. This can be challenging.

Section 2 briefly reviews the relief policies, focusing on their legacy. The next two sections examine which policies are likely to be needed. Starting with fiscal policy, Section 3 lists the possible scarring effects that will have to be dealt with and then details the dos and the don'ts of post-pandemic measures aiming at making the recovery sustainable. It argues that the relief policies must come to be replaced by other, equally-forceful policies. Section 4 looks at monetary policy. Paradoxically, since the post-pandemic situation could be characterised by demand shortfalls, monetary policy should be in the front seat but is unlikely to be in a position to do so. The reason is that its interest rate has reached its effective lower bound and that liquidity is already plentiful after years of the massive asset purchase programmes. The paper makes two points: the current stance must be maintained until the recovery is sustainable but then the ECB should move to escape the effective lower bound trap. The last section concludes.

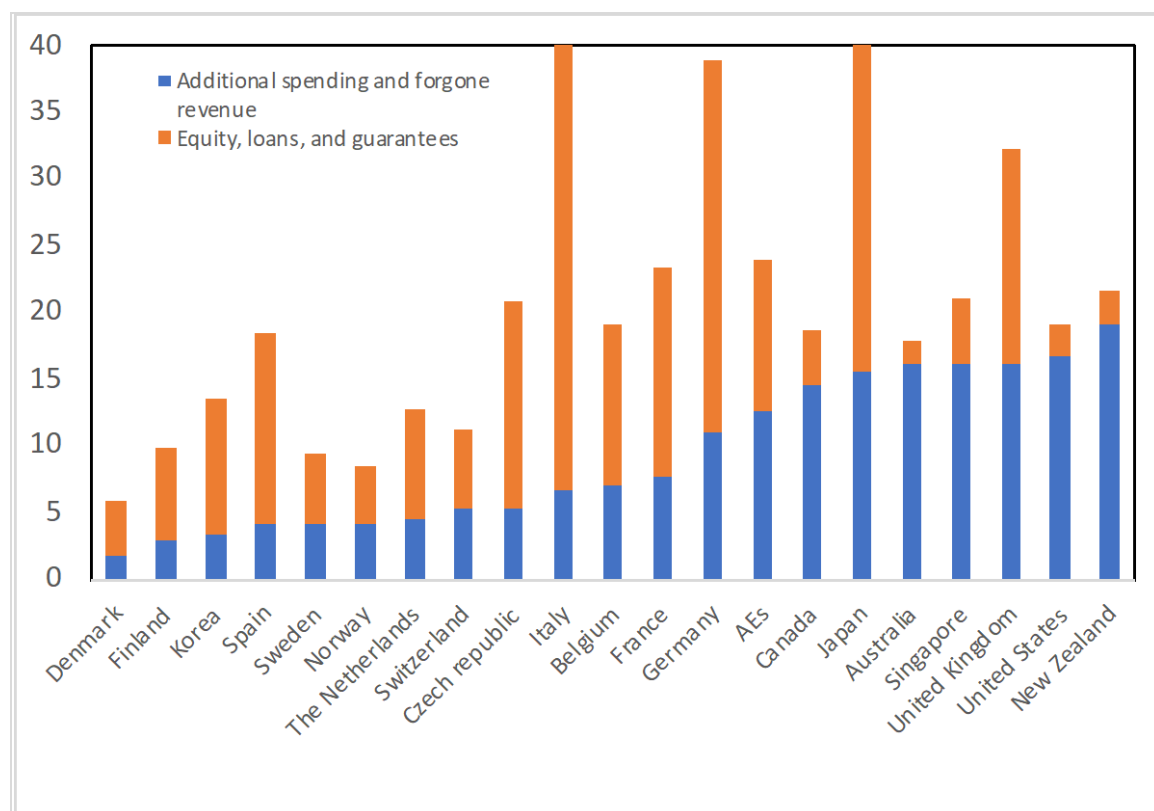
2. BRIEF REVIEW OF EXPIRING POLICIES

2.1. Fiscal policies

From the start of the pandemic, most developed countries have taken strikingly similar fiscal policy measures. The need to protect people and firms from the consequences of the pandemic and, especially, from the extensive sanitary measures decided by the authorities, was easy to recognise. The IMF's *Fiscal Monitor* provides an updated detailed list of these measures for a selection of countries. The costs of these measures are reported in Figure 1. The figure distinguishes between measures that directly affect the budget (spending less taxes) and various guarantees which may or may not eventually entail costs and yet provide relief. The countries are ranked according to the direct budgetary costs.

The difference in the uses of additional net spending and guarantees is striking. Net spending immediately increases the public debt while guarantees may add to debt sometime in the future. In many countries, especially in Italy, Germany and Japan, the bulk of assistance is provided through guarantees. This is also the case in the Nordic countries (Denmark, Finland, Sweden and Norway) where direct relief spending is limited; one reason is that these countries have powerful welfare systems which imply automatic "additional spending", without needing strong discretionary measures. At the other end of the spectrum, New Zealand, the US, Singapore, Australia and, to a lesser degree, the UK have massively raised direct spending with much more limited guarantees.

Figure 1: Costs of policy measures in selected advanced economies (% of GDP)



Source: Author's own elaboration from *Fiscal Monitor Update*, IMF, January 2021.

Notes: Data collected until end of December 2020. AEs: average of advanced economies.

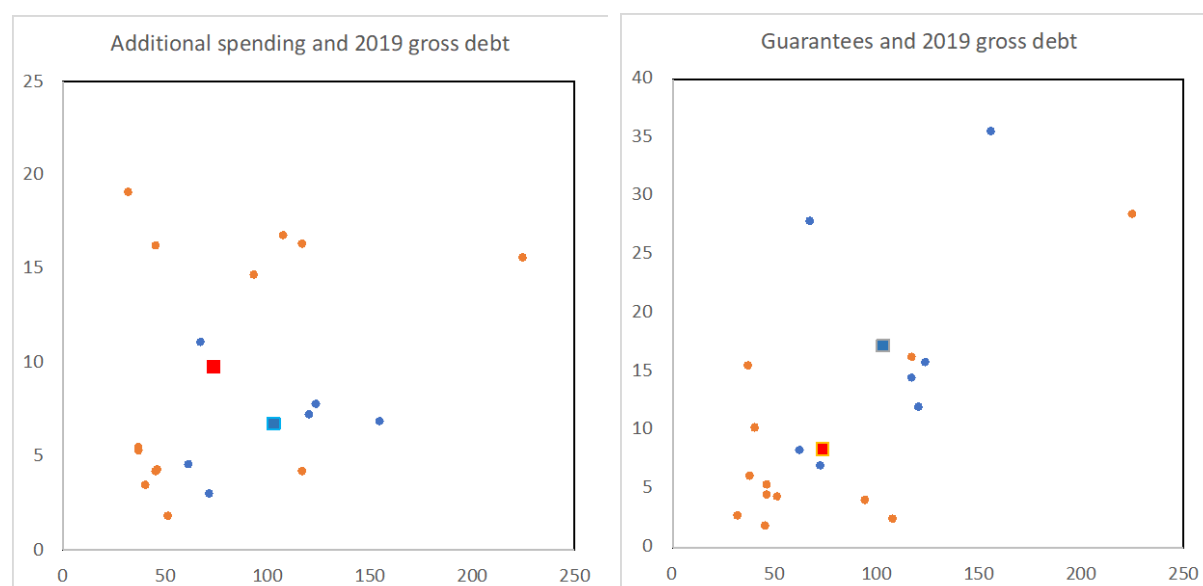
Figure 2 compares additional spending and guarantees to the pre-existing gross debt ratio in 2019. The number of countries in the Fiscal Monitor selection is too small to allow for statistical tests but there is some indication that large pre-existing debts tend to reduce the use of additional spending and to enhance recourse to guarantees. The comparison of euro area and non-euro area countries is interesting. On average, the non-euro area countries started with less debt and made use of larger amounts of additional spending and less guarantees.

A possible interpretation is that central banks outside the euro area implicitly provide a backstop for their governments while the backstop must be explicit in the euro area. In the event, the ECB has expanded its purchases of public debts, tilting it to the more indebted countries through the pandemic emergency purchase programme (PEPP), in effect indirectly financing most of official borrowing over 2020.

Alternatively, this may be the result of the perverse effects of the Stability and Growth Pact, even though it has been suspended until end of 2021. If so, it would serve as a stern warning that the pact must be profoundly transformed before it is reinstated.

Yet another interpretation is that governments saddled with large public debts inherited from the past fear of market reactions to large additional borrowings. This interpretation strongly suggests that debt restructuring was needed after the euro area crisis started in 2010. Unfortunately, this option was quasi-unanimously rejected, sometimes put down for later under the assumption that the future will be easier than the past. This issue is taken up in Section 4.4.

Figure 2: Costs of policy measures and gross debt in 2019 (% of GDP)



Source: Author's own elaboration from *Fiscal Monitor Update*, IMF, January 2021, and *Economic Outlook*, OECD.

Notes: Data collected until end of December 2020. Euro area countries in blue, non-euro area countries in red. Large squares represent unweighted averages.

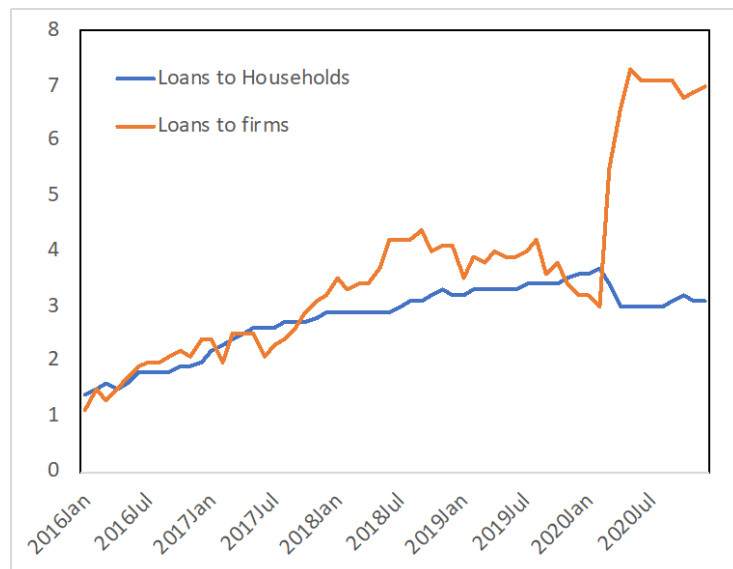
2.2. Monetary policy

The pandemic hit at a time when monetary policy was already in a bind. Since September 2019, the interest rates were set at what probably is the effective lower bound. Even though the ECB has regularly

stated that it stands ready to lower them further, it has not done so since then. Instead, the ECB has expanded its existing asset purchase programmes and created new ones to reach unprecedented levels. The PEPP provides a backstop to national public debts, and the targeted longer-term refinancing operations (TLRO) that lends at -1%, below the deposit rate of -0.5% to banks that increase their loans.

Clearly, the ECB is doing what it can but it has limited firepower and, more importantly, it is not evident what more it can do. The recession brought about by the pandemic shock is not a classic event. When people stay at home and important segments of businesses are not allowed to operate, lower interest rates and abundant credit availability can, at best, prevent further declines. Figure 3 shows that bank loans to households have fallen by very little. Loans to non-financial corporations have sharply increased but the likely cause is that governments have offered large guarantees that made granting loans riskless to banks. Alongside fiscal measures, these loans helped firms to survive during the pandemic, as intended. Of course, ample availability of cash by the ECB also helped in the relief effort.

Figure 3: Banks loans in the Euro Area (% annual increase)



Source: Author's own elaboration from ECB data.

2.3. Coordinated fiscal policy

The real innovation has been the Europe-wide recovery plan under the label NextGenerationEU. It will be financed by collective borrowing and will provide more loans to those countries that may find it difficult to borrow, at least at low costs. These loans are expected to come on stream in 2021 and to spread over 2022. While the overall amount is significant, the time line of deployment is subject to substantial uncertainty.

3. FISCAL POLICIES AFTER COVID-19

Perhaps too optimistically, it is assumed here that normal economic life will return in the second half of 2021. As it happens, the exceptional relief policies mentioned in the previous section will not be needed anymore. The essential question is: will governments need to then focus on closing the budget deficits and roll debts back or will they have to use fiscal policy to sustain the recovery? The answer depends on whether the recovery will be self-sustained or not. Starting with a methodology issue, the next section looks at four reasons why the recovery might be short-lived.

3.1. Scarring effect: short-run vs. persistence vs. hysteresis

When economists look at disturbing events, usually labelled “shocks”, they usually ask whether the impact will be short-lived, or whether it will be long-lived but eventually dissipate, being persistent, or else whether they will leave a permanent imprint, a case of hysteresis.¹ For instance, when popular discussions of the COVID-19 pandemic claim that “the world will never be like before” for a large range of issues, they implicitly assume hysteresis.

This three-way distinction is crucial for policy purposes. Short-term cases can be treated with measures designed with business cycles. Persistence calls for policies that accelerate adjustments. Permanent effects that cannot be avoided require relief measures. Unfortunately, it is sometimes quasi-impossible to nearly classify events in these categories. Indeed, the borders between these categories are fuzzy. How long is the short run? Is persistence over several decades really different from permanence? Even when the borders can be defined precisely, the instruments available to economists rarely allow us to reach black-and-white conclusions. As an example, for decades now, statistical techniques have been used to distinguish between cyclical effects and trend changes. Box 1 illustrates these difficulties by looking at the broken transmission by financial markets of monetary policy to the real economy in the wake of the global financial crisis (GFC).

A specific difficulty is that short-term disturbances that normally have short-term effects, can leave a permanent impact under particular circumstances. For example, a cyclical downturn is expected to be accompanied by temporary increases in unemployment. However, it has long been suspected that people who remain unemployed for a while find it near impossible to find jobs during the ensuing cyclical upswing. Hysteresis thus transforms short-term effects into permanent ones, sometimes just persistent.² This is what current discussions about “scarring” now consider.

¹ Some authors consider that both persistence and permanence are cases of hysteresis. Here the term is used to describe cases of permanence, not persistence.

² Classic references are Blanchard and Summers (1986) and Ball (2009) for labour markets and Dixit (1992) for corporate investment.

Box 1: The global financial crisis

The global financial crisis of 2008 fragilized the financial sector. A decade later, the financial sector was still not fully transmitting monetary policy actions. This is why central banks were still keeping in 2019 their interest rates at their effective lower bounds – sometimes negative – and were often pursuing quantitative easing (QE). This impact is certainly not short-run but is it persistent or permanent?

In order to answer the question, we need to understand why it is happening. The problem is that there are many possible culprits. First, regulation has changed to reduce the odds of facing a similar financial crisis again. The Basel Committee has made proposals, adopted in one version or another in a large number of countries. These measures require banks to act more prudently than before, which has changed the impact of monetary policies. If that is the story, the shock had short-lived effects but the ensuing regulations have permanently affected the financial sector.

A second interpretation is that the shock has led financial institutions to change their business models to protect their shareholders from huge potential losses, and this irrespective of the new regulations. This would be a permanent effect but it is possible that these changes have been a response the regulations.

Third, it takes time for badly-hurt financial institutions to clean their balance sheets up. Some financial institutions quickly bounced back while others are still reeling from the crisis: persistence for some institutions and short-run adjustment for others.

Fourth, facing a different financial sector, central banks have changed the way in which they operate as they tried to restore monetary policy effectiveness. These nonstandard tools, in turn, have profoundly affected the structure of the financial sector. If central banks eventually return to their standard mode of operations, we will have seen a case of persistence, but it could be permanent if the central banks make permanent use of their nonstandard tools.

Finally, even if regulations have played a major role, they may be changed again, possibly back to what they used to be. Alternatively, the enforcement of the rules may become weak, as has been the case in the US under the Trump administration. Permanence may dissolve into persistence.

3.2. Short-run dissaving and private investment

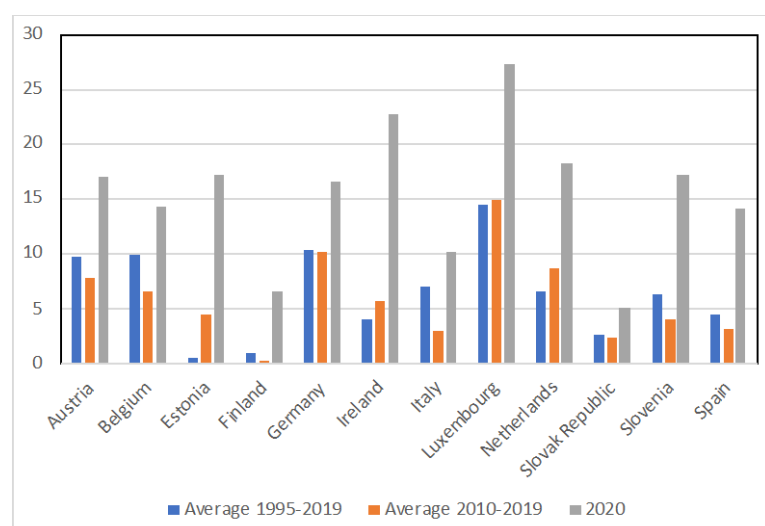
Locked down at home and yet still receiving salaries, with stores selling “non-essential goods” shut, a large number of households have increased their saving rates. Figure 4 documents this effect for European countries where data is available. In virtually all cases, the increase is very significant.

It is widely expected that much of the accumulated savings will be spent once all stores reopen for good and people can move freely and without fear of being infected. Spending could jump above pre-COVID-19 levels by as much as 10% of GDP, or more. The result would be a very large bounce back of GDP, to levels comparable to the pre-COVID-19 situation.

Like households, firms have cut down on productive investment in 2020. As they face a resurgence in demand, they could quickly respond by raising spending on investment. This would further add to the immediate post-COVID-19 growth rate.

Assuming that these widely-shared predictions occur, there would be no need for supporting fiscal policy. Instead, this could be a good time to close down the COVID-19-era budget deficits. Such a conclusion is likely to be misguided.

Figure 4: Household saving rates (% disposable income)



Source: Author's own elaboration from data from *Economic Outlook* database, OECD, December 2020.

3.2.1. Household savings

Accumulated savings offer the opportunity for a strong rebound but they are finite. Once they have spent those savings, what will household do? If they return to the pre-COVID-19 pattern, overall growth will do so too and the recovery will be under way. However, less favourable scenarios can be entertained.

- The pandemic is not over. Not all countries will get rid of the coronavirus at the same time. Europe and other developed countries will probably reach a reasonable level of collective immunity before the end of 2021 but it will take much more time in the developing world. The virus will remain active there and it will keep mutating. Whether or not these mutants are resistant to existing vaccines and treatments, the fear factor will remain. In that case, a large number of households will save for an uncertain future.
- Even though many households were reasonably well protected from the impact of the pandemic, some were not. Either they did not save at all, or borrowed from family and friends.
- As discussed below, unemployment may surge, which will make households prudent and encourage keeping a part of accumulated savings.
- There is some evidence that people who suffered hardship (wars, financial crises) become more prudent and save more throughout their lifetime.

The first three possibilities suggest persistence, the last one corresponds to hysteresis. These just are just possibilities, but policymakers will need to be ready to deal with their negative impact on growth.

3.2.2. Corporate investment

Firms in the negatively-affected sectors had clearly no reason to invest. A quick dissaving boom could radically change the situation. As with household consumption, some less encouraging scenarios are plausible.

- Many firms may have enough production capacities to meet the temporary surge in demand. Furthermore, they may adopt a wait-and-see approach if they are unsure about the duration of the consumption boom.
- Many firms have benefitted from low-interest loans guaranteed by their governments. They took out these loans as a precaution or as a mean for survival. As they emerge seriously weakened and more indebted, they may be unable to invest, often because banks will be reluctant to extend new loans.
- In normal times, on a continuous basis, some firms become bankrupt while new ones are created. During the pandemic, much of this churning has come to a halt, in part because of government support. Once the support stops, the number of bankruptcies is expected to suddenly rise. On the other hand, the creation of new firms takes time and may be reduced by the general uncertainty that will prevail.
- During the pandemic period, we have seen sizeable reallocation of demand across firms and sectors. The firms that benefitted from this reallocation have been investing quite heavily and will need little new investment once the pandemic is over, especially if some of the reallocation is undone.
- When investment is depressed for a sustained period of time, the production potential declines, which reduces demand, which further deters future investments.

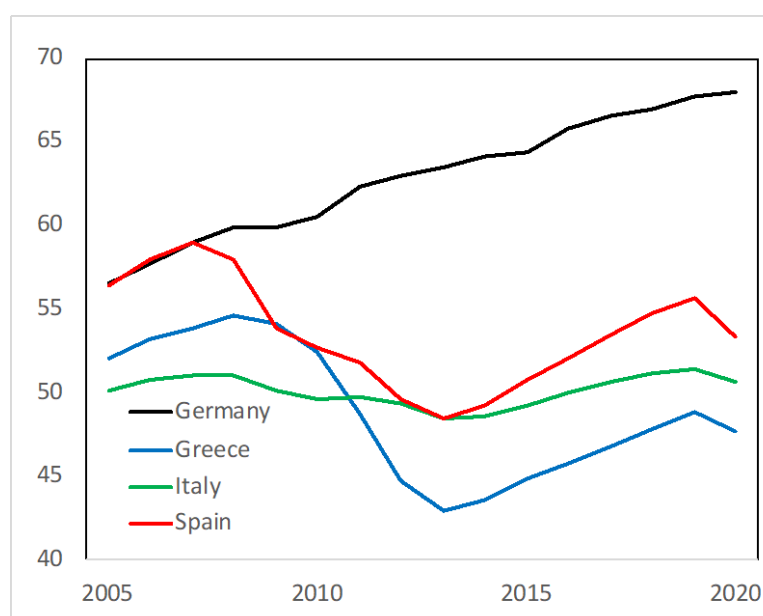
The first three possibilities suggest persistence, the last two correspond to hysteresis.

3.3. Hysteresis in labour markets

Labour markets are known to be particularly susceptible to exhibit hysteresis. Workers who lose their jobs often drift away from employability as their skills, contacts and other attachments to employment wither away. An additional factor is the end of eligibility to unemployment benefits. A big and lasting shock disenfranchises many people who quit the labour force as they give up on their chances of finding jobs, a process that often affects women. Conversely, a vigorous boom may bring back to the labour force people who had previously left.

Measures like the rate of unemployment fail to detect this phenomenon because it relates the number of unemployed people to the size of the labour force. Hysteresis implies that the numerator and the denominator both move in the same direction. Figure 5, instead, looks at the ratio of the number of employed people to the total population of working age. For a few selected countries, it looks at the impact of the GFC (2008-9) followed by the euro area debt crisis (2010-12) on the labour markets. In Greece and Spain, which were badly hit by the crisis, the employment rates strongly declined. They partly recovered after the crises but, nearly a decade later in 2019, they were still significantly lower than in the mid-2000s. The contrast with countries that were not adversely or little affected, such as Germany and Italy, is very visible.

Figure 5: Employment rates (% of labour force)



Source: Author's own elaboration from data from *Economic Outlook* database, OECD, December 2020.

Note: The employment rate is the ratio of the number of employed people to the working age population (15-74 years old)

One reason why Germany fared well is that it benefitted from strong demand for its cars and machinery from China, which was quickly growing at the time. Another reason is that it adopted the *kurzarbeit* scheme, which subsidized firms to retain workers rather than to dismiss them and trigger the hysteresis effect. Importantly, this scheme has been widely used during the pandemic crisis, which explains the limited increases in unemployment so far. However, these subsidies should end when the distancing measures are not necessary anymore. A consequence would be widespread dismissals of workers. The risk is that a key benefit from the *kurzarbeit* scheme, preventing the employment hysteresis effect, could go wasted if the cliff effect is not prevented. A long-lasting, possibly permanent decline in employment would have an equally long-lasting adverse impact on economic growth.

3.4. Hysteresis in sectoral structure

Section 3.2.2 notes that the pandemic is provoking a reallocation of activity across sectors. There is also much discussion about how the global supply chains have been deeply disturbed during the crisis. It is an open question whether these changes will become permanent. Arguments cut both ways.

For example, the lack of basic inventories of medical instruments and products at the start of the pandemic has prompted discussions in Europe on the need to be able to produce strategic goods locally. Likewise, the breakdown of global supply chains has exposed the depth of the interdependence inherent to global integration. But, hopefully, the pandemic is a once-in-a-century event. If so, it is unclear that firms will spontaneously opt for less efficient modes of production. On the other hand, governments may wish to draw lessons from the pandemic and decide on specific measures.

On the demand side, there might be more scope for hysteresis or, at least, persistence. This possibility can be examined with a few examples, noting that much more may be going on outside the radar screen.

- Many people have discovered on-line shopping.

- Corporations have replaced travels with video conferencing.
- Working from home, a rather rare practice, has become widespread, exposing both its limits and advantages.
- Individual transportation modes (bicycles, scooters, etc.) have replaced public transportation.
- There is early evidence of people leaving city centres and migrating to suburbs.
- Global tourism will be reduced as long as the virus is still active in parts of the world where vaccination lags, possibly encouraging tourism elsewhere.

Some of these new habits may well persist, partly at least. It also remains to be seen whether these changes will have lasting effects on the economy as a whole. The existence of fixed costs suggest that overall shorter-run effects may be sizeable.

3.5. Implications for fiscal policies

Table 1 summarises the discussion on potential scarring effects. A “+” indicates that there could be an expansionary effect once the pandemic is over, while a “-” suggests a contractionary (scarring) effect. It is not certain at all that the effects will be present, not even that their signs will prove to be correct. The uncertainty is large, because we have not seen such a serious pandemic for a century, and because previous pandemics were not supported by policy interventions, certainly not of the size that we have seen this time around. A reasonable conclusion, which is largely shared at this stage, is that the widely expected powerful rebound will be short-lived and could be followed by a lasting period of weak, possibly negative growth.

Table 1: Potential scarring effects

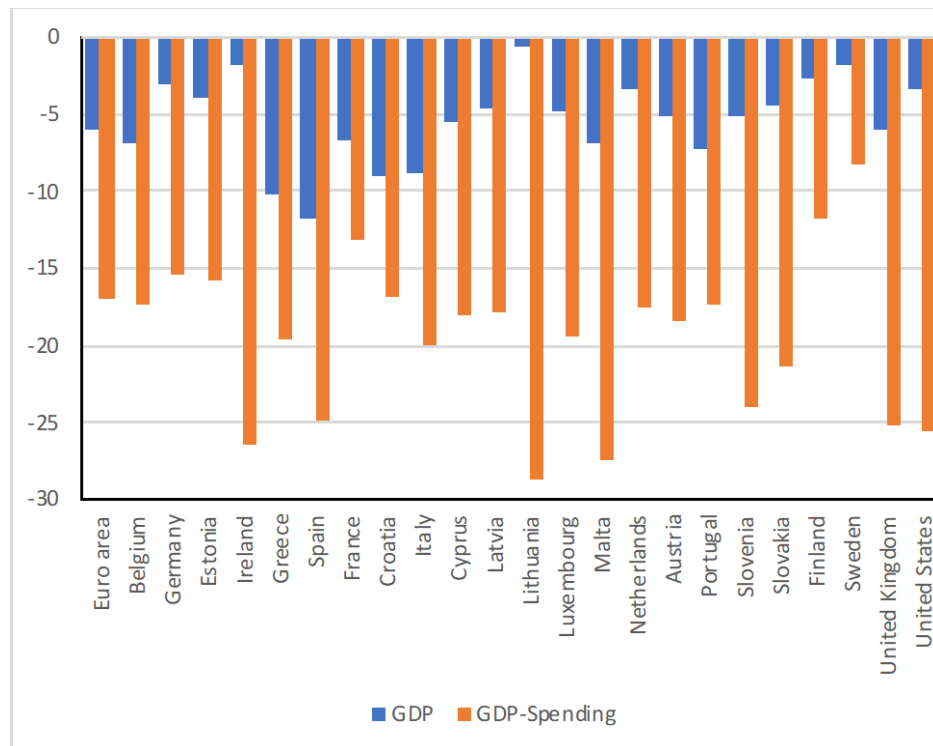
	Short-run	Persistence	Hysteresis
Large accumulated savings	+	-	
Corporate investment		-	-
Labour employment	-	-	-
Sectoral reallocation	+	-	

Governments must therefore prepare to deal with a possible slowdown following the initial rebound. Indeed, one key downside with fiscal policies is that they are long to put in place and to implement. This is crucial since monetary policy is unlikely to make a contribution, as explained in the next section.

The first step is to ensure that the end of the support measures, the cliff, does not cause a recession, which could be severe. The fall in GDP growth in 2020 is spectacular, but it would have been much worse without these measures. It will take time and careful work to estimate what has been achieved. Figure 6 accordingly presents a very rough estimation. The idea is that the support measures took mostly the form of transfers to people and firms. In that sense, they directly contributed to raise the GDP. Figure 6 simply deducts the additional public spending shown in Figure 1 from actually measured GDP growth. It ignores the state guarantees (shown in Figure 1), the automatic stabilizers, the fiscal multipliers and the impact of monetary policy. This calculation suggests that, absent the support measures, the fall in GDP would have been massive. For example, looking at the euro area as a whole,

current estimates indicate that the GDP growth rate was -6%; according to the calculation, it would have been -17% without the support measures.

Figure 6: A rough estimate of the effect of support measures in 2020 (%)



Source: Author's own elaboration from data from Figure 1 and AMECO on line database, European Commission.

Note: The blue bars represent actual GDP growth, the orange bars represent GDP growth less the support measures.

- This calculation is meant to indicate that the removal of the support measures will have a sizeable negative impact on growth. If enacted in one step, they could wipe out the effect of expected dissaving. It is not an argument for maintaining the support measures. These targeted measures were designed as a relief from the economic impact of the pandemic and the accompanying social distancing measures. Most of them will become pointless, and possibly counter-productive inasmuch as they contribute to freeze the situation and prevent necessary adjustments (the often-mentioned "zombie" problem). Rather, it is an argument for substituting different new measures at the same time as removing the previous ones. The far from exhaustive list of desirable measures, suggested by Table 1, includes:
 - Unemployment benefits. If, as expected, a large number of people lose their jobs, unemployment will soar. If the unemployment spell lasts more than during a normal business cycle, the duration and generosity of unemployment benefits must be temporarily extended. Announcing such measures early stands to prevent a serious dent in the rebound.
 - Many firms will emerge from the crisis badly scarred. The challenge is not to prolong the life of "zombie firms" while helping those that are and will be profitable. A solution is to provide partial guarantees for further bank loans. Sharing the risks with banks, and letting banks decide, should reduce the odds of protecting zombie firms.

-
- Personal tax reductions, if well targeted to the less well-off, would strengthen the dissaving process. These reductions should be temporary with firmly spelled out termination dates.
 - Similarly, temporary investment tax credits stand to encourage firms to anticipate future spending on productive equipment. It could also help with the sectoral allocation.
 - Moving up spending on climate change is another possibility. However, much of the necessary spending requires a long-run undertaking, not a temporary one. In addition, the maturation of projects will be long, possibly extending beyond the horizon during which recovery support will be needed.

The last observation points toward an important consideration. A number of precautions must be taken to avoid inasmuch as possible, wasteful or lagging measures. If the replacement spending is large enough, and the Biden plan in the US provides an idea of what will be needed, governments will come under intense pressure from interest groups. A few principles are worth being recalled.

First, by definition, recovery policies must be strictly temporary. They will need to be stopped once a sustainable recovery is in place, and this will be the time when closing deficits and reducing public debts will finally become a priority. It follows that all recovery measures must be easy to roll back. Importantly, they should not be entitlements that become impossible to renege upon.

Second, long-run policies should be treated apart. NextGenerationEU has identified climate change and artificial intelligence as key priorities. Both objectives will have to be sustained for many years to come. They are not well adapted to serve as recovery policies. As indicated above, moving these policies forward can help with the recovery but this is likely to be the exception rather than the rule. The risk here is that NextGenerationEU and other structural policies are counted as part of the recovery package, are not rolled out soon enough and leave the economy stagnating. In addition, given their duration, these policies should be fully financed and not reliant on continuing deficits.

Third, the reallocation process means that certain activities will shrink. The recovery policies should not slow the shrinkage process down, for fear of locking human and financial resources in the wrong places. For instance, if travel is set to decline permanently, airlines and airplane-building should not claim public resources.

4. MONETARY POLICY AFTER COVID-19

During the pandemic crisis, the ECB's nonstandard instruments have assisted fiscal policy, with little direct impact. Indeed, as already noted, the economic crisis provoked by the pandemic was not a classic cyclical downturn prompted by a demand shortfall that monetary policy can counteract. Both demand and supply went down when people and many firms were locked down for sanitary reasons. Bringing them up was not desirable, indeed it was impossible. Furthermore, standard monetary policy had reached its limits before the onset of the pandemic.

Yet, the ECB has deployed its nonstandard instruments to support fiscal policy during the crisis. It did so, first and foremost, by making sure that there would not be a financial crisis. This called for ample liquidity provision through the various pre-existing asset purchase programmes. With its new LTRO programme, it also ensured that bank lending conditions were as favourable as possible. Finally, and crucially, it offered a backstop to public debts, especially to the highly-indebted countries through PEPP, thus making it possible for all governments to deploy fiscal policies.

When the sanitary crisis comes to an end, the ECB will still be stuck with its interest rate at the effective lower bound and ample liquidity will already be available. Once again, monetary policy will only be able to support fiscal policies for the recovery. At the same time, it will have to escape its low-for-long interest trap, a daunting challenge.

4.1. Support for fiscal policies

Section 3 makes the case for maintaining large budget deficits to support the recovery, which could take a couple of years or more. Much of this effort will address demand shortfalls, which is something that central banks can do, assuming that they have the necessary instruments. The task of the ECB will be, therefore, to keep interest rates low for even longer and to ensure that liquidity remains ample. It already indirectly financed much of public borrowings in 2020 and should continue to do so. It should also continue to backstop public debts with PEPP, possibly renamed to signal the duration of the programme. It may also encourage banks to lend with its TLTRO programme.

4.2. Financial stability

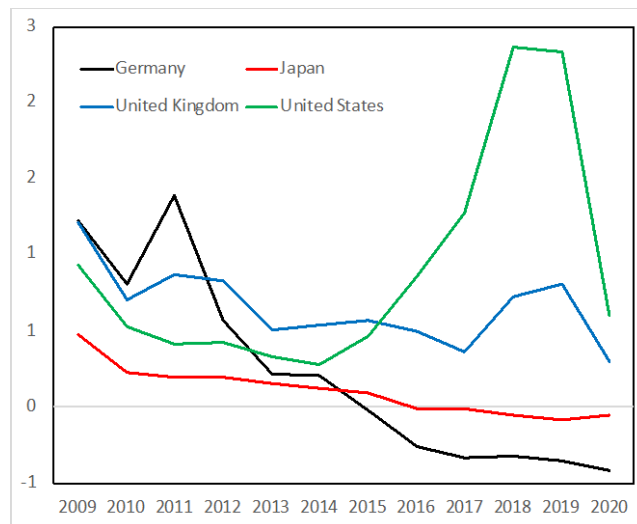
Financial stability may require further action. Many bank loans granted during the pandemic have benefitted from public guarantees. Eventual defaults will become public liabilities and increase the budget deficits, thus avoiding financing fragility. However, the reallocation process described in Section 3.4 implies that borrowings by declining firms may sour. In its role as Single Supervisor, the ECB is keenly aware of these risks. The problem is that the bank resolution system is incomplete and may be unable to effectively deal with a wave of serious difficulties.

As it stands, national governments have to face the costs of bank resolution. This arrangement implies that bank failures become government liabilities. Highly indebted countries may come under pressure, as we saw after 2010. Whether it likes or not, the ECB is the lender in last resort. Last time, it took several years for the ECB to rise up to the task. The existence of a public debt backstop is now in place and should remain in place. More innovative would be lending in last resort to banks. This would require a fully-worked out agreement between the ECB and member governments such that the central bank provides emergency liquidity while the risks remain at the national level. This would require the completion of the resolution system.

4.3. Normalisation

For nearly a decade, the euro area has joined Japan in keeping its interest rates low, even negative (Figure 6). In contrast, the UK and the US managed to lift them up during the mid-2010s, which provided them with quite some room for manoeuvre when the pandemic hit. A similar observation concerns the sizes of the central bank balance sheets.

Figure 7: Short-term (3 months) interest rates (%)



Source: Author's own elaboration from data from *Economic Outlook*, OECD, December 2020.

Why did the ECB and the Bank of Japan fail to move toward normalisation? It is a complicated issue that goes far beyond the scope of the present paper. One interpretation is that the neutral real interest rate has declined, which is critically discussed in Box 2. This popular assumption is not considered here. Without resorting to hindsight, it remains that the intention never was to keep interest rates so low for so long. It may have been assumed that normalisation could wait under the assumption that the situation would gradually improve. It did not, and monetary policy has become largely impotent in the euro area.

One lesson is that fiscal and monetary policies must be better coordinated.³ More supportive fiscal policies would have made it possible for monetary policy to be less expansionary. Looking forward, an additional benefit from active fiscal policies would be to create the space for the ECB to finally normalise its interest rate. This may well happen in the US.

Raising the interest rate is bound to be a delicate step, though, since it will increase the cost for governments to borrow. Initially, it will not have a strong impact on the cost of servicing the accumulated debt because most governments have borrowed long term at fixed rates. Still, if the interest rate is increased while the budget deficits are still large, it could be put some governments in an uncomfortable position.

Hence the view that the ECB would not normalise until after the deficits have been significantly reduced. The risk is that, once more, many governments procrastinate, especially in already highly indebted countries. This would leave the ECB hostage to a deficit reduction that is delayed. Financial

³ Bartsch et al. (2020) develop a "new view" on how to think of cooperation between fiscal and monetary policies.

stability would be the argument in favour of not raising the interest rate. Much the same applies to the reduction of the central bank's balance sheet.

An alternative timing would see the ECB move first, before governments have cut their deficits. The ECB would raise its interest rates well above the effective lower bound, recovering its ability to counteract the next downturn. The recovery would be supported by fiscal policies alone, taking into account the changed monetary stance, which is likely to exert a contractionary impulse. The ECB would maintain its backstop of public debt to reassure governments and financial markets while interest rates are normalised. The idea that fiscal policies should create space for monetary policy normalisation means that governments continue their efforts to support a fragile recovery longer and stronger than usual.

Box 2: The neutral real interest rate hypothesis

The neutral real interest rate is defined as the real rate such that monetary policy is neither expansionary nor contractionary when it is reached. A substantial literature asserts that it has significantly declined since the 1980s and is now possibly negative (among many others, see Laubach and Williams, 2003; Summers, 2014). Many reasons are provided, ranging from excess world savings to declining productivity gains or to demography.

This assumption is currently in vogue. It implies that, to just have a neutral policy, central banks must keep their interest rates very low or even negative, which matches the recent experience. Critics, however, contend that the evidence is weak and sometimes contradicted (a good review is provided by Borio et al., 2019). The intriguing counter-argument is that low for long interest rates lead to low estimates of the neutral real interest rate, which in turn leads central banks to keep their interest rates for long.

4.4. Public debt reduction

Very large debts fragilize countries because they are open to adverse market reactions. The debt crisis has already shown how the financial markets can suddenly panic, moved by small events. For this reason, reducing large public debts should be actively considered. A natural solution would be to reduce public debts at once, without waiting for the many years required to bring them down through sustained budget surpluses.

Public debt reduction is contentious, for good reasons. First, most governments rightly consider that public debts must be honoured. A default stands to undermine the reputation of a country and to hurt those who hold the debt, private citizens and financial institutions. Within the euro area, there is the additional fear that it would hurt the reputation of all member countries. Second, if the ECB is then forced to intervene, low-debt countries fear that the result would be income transfers to the high-debt countries, which they rightly refuse to contemplate. Third, the risk is to create a precedent that would undermine fiscal discipline in the euro area.

These considerations are correct, but a collective debt reduction programme does not have to involve defaults or income transfers, nor to create a precedent. The PADRE (Politically Acceptable Debt Restructuring in the Eurozone) plan of Pâris and Wyplosz (2014) avoids all three pitfalls. In brief, it works as follows.

- The ECB (or another European institution) purchases significant amounts of national debts at market price, in proportion to the central bank's shareholding key. It then transforms these debts in perpetuities that serve a zero-interest rate, in effect wiping them out.
- Inasmuch as the purchased debts yield a positive return, this transformation inflicts a loss to the central bank. It will reduce the ECB's profits but this will be at governments' expense since the profits are redistributed to national central banks according to the shareholding key, which then pass their own profits to their own governments. In that way, each country will end up reimbursing the ECB for its losses, without any inter-country transfers.
- In practice, the ECB would stop paying all member countries any profit until the losses are fully reimbursed. In this way, the debt reduction ends up being fully paid by member governments, but slowly over time. This process could take decades. Declining national public debts would eliminate the spectre of a debt crisis.
- Finally, the PADRE plan also deals with the risk that, once their debts have been lowered, some governments abandon fiscal discipline. To that effect, it envisions a formal compact that includes three components. First, it precisely defines fiscal discipline. Second, it calls upon the ECB (or another independent institution) to determine when a country breaches discipline. Third, in that case, the ECB is mandated to transform the perpetuities back into the original bonds and to sell them in the market. This process, which comes about in a succession of instalments, will put increasing pressure on delinquent governments as markets grow increasingly concerned.

The first step of the PADRE plan is already completed as the result of the asset purchase programmes of recent years. Actually, as long as the ECB holds the bonds that it has acquired and keeps rolling them over, as it does, national public debts are reduced in proportion. They are not traded in the markets, which only hold the remaining bonds and are much less concerned about risks defaults. Thus, the current situation almost mimics the first step of the PADRE plan. The next steps are missing, however. The ECB has not promised to keep rolling the bonds over, which would resemble the transformation into perpetuities. In fact, it may want not just to raise the interest rate but also to reduce the size of its balance sheet. Furthermore, the combination of a weak fiscal discipline mechanism, the Stability and Growth Pact, and the absence of a compact as in the PADRE plan, means that the current informal arrangement provides incentives for governments to be fiscally undisciplined.

5. CONCLUSIONS

In many ways, designing fiscal and monetary policies for COVID-19 times was the easy part. Fiscal policy options were simple and clear; indeed, all governments in developed countries promptly adopted qualitatively similar measures, although the amounts involved vary significantly. Central banks also broadly moved in the same direction, depending on their starting points. How and when to end these policies is much more complicated.

Scarring effects will differ from country to country. Where they are significant, the risk is that early rebound linked to household dissaving will evaporate, calling for continuing demand-side support, and possibly supply-side assistance. Following a year or two of historically large budget deficits, many governments will tend to ignore that risk. Large public spending cutbacks would then likely lead to a second recession. Monetary policy is unlikely to be able to substitute for an ill-timed retrenchment of fiscal policies. What is needed is that fiscal and monetary policies move in tandem.

The fiscal policy relief measures will have to be withdrawn promptly once the pandemic is over, not because they require large deficits but because their objectives will not be justified anymore. Yet, fiscal policy will be needed if, as widely expected, the longer-term effects of the pandemic exercise downward pressure on economic growth. Once households have decumulated their savings amassed during the pandemic, demand is unlikely to go back to pre-crisis trends, because of reasons such as rising unemployment and possible fears of COVID-19 mutations as much of the developed world will remain unvaccinated. Firms may not return to pre-COVID-19 investment spending as many emerge weakened from the crisis or are facing more difficult markets due to changed consumption patterns. These scarring effects will call for classic demand support along with assistance to the reallocation process on the supply side.

Monetary policy will have to play a complementary, supporting role to fiscal policies and ensure that the financial markets absorb the impact of pent-up bankruptcies. This will call for a continuation of the current policy: low interest rates, abundant liquidity, support to bank lending and a backstop to public debts. The more difficult part will come later, when the recovery is sustainable. The ECB should be the first to tighten its stance. After a decade of very low, indeed negative interest rates, it will have to recover its ability to conduct standard policy by steering its interest rate well above the effective lower bound. To that effect, it will be the turn for fiscal policies to play a supporting role to monetary policy normalisation. That will mean longer-lasting budget deficits, a stance most likely to prove highly controversial.

The controversy will centre around the large debts of many countries. Large public debts are indeed a source of fragility. Currently low interest rates have somehow reduced the risks but they are unlikely to remain so low forever. Reducing public debt should be considered as a serious option. This can be achieved in the euro area without defaults, without inter-country transfers and without providing incentives for fiscal indiscipline.

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Adjusting Support in a K-Shaped Recovery

Daniel GROS and Farzaneh SHAMSFAKHR



Abstract

As recovery from the pandemic continues, fiscal and monetary support can be reduced, at least for industry. Cliff effects are unlikely to arise under a gradual reduction of support. With financial markets in a “risk on” phase, monetary policy support becomes less relevant. The withdrawal of the various pandemic measures should not pose a risk to the recovery or to financial stability.

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LIST OF ABBREVIATIONS

CSPP	Corporate sector purchase programme
ECB	European Central Bank
EP	European Parliament
EU	European Union
GDP	Gross domestic product
HFCS	Eurosystem Household Finance and Consumption Survey
PELTROs	Non-targeted pandemic emergency longer-term refinancing operations
PEPP	Pandemic emergency purchase programme
PSPP	Public sector purchase programme
SSM	Single Supervisory Mechanism
TLTRO	Targeted longer-term refinancing operation

EXECUTIVE SUMMARY

- **Extraordinary fiscal and monetary measures were instrumental to helping the EU economy weather an unprecedented crisis.** Financial markets have fully recovered, but the real economy has only partially bounced back.
- **The renewed lockdown over the winter has generated a “K-shaped” recovery**, with output and confidence in industry strengthening to go beyond pre-crisis levels, but in services there has been a reversal of recent gains. Hopes for a generalised recovery are thus dependent on mass vaccination.
- **It is clear that a sudden withdrawal of all measures would endanger the nascent recovery.** However, it should also be clear that not all the measures introduced at the peak of the crisis are still needed today.
- **The key issue is thus the speed of withdrawal of crisis measures**, in tandem with the recovery of the economy.
- **Cliff effects would arise only from a sudden and unanticipated withdrawal** that is faster than warranted by the economic outlook.
- **It would be useful to examine and recalibrate those measures** (such as bond buying or collateral rules) that mainly benefit industry.
- **The emergency measures adopted by the ECB in March/April 2020 were also motivated by the financial turbulence created by an extraordinary level of risk aversion.** However, financial markets are now far more stable and risk aversion has diminished considerably (one might even argue that it is too low). This means that financial stability is no longer the key concern for the ECB. Attention can now focus on its traditional key target, namely price stability.
- **An important issue for the ECB now (spring 2021) is thus how to interpret the recent rise in market-based inflation expectations.** They are still below the long-term target of “below, but close to 2%”, but they are at the same level as before the pandemic, suggesting that the measures motivated by the pandemic may no longer be needed.

1. INTRODUCTION

The term cliff-edge or cliff effect refers to a situation where a sudden small change leads to big problems. For example, when households are highly dependent on public assistance programmes, cliff effects can arise when they lose their eligibility for public support because of a marginal increase in household income. In this case, the loss of benefit cannot be compensated by the increase in household earnings. This sudden change might push households to a financial cliff-edge – at risk of income loss and hence dire financial circumstances.

Cliff effects for companies may occur when a firm's credit rating is downgraded due to high debt levels. Such downgrades can significantly increase borrowing costs and impair the availability of financing. This in turn leads to a further downgrade, and the cycle continues.

In its November Financial Stability Review, the ECB analyses the potential risks (cliff effects) for the financial system and the economy that would arise from simultaneously ending the policy measures. It argues that, due to the heavy reliance of households and firms on these support measures, any abrupt ending would create a considerable drag on demand and pose a risk to financial stability.

The scale and the timing of withdrawing the policy measures are thus brought into focus. The ECB analysis also highlights important cross-country differences in the measures adopted and when they might be withdrawn.

We argue that the term cliff effect might be improper in this case. The overall impact of all pandemic measures (and their removal) is not a small change in policy that might have a large impact, but rather a large change in a number of policies, which can be presumed to have a large impact. It is apparent that policy support that was necessary to counteract the massive negative shock caused by the pandemic and the associated lockdown should be withdrawn only when the headwinds coming from the pandemic die down. The negative impact of withdrawing the policy measures would then be offset by the positive impact of opening up the economy, with little net impact on the economy, and certainly no cliff effects.

One should distinguish between stock and flow effects. A cliff effect might arise when a measure, such as the reduction of haircuts on loans used as collateral for ECB lending, affects an entire stock of assets, potentially leading to its rerating. However, this could be avoided if the ECB "grandfathers", for example, the stock of loans that were given favourable treatment by the ECB in terms of the haircut applied to their face value when they are used as collateral. This seems to be the case. New collateral rules would apply only to new borrowing by banks.

Financial markets tend to anticipate policy measures. This means that cliff effects arise mainly from unanticipated policy measures. An end to the exceptional support measures is widely expected as the economy recovers (and inflation expectations return to pre-crisis levels¹). Financial markets would react negatively only if the pace of normalising monetary policy were to accelerate relative to the baseline expectations.

The fact that financial market prices are based on expectations for the future (and not the past) has another implication. For example, banks and financial markets judge the solvency of an enterprise based on its expected profits and cash flows many years into the future. During the crisis, financial support might be crucial to maintaining the cash flow of the enterprise. But a few months of financial

¹ The latest data, available until 29 January 2021, on expected inflation (derived from the yield OAT 0.75% May 2028 and the yield OATi 0.10% March 2028) suggests a rebound in inflation expectations in the Euro area, reaching its level in the second half of 2019 (see <https://www.aft.gouv.fr/en/oatis-key-figures#rendement>).

support do not fundamentally change the value of an enterprise if one can assume that its basic business model is still sound once normality returns. As the economy recovers, one should thus not expect any cliff effect if support is withdrawn as planned.

2. THE REACTION OF MONETARY POLICY TO THE CRISIS

Before discussing the potential for cliff effects, we provide a short overview of the measures taken in response to the pandemic.

One can group the measures taken in three categories: fiscal, prudential and monetary policy.

We concentrate on the monetary policy measures, assuming that the main fiscal measures in place (such as short-time working schemes, special tax deferrals, direct support to households and firms, etc.) will remain in place as needed.

Neither do we comment on the prudential measures taken to alleviate stress on bank balance sheets. The prudential measures consisted of a release of capital buffers, guidance to reduce pro-cyclical provisioning and other measures to preserve banks' loss-absorbing capacity, for example by restricting dividend distributions. These measures were taken by the Single Supervisory Mechanism (SSM), which is part of the ECB, but independent of the monetary policy decision-making.

The four main monetary policy measures are summarised in Rakic (2021):

1. Pandemic emergency purchase programme (PEPP);
2. Targeted longer-term refinancing operations (TLTRO III);
3. Non-targeted pandemic emergency longer-term refinancing operations (PELTROs);
and
4. Easing of the collateral rules.

The ECB did not change its policy interest rates since they were already negative.

We briefly comment separately on each of these four elements. In general, they are similar to measures taken by the ECB in the past.

PELTRO: Demand for these loans was limited. This utility of this programme has thus *de facto* diminished, despite the addition of four new operations for 2021, decided in December 2020.

TLTRO III: They do not constitute a new instrument. TLTROs have been used for some years now. They are designed to give banks an incentive to increase their loan portfolio.

PEPP: This is a programme to purchase both private and public securities. It is in addition to the renewed purchases under the asset purchase programme (APP) that were decided before the outbreak of COVID-19 as the inflation outlook had deteriorated. The PEPP constitutes, *de facto*, an extension of the various bond purchase programmes the ECB was already operating before the crisis, albeit with greater flexibility (i.e. adherence to capital key limits). The PEPP is scheduled to run until early 2022.

Easing of collateral rules: the purpose was to offset the stress on banks' balance sheets during the acute phase of risk aversion and financial market volatility. The ECB has linked the duration of easing the collateral rules to the duration of the PEPP.

The need to continue these measures should be re-evaluated given that financial market volatility has fallen markedly, and given that risk aversion may even be too low (as evidenced by the record-low risk spreads on all asset classes).

2.1. Estimated impact of monetary policy measures

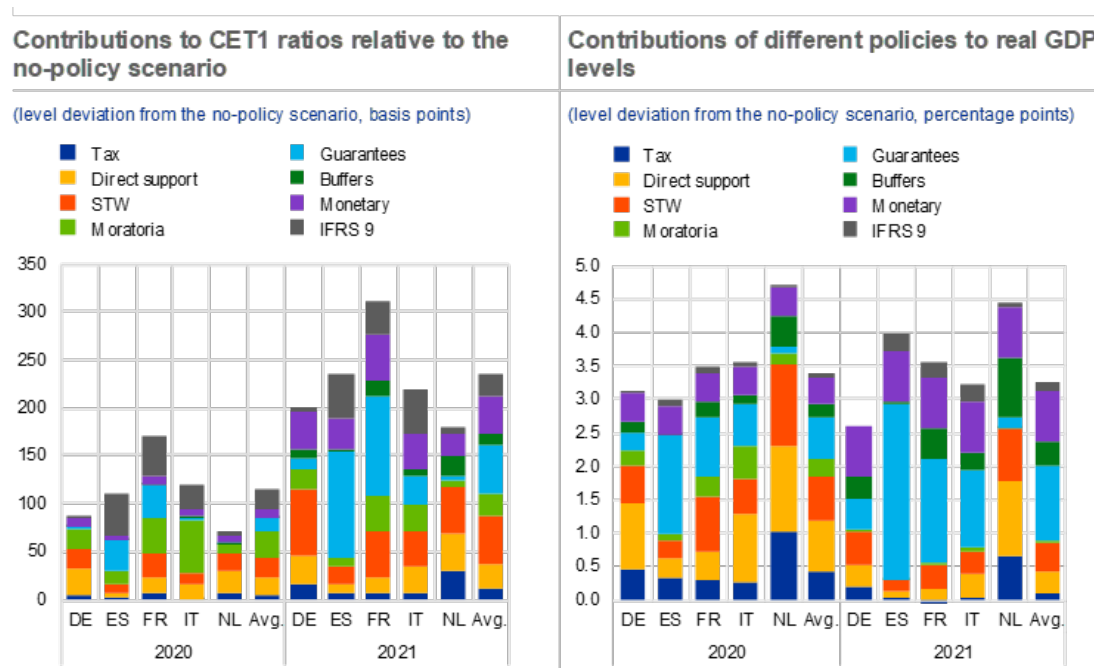
The latest ECB Financial Stability Review provides detailed estimates of the macro-financial impact of the policy measures. These estimates are based on the New Keynesian dynamic stochastic general

equilibrium (DSGE) model proposed by Darracq Pariès et al. (2019), which is developed by granular modules for the banking, corporate and household sectors. Banks in the model are assumed to be capital-constrained and are required to hold low-risk, liquid assets (Darracq Pariès 2020). The model incorporates estimates of stress for banks and the default probabilities of households and firms based on stress testing methodologies. The simulations are based on micro data from Orbis database and the Eurosystem Household Finance and Consumption Survey (HFCS).

The overall impact on real GDP is estimated to be more than 3 percentage points on average for both 2020 and 2021, with detailed results provided for the five largest euro area economies (France, Germany, Italy, the Netherlands, and Spain). See Chart 1 below.

This means that, according to these model simulations, without these fiscal and other support measures, GDP would have been more than 3 percentage points lower in 2020. A major part of this gain is due to fiscal, labour and other temporary support policies, for both households and corporates. However, monetary policy has also played a significant role, amounting to about half a percentage point in 2020 and somewhat more in 2021.

Chart 1: Macro-financial impact of the policy support



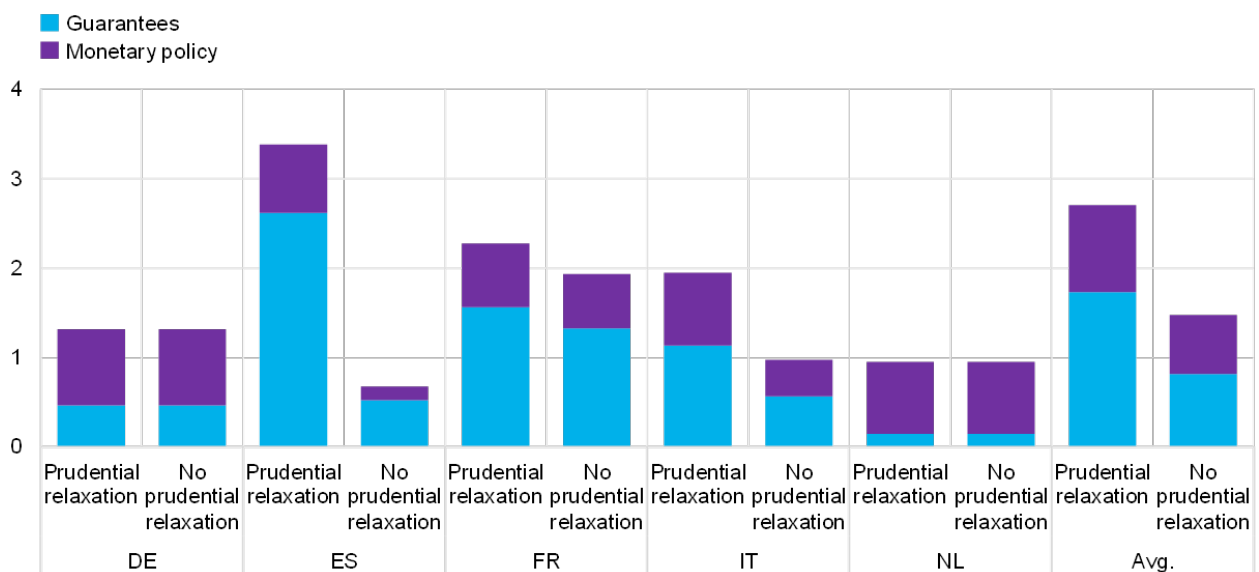
Sources: Financial Stability Review, November 2020.

Notes: The left and right charts report the average yearly impact on banks' Common Equity Tier 1 (CET1) ratios and real GDP levels respectively. As active policy support built up in the last three quarters of 2020, the annual average impact is lower than the average impact over the last three quarters of 2020. By contrast, for 2021 four quarters of active policy support enter the average annual impact. In the charts, "IFRS 9" refers to the impact of the add-back due to the amendments to the transitional arrangements of IFRS 9; "Monetary" refers to the impact of the PEPP and TLTRO III; "Buffers" refers to the relaxation of the requirements regarding the Pillar 2 guidance, Pillar 2 requirement, countercyclical capital buffer and systemic risk buffer; and "STW" refers to short-time working schemes. The calculations are based on the September 2020 ECB staff macroeconomic projections.

The ECB also finds a significant contribution of the measures to the bank solvency ratios in 2020 and 2021 (about 230 basis points in cumulative terms). We do not comment on these results separately as the impact of the better solvency ratios on loan supply, and thus demand, is taken into account in the

model. However, the model also illustrates the interaction between prudential requirements and other measures. Chart 2 below shows that there is an interaction effect between prudential controls and guarantees. But the size of this effect varies across countries. Government loan guarantees appear to have a much stronger impact on GDP if prudential measures are relaxed only for Spain and Italy – which are the two countries whose financial systems are weakened by remaining risk premia (much lower today than when the simulations reported below were run). The intuition behind this is clear: government guarantees cannot foster new lending for banks that cannot expand their loan portfolio for lack of capital. Banks in core countries (Germany, Netherlands and France) have much easier access to capital markets. This is the reason why, for them, the relaxation of prudential rules is less important. Given the strong reduction in risk premia over the last few months one would expect that the importance of prudential rules in influencing the effectiveness of monetary policy should be much reduced.

Chart 2: Contributions of guarantees and monetary policy to real GDP levels by end-2021 with and without relaxation of the prudential buffer requirements



Sources: Financial Stability Review, November 2020.

Notes: The chart compares the impact of guarantees and monetary policy on real GDP levels first assuming the contemporaneous relaxation of prudential buffer requirements, then abstracting from it. All other policies which are assumed to be activated in Chart 1 are also assumed to be activated, even if the results for them are not shown.

2.2. Cliff effects from a withdrawal of support?

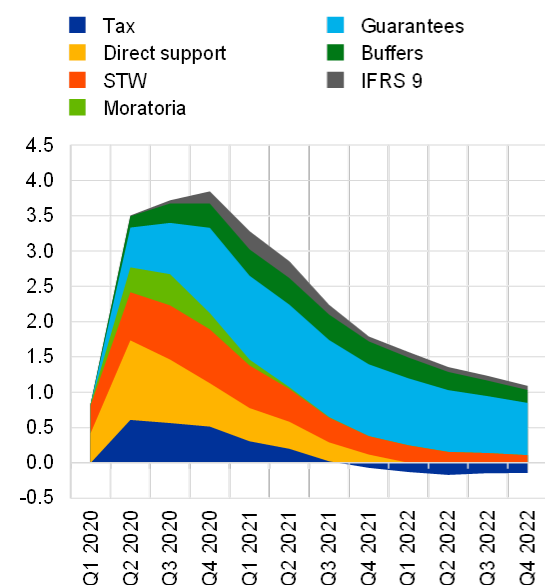
It is clear that a sudden simultaneous withdrawal of all policy measures can expose the households and firms to cliff effects and significantly weigh on growth prospects. But this is not a realistic scenario.

The ECB also provides an estimate of the impact of a more realistic scenario, namely the gradual withdrawal of support measures (as planned before November 2020). According to the calculation using the model of the ECB, phasing out a number of support measures would have a negative impact on real GDP in 2021 by around 2% of real GDP (for the five largest countries on average). Not surprisingly, the main negative impact comes from phasing out short-time working schemes, direct supports and tax deferrals.

Chart 3: Impact of support measures on the real GDP

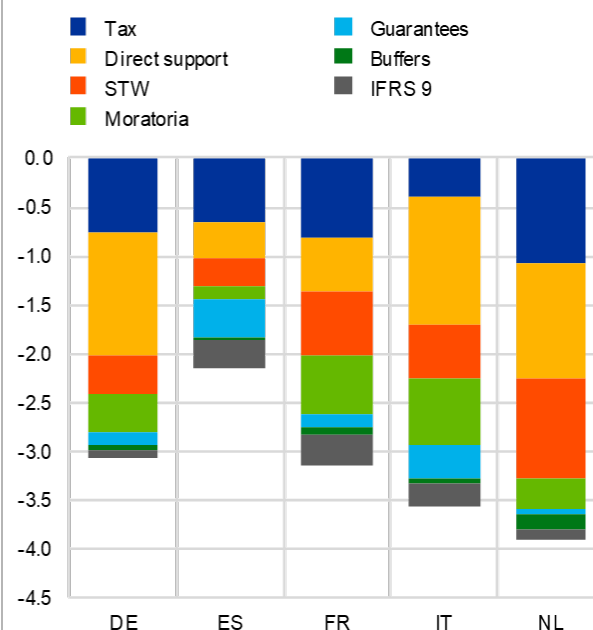
Policy support impact on the real GDP level of the five largest euro area countries

(percentage deviation from a no-policy scenario)



Contributions to the real GDP impact of the phase-out in 2021

(percentage deviation from a no-phase-out scenario)



Sources: Financial Stability Review, November 2020.

Notes: The left panel reports the quarterly profile of some of the contributions to the real GDP reported in Chart 1 (right panel). See notes to Chart 1 for the abbreviations.

In interpreting these results, one has to keep in mind that the ongoing recovery is expected to lead to overall growth of 4% for the euro area in 2021. Taken literally, the simulation results would imply that growth would be about 2 percentage points higher if the emergency support measures were not phased out. However, this estimate appears to be on the high side if one takes into account the sectoral nature of this recession.

2.3. Using standard macro models during a sectoral recession

A key issue in judging these results is the sectoral nature of the current recession (and recovery) highlighted by Capolongo and Gros (2020).

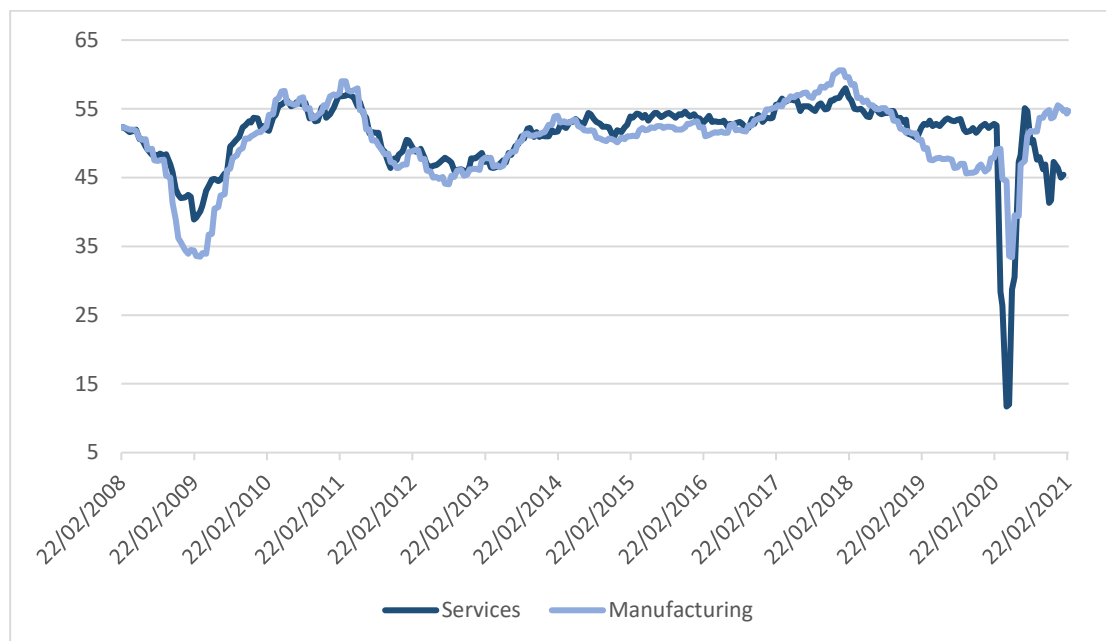
“The defining feature of the present situation is that the remaining demand and supply obstacles are highly sector specific. Aggregate demand management will thus be less effective. Income replacement measures, such as short-term work schemes, will be needed for some time, but should be applied flexibly to support rather than hinder structural adjustment”.

Unfortunately, the existing models, including the ones used by the ECB, do not account for sectoral nature of the present recession. The purpose of most existing macro-economic models is to provide a framework for aggregate demand as influenced by monetary and fiscal policy. The models used by the ECB to estimate cliff effects share this property. They do not distinguish between sectors affected by lockdown and those that are not, such as industry.

The clearest evidence for this divergence across sectors is the “K-shaped” recovery, which is visible in the Purchasing Managers Index (PMI) data displayed in Chart 4 below. The latest data confirm a robust expansion of industry (PMI around 55 whereas for services only 45). Given that the threshold for expansion is 50, this implies that industry is expanding but services are contracting. This divergence between industry and services is unprecedented. During the double-dip recessions of 2009 and 2012, services and manufacturing always moved in the same direction and remained fairly aligned – except during the depth of the recession in 2009, which hit industry stronger.

The strong PMI reading (and actual data from industrial production) suggests that industry does not need continuing support. Industry accounts for only about one-fifth of GDP. A robust and balanced recovery can thus start only when the services sector exits the lockdown. This should happen over the next few quarters, but the exact timing remains uncertain. Aggregate demand factors are unlikely to play a key role in the timing and the pace of the recovery.

Chart 4: Euro area manufacturing and services sector PMI



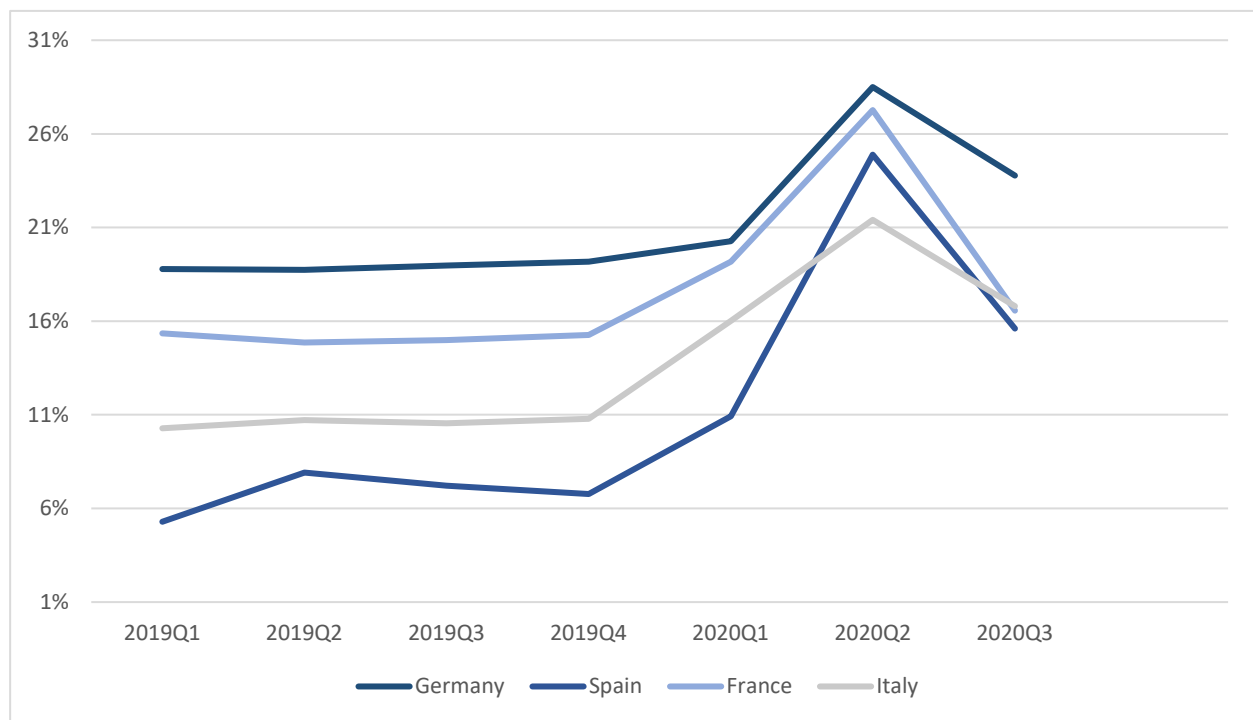
Source: Authors' calculation based on IHS Markit.

The data now available for household savings provides some evidence of the limited effectiveness of aggregate demand management in this recession (Chart 5). Savings rates have increased considerably, indicating that households have either been unable, or unwilling to spend all of their income.

It also appears that the fiscal measures, especially those which provide replacement income have been sufficient to prevent household incomes from falling. A comparison of the time path of households' disposable income during the first three-quarters of 2020 and during the recession of 2009 shows that incomes held up better in 2020 than in 2009. The reduction in consumption demand (which is the counterpart of the increase in savings) was thus not due to a lack of income (Chart 6).

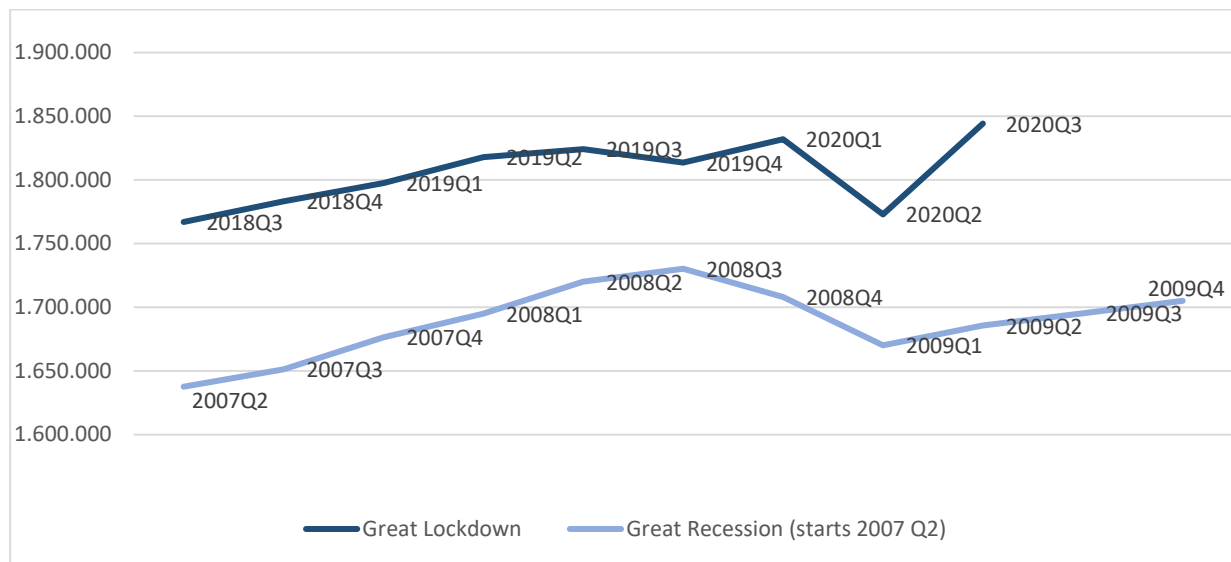
Most modern macroeconomic models assume that a certain part of the population is cash-constrained and consumes out of current income. The share of these “hand-to-mouth” consumers should have fallen, since households accumulated cash balances during 2020. This would imply that, in the logic of these models, the multiplier effect of fiscal policy should be lower than usual. (See also Capolongo and Gros [2020] and the references cited therein.)

Chart 5: Households savings rate in the four largest euro area countries



Source: Authors' calculations based on Eurostat data.

Chart 6: Disposable income during two recessions



Source: Authors' calculations based on Eurostat data.

All in all, it thus appears that the pace of the recovery depends much more on the timing of lifting of the lockdown measures and the vaccination campaigns than on aggregate demand measures.

Monetary policy affects the entire economy, but some of the pandemic measures might be more important for some sectors, namely industry, than for others. For example, the corporate bond-buying programme might *de facto* be more important for industry, which is dominated by larger enterprises

that are able to issue corporate bonds. Moreover, loans to industry might constitute a substantial part of the collateral that banks use in their borrowing from the ECB (TLTROs).

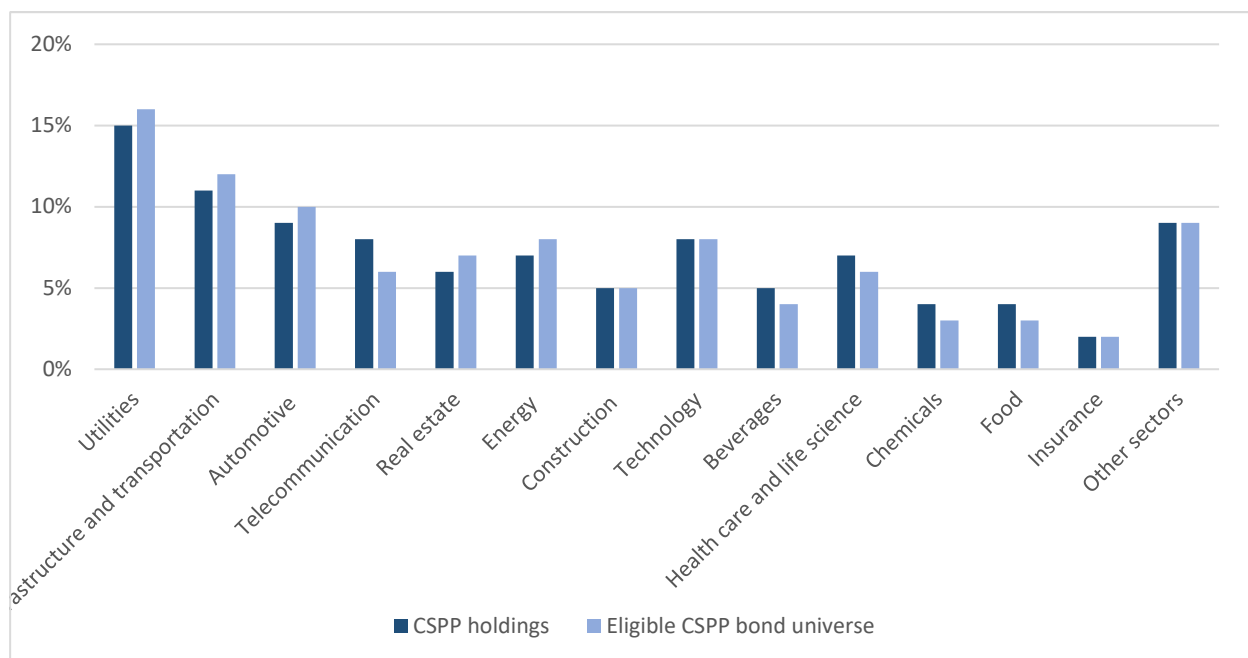
This is why Capolongo and Gros (2020) argue that the impact of the PEPP is likely to be overstated when one uses models calibrated on the experience of normal times and the PSPP.

The corporate sector purchase programme (CSPP) (about EUR 260 billion until February 2021) provides a good illustration of the differential impact of a broader program, namely asset purchases. The CSPP started already in 2016. Renewed purchases of corporate sector bonds were already part of the wider APP which was restarted in late 2019 as inflation continued to disappoint. The pace of purchases of corporate bonds then increased considerably under the PEPP.

The available data shows that the actual purchases by the Eurosystem have gone mostly to sectors which either have not been affected by the crisis (utilities, telecommunication, technology, chemicals) or have recovered since (real estate, automotive and infrastructure). These sectors do not need special support anymore (Chart 7). This evidence suggests that some of the emergency measures taken in March-April 2020 could now phased out.

One measure, namely the commercial paper programme, which was part of the PEPP package, is *de facto* being phased out as the holdings of the Eurosystem of commercial paper are declining, whereas those of corporate bonds are continuing to increase, albeit at a slow pace.

Chart 7: Economic sector distribution of CSPP holdings and the eligible bond universe



Source: Authors' calculations based on ECB data.

3. CONCLUSION

The ECB is facing a “K-shaped” recovery (i.e., industry expanding, and services affected by the lockdown), with inflation expectations increasing and financial market stability re-established. Industry has already returned to its pre-crisis level and standard confidence indicators remain high, indicating a continuing expansion. This part of the economy does not need continuing support.

The partial recovery would not justify the sudden withdrawal of all fiscal and prudential support measures. With inflation expectations still weak, an expansionary monetary policy stance therefore remains fully justified.

But some of the monetary policy measures that were justified by the acute emergency period of early 2020 may no longer be needed. In particular, one should investigate whether some specific measures mostly benefit those sectors that have recovered, such as industry. This may be the case for example for the corporate sector purchase programme (CSPP). These bonds are issued mainly by large, quoted companies, most of which are not negatively affected by the crisis as witnessed also by high equity prices. The purchases of private sector assets which might have been justified in early 2020 are thus no longer needed and could be stopped now.

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Balanced Withdrawal of Policy Support to Avoid Cliff Effects

Klaus-Jürgen GERN



Abstract

The COVID-19 crisis has triggered unprecedented concerted economic policy response. The paper investigates potential cliff effects that may arise from the temporary nature of the measures adopted and their different phase-out schedules. It finds that the concern that premature policy tightening could jeopardise the recovery are overblown. The major challenges for economic policy lie in the medium term.

This paper was provided by the Policy Department for Economic, Scientific and Quality of Life Policies at the request of the committee on Economic and Monetary Affairs (ECON) ahead of the Monetary Dialogue with the ECB President on 18 March 2021.

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LIST OF ABBREVIATIONS

APP	Asset purchase programme
EBA	European Banking Authority
ECB	European Central Bank
EP	European Parliament
EU	European Union
GDP	Gross domestic product
HICP	Harmonised Index of Consumer Prices
PELTRO	Pandemic emergence longer-term refinancing operation
PEPP	Pandemic emergency purchase programme
SGP	Stability and Growth Pact
TLTRO	Targeted longer-term refinancing operation

EXECUTIVE SUMMARY

- **The COVID-19 crisis has triggered unprecedented economic policy response which may lead to substantial cliff effects once support measures are withdrawn.** Policy makers responded swiftly with a concerted implementation of fiscal, monetary and prudential measures on an unprecedented scale. The paper investigates potential cliff effects that may arise from the temporary nature of the measures adopted and their different phase-out schedules.
- **The nature of the crisis has implications for economic policy.** As supply side restrictions are an important part of the problem, generalised demand stimulus is not the appropriate policy response and policies need to be more targeted. To the extent that the pandemic can be characterised as an interruptive shock it is essential for economic policy to prevent the collapse of sound production structures.
- **Short-time work schemes have been an important element policy support in the crisis and should remain so as long as activity is restrained in significant parts of the economy.** However, potential negative effects on economic efficiency may become more of a concern the longer the crisis lasts.
- **Budget plans do not suggest a fiscal cliff looming.** The deficit in the structural primary balance will decline only gradually according to Commission forecasts from autumn 2020, and governments in the euro area have in the meantime introduced additional fiscal support measures. As long as the pandemic substantially affects economic activity, the general escape clause of the European fiscal framework should remain in force.
- **Monetary policy will remain supportive for the foreseeable future.** The ECB needs to continue to act as a backstop for fiscal policy in the short-term. Measures designed to support bank liquidity and funding conditions have underpinned a strong increase in bank loans to the private nonfinancial sector.
- **Prudential rules in the financial sector have been eased and the use of capital buffers supports lending and economic activity.** The positive effect of loan guarantees and prudential easing measures is relatively persistent until the end of 2022.
- **Stimulus measures in the different policy areas have been mutually reinforcing.** The relative importance of the different policy measures varies substantially across countries.
- **The concern that premature policy tightening could jeopardise the recovery seems overblown.** Cliff effects could be particularly important in the case of fiscal measures and loan moratoria, but they need not bite. A gradual withdrawal of fiscal support is appropriate if the economy starts a sustained recovery from spring onwards as projected.
- **The medium-term risks of continued massive policy support rise with the duration of the crisis.** The longer fiscal, monetary and prudential measures to shore up the economy are in place, the larger negative side effects can be expected to be. Fiscal reconstruction after the crisis must be reconciled with the goal of sustainable and inclusive growth, which will be difficult to achieve.

1. INTRODUCTION¹

A crisis of historic proportions has triggered unprecedented economic policy response. The economic repercussions of the COVID-19 pandemic have been dramatic in the euro area, with output dropping by 15 percent in the first half of 2020. After a phase of incomplete recovery in the summer months, renewed containment measures amid a second wave of infections have been introduced starting in autumn and are at the current juncture again weighing on the economy. Economic policy responded swiftly to the crisis with a concerted implementation of fiscal, monetary and prudential measures on an unprecedented scale.

Policy response in the case of a macroeconomic emergency needs to be bold and flexible. An economic shock of the dimension created by the pandemic requires policy to respond quickly and forcefully in order to reduce uncertainty, provide vital support to firms and households, and safeguard financial stability. A timely response has to be decided in a situation where the precise manifestation of the crisis is still largely unknown, when it is still unclear how deep and how long the downturn will be and which parts of the economy will be affected most. Making measures strictly temporary allows readjustment after a certain period of time to better target those most in need and make the programmes more efficient.

The paper investigates potential cliff effects that may arise from the temporary nature of the measures adopted and their different phase-out schedules. Section 2 briefly characterises the nature of the COVID-19 shock and its implications for economic policy. In section 3, we review by policy area the support measures put in place and describe the potential for cliff effects. The interaction of COVID-related policy measures is investigated in section 4 and problems of phasing-out are discussed. Section 5 concludes.

¹ The author is grateful to Ulrich Stolzenburg for providing useful comments as well as several figures shown in the paper.

2. THE SPECIAL NATURE OF THE COVID-19 SHOCK

The COVID-19 crisis differs from “normal” recessions with respect to the industries that are particularly affected. Normal business cycles are fluctuations of economic activity that economic agents can make provisions for, e.g. by accumulating reserves during an upturn to draw upon in a downturn. The extent of such provisioning will be larger in industries with high volatility of demand and activity over the cycle (e.g. manufacturing of investment goods) than in industries that face relatively stable demand conditions and weak cyclicalities (such as consumer services, for instance). In the COVID-19 crisis, industries have been severely affected that are usually confronted with relatively stable demand and thus cannot be expected to have sufficient reserves to cushion a strong decline in revenues.

Policies to contain the pandemic and behavioural responses to avoid infection are important drivers of activity. The drop of economic activity in the crisis is to a large part due to measures imposed by governments to contain the spread of the virus which represent severe temporary supply-side restrictions. Personal services industries, the hospitality sector and entertainment industries are still strongly affected, while the recovery in the manufacturing sector has already gone a long way. The change in demand also results from behavioural responses that can be seen as a preference shock in the sense that people are temporarily reluctant to engage in activities that involve social contacts in order to avoid infection risk. This preference shock might quickly reverse once a medical solution to COVID-19 is in place. This raises the question to what extent potential output has been affected by the crisis (Bodnár et al., 2020), with repercussions for the estimate of the output gap which plays an important role in the European fiscal surveillance framework (Gern et al., 2020).

The COVID-19 crisis can be characterised largely as an interruptive shock, and adjustments in the production structure that are necessary in the longer term may be limited. In contrast to normal recessions that usually contain elements of a correction of excess demand in the previous upturn, the COVID-19 shock can be regarded as completely exogenous. It can be argued that the structure of demand prevailing before the pandemic will largely be restored after COVID-19 is under control. To the extent that this interpretation is correct, COVID-19 can be described as an interruptive shock, in contrast to a disruptive shock that would imply substantial reallocation of resources in the medium term.

The nature of the crisis has implications for economic policy. When systemic shocks like COVID-19 (or large-scale natural disasters or political conflicts) are erratic and virtually unpredictable for economic agents (Knightian uncertainty) and private provisioning – for example, via insurance markets – is therefore no option, this calls for policy intervention beyond the usual automatic stabilisers to keep affected businesses afloat. When supply side restrictions are at the heart of the problem, generalised demand stimulus is not the appropriate policy response and policies need to be more targeted. In the case of an interruptive shock it is essential for economic policy to prevent the collapse of sound production structures. However, the longer the economy remains in crisis mode, the higher the probability of fundamental changes in the way our economies work, i.e. that businesses will have to adjust, and that economic policy should consider ways to facilitate restructuring rather than aim to conserve economic structures.

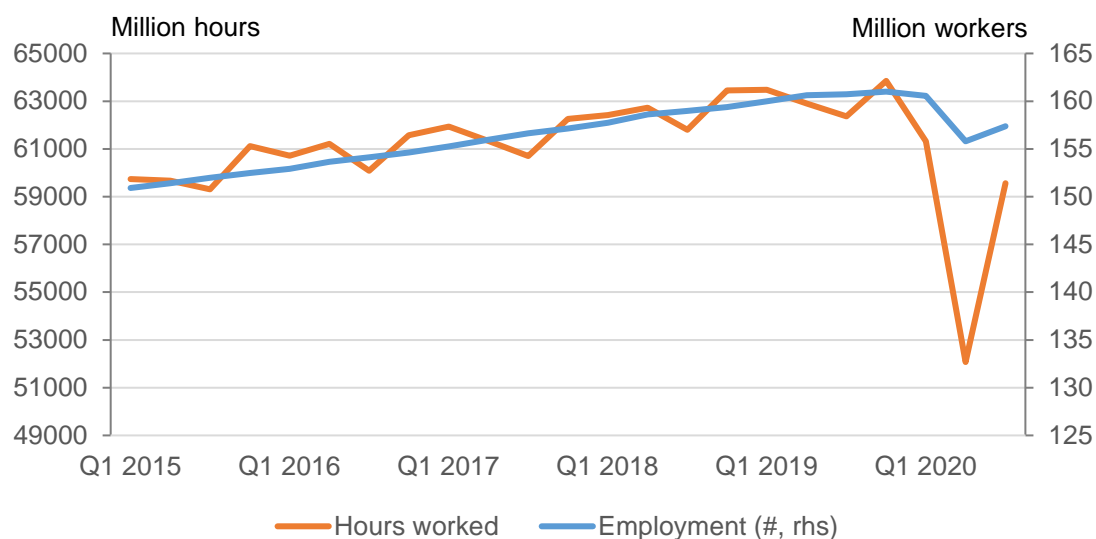
3. POLICY AREAS WITH POTENTIAL CLIFF EFFECTS

In this section we briefly review by policy area reactions to support the economy amid the COVID-19 crisis and describe the potential for cliff effects.

3.1. Labour market policy

In Europe, the COVID -19 crisis has led to a comparatively modest rise in unemployment. Before the pandemic, unemployment had decreased substantially from the high levels reached in the course of the Great Recession and the successive European sovereign debt crisis amid a sustained period of uninterrupted growth. In several countries, including Germany, the Netherlands and the UK, unemployment even declined to long-term lows. COVID-19 resulted in a reversal of recent trends in labour markets. In the euro area, the sharp drop in activity in spring 2020 led to a significant rise in unemployment, from 7.2% in February to 8.7% in July, albeit with substantial differences across countries. The increase in the unemployment rate (Eurostat definition) from pre-crisis levels to the peak registered in the course of 2020 ranged from only 0.3 percentage points in Italy to somewhat more than 3 percentage points in Spain, Estonia and Cyprus. The increase in unemployment was, however, generally small compared to the size of the fall in output, and much smaller than in the United States, where the unemployment rate as a result of the COVID-19-induced contraction of economic activity in spring 2020 skyrocketed from 3.5% in February to almost 15% in April. Similarly, the fall in the number of people in employment in the euro area between the fourth quarter 2019 and the second quarter 2020 (–3.2%) was much smaller than the rapid decline in hours worked, which fell by 18% (Figure 1).

Figure 1: Employment and hours worked in the euro area



Source: ECB.

The impact on the European labour market was mitigated by the extensive use of short-time work or furlough schemes. Short-time work schemes allow employers to temporarily reduce hours worked, even to the level of zero, while keeping the worker on the job and (partially) compensate workers for the loss of income. They had proved to be effective in smoothing employment during the Great Recession in some countries, particularly in Germany, and been operational in a number of countries before the COVID-19 crisis or been implemented as the crisis unfolded. Countries with

existing schemes generally introduced temporary expansions to make them more inclusive or reduce remaining labour costs for the employers (Eichhorst et al., 2021). In addition, the length of a period of short-time work possible was typically extended. The EUROFRAME group of ten European economic research institutes in the focus section of its recent Euro Area Economic Outlook report (EUROFRAME, 2021) concentrates on the effect of COVID-19 on the labour market and provides an overview of short-time work schemes in the institutes' host countries (Table 1). The number of workers on these kind of schemes in relation to the labour force was as high as 20-30% in spring in a number of countries, including in France, Italy, Austria and the UK. The numbers on the schemes decreased substantially during the recovery phase in summer, but started to rise again more recently, reflecting the economic repercussions of renewed lockdown measures.

Table 1: Short-term work / furlough schemes

	Austria	Finland	France	Germany	Italy	Ireland	Netherl.	Poland	UK
In place before Covid-19	yes	yes	yes	yes	yes	no	no	no	no
Newly introduced	no	no	no	no	no	yes	yes	yes	yes
Extended	yes	yes	yes	yes	yes	yes	yes	no	
<i>Characteristics</i>									
max. possible length (months)	6 each phase	unlimited	24	24	8	unlimited	n.a.	3	unlimited
Average (effective) replacement rate (% of wage)	80 to 90% (gross)	43 to 56% (gross)	84 (net)	60-87% (net)*	80% (net) **	n.a. ***	n.a. ***	up to 50% (gross)	80% (gross)
In place until	Mar 31, 2021	Dec 31, 2020/ Mar 31, 2020	Dec 31, 2021	Dec 31, 2021	Mar 31, 2021/ Jun 30, 2021	Mar 2021	Jul 2021	no expir. date	Apr 2021
Other specific labor market support policies	yes	no	no	yes	yes	yes	yes	yes	no

Source: EUROFRAME (2021).

Notes: *Depending on family status and duration of spell of short-time work; ** with a maximum of EUR 1,100 per month; ***wage subsidy for employers.

Time limits to eligibility for short-time work have been shifted out to prevent a jump in unemployment. The possibility for companies to use short-time work schemes was generally limited to a certain period of time, usually 6-12 months. An expiration of short-time work before normalisation of economic activity is largely complete can potentially lead to a strong increase in unemployment. Forecasts and realisations for unemployment in the UK may serve as an example: In its August forecast, the National Institute in London expected the unemployment rate in the UK to increase drastically to 10% in the fourth quarter 2020 from just over 4% in the second quarter, as the government had confirmed to close the Coronavirus Job Retention Scheme at the end of October, a furlough scheme designed to allow companies to keep employees through the crisis (Lenoel et al., 2020). Eventually, however, the scheme was extended to 30 April 2021, although at somewhat less generous terms. This move has probably been decisive in limiting the rise in unemployment to 5.1% by December. Similarly, in other countries, time limits for short-time working arrangements have already been extended or replaced by similar programmes to limit the negative impact of COVID-19 on the labour market.

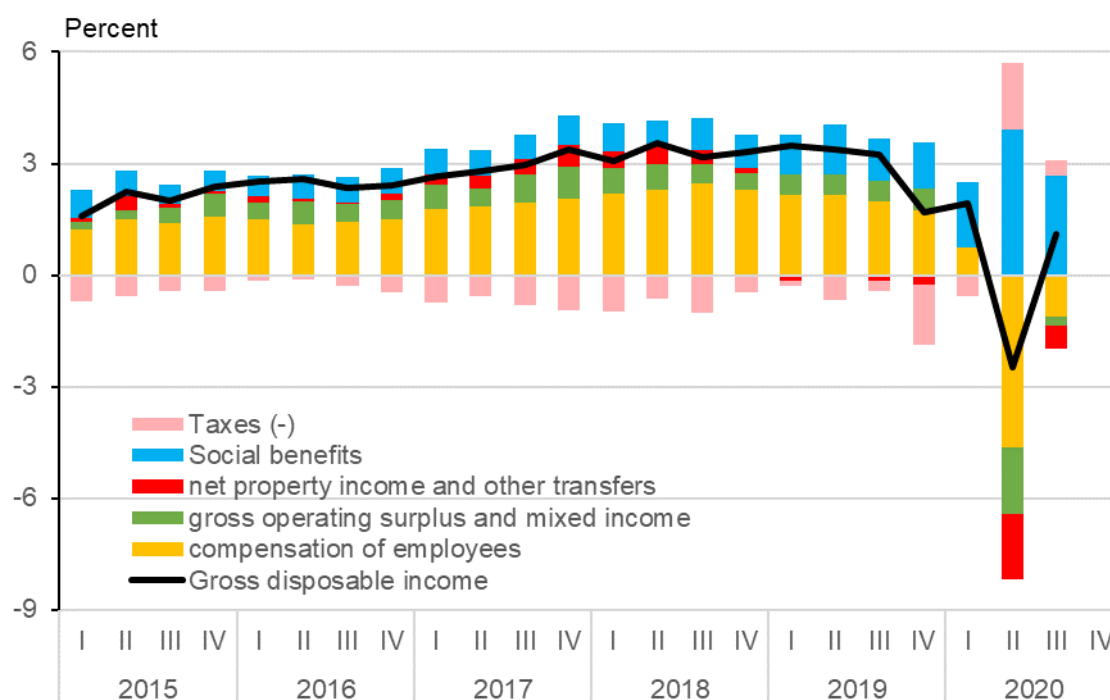
While short-time work schemes should remain an important element of labour market policy as long as activity is restrained in significant parts of the economy, potential negative effects on economic efficiency may become more of a concern the longer the crisis lasts. Short-time work schemes facilitate the temporary reduction of hours worked so that labour input is better matched to output requirements. They are particularly effective when there are strong labour market regulations

and institutions which make it difficult to adjust hours and wages at the plant level, as in most European countries. The advantage of this approach is that the link between employee and company is maintained and production can be resumed more easily. This is particularly attractive in the current situation to the extent that the nature of the COVID-19 shock is interruptive rather than disruptive. On the negative side, inefficiency can be introduced in the labour market as incentives for shifts from contracting sectors to growth sectors are reduced and labour market access for freelancers and those looking for part-time work may be limited (Cahuc, 2019). These disadvantages can be expected to become increasingly important with the duration of the crisis. Consequently, further extension of short-term schemes should be carefully designed, with possible options such as declining generosity over time and narrowing access to the program to those enterprises that remain most affected. At the same time, policy should put a stronger focus on retraining and preparing workers for internal restructuring or external mobility on the labour market, to help manage the challenge of adjustment to changes in markets and business models that may result from the crisis in the longer term.

3.2. Fiscal policy

Governments have responded quickly to the COVID-19 crisis with a broad range of measures. In the countries of the euro area (and worldwide), fiscal policy is heavily engaged in trying to mitigate the adverse economic impact of the pandemic. Governments were relatively quick to respond, with sizeable packages announced already in March 2020, almost in sync with lockdown measures. A broad range of fiscal measures have been implemented. The initial emergency packages focused on support for the health sector and those parts of the economy that were directly affected by government restrictions on economic activity (Haroutunian et al., 2021). They included the introduction or expansion of short-time work schemes to reduce the labour cost burden and the provision of credit guarantees to support liquidity in the corporate sector. Additional measures were announced in the following months in order to underpin the economic recovery after the lockdowns were eased, including packages containing generalised demand stimulus and amounting to some 4% of GDP in Germany and France. Part of the measures in these programmes and other measures included in the draft budgetary plans for 2021 partly will be effective in 2021 and beyond. Effectively, fiscal policy measures during 2020 smoothed gross disposable income of households substantially during the crisis months amid major reductions in terms of compensation of employees, mixed income and gross operating surplus (Figure 2).

Figure 2: Contributions to Gross Disposable Income Growth of Households

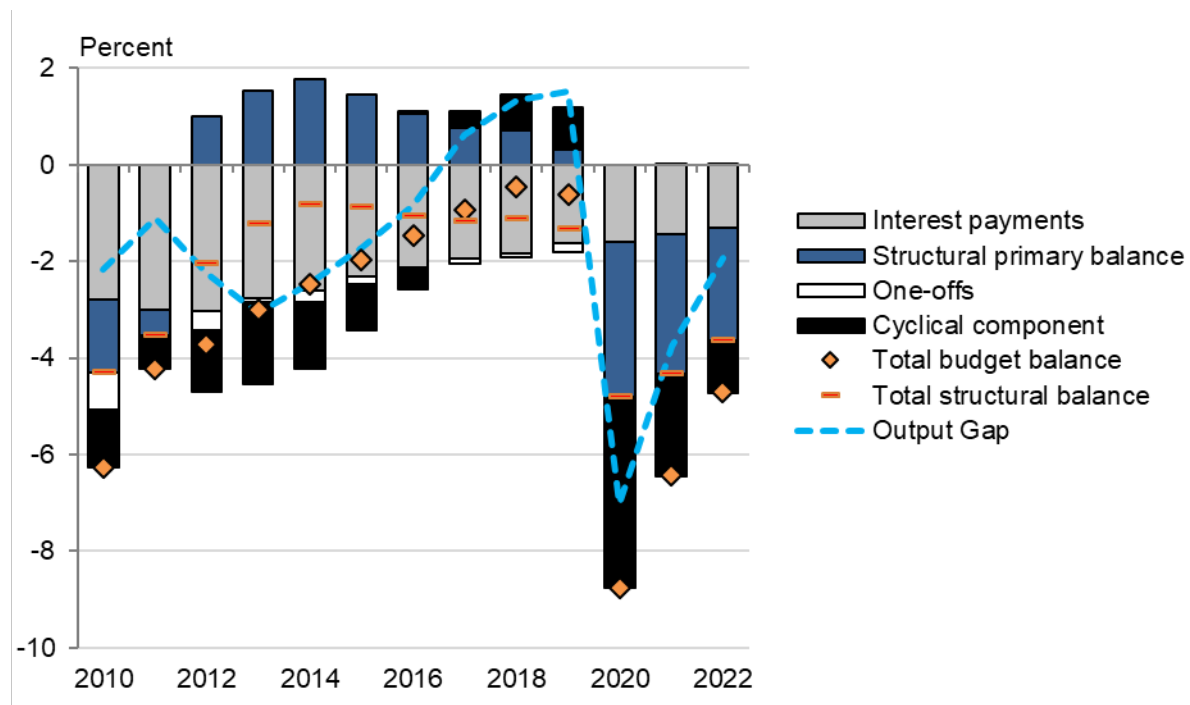


Source: Eurostat, National accounts.

The fiscal stance in the euro area is strongly expansive, with the aggregate fiscal impulse in the euro area expected to exceed 3.5% of GDP. The fiscal stance can be measured by the change in the structural primary balance, which is the total fiscal balance less the impact of one-off or temporary measures (like a bank rescue), the cyclical component (which captures the budgetary effect of automatic stabilisers), and interest payments on public debt, which cannot be directly influenced by governments.² In its autumn forecast, the Commission expects the structural primary balance to deteriorate by an estimated 3.5% of GDP from a small surplus in 2019 (Figure 3). The overall fiscal balance is forecast to register a hefty deficit of 8.8% of GDP due to a swing in the cyclical component by 5 percentage points. Although this deficit is relatively small compared to the general government deficit in the US and the UK, which are expected to be 13.4 and 15.3% of GDP, the fiscal impulse in the euro area is not materially different as the US deficit is coming from a much higher base and the larger swing in the UK deficit is mainly reflecting a stronger deterioration of the cyclical component corresponding to the significantly stronger decline in activity in 2020.

² It can be argued that temporary measures, which are a direct response to COVID-19 and the economic repercussions of measures to contain the pandemic, should be treated as one-offs and not included in the structural budget balance (Danish Ministry of Finance, 2020). The Commission, by contrast, does not categorise the fiscal implications of such initiatives as one-offs, which remain insignificant in the decomposition of the Commission forecast for the euro area budget balance in 2020–22 (see Figure 3). Stimulative fiscal measures that remain in place into 2022 and beyond should arguably not be regarded as one-offs.

Figure 3: Components of the euro area fiscal balance, 2010-2022



Source: European Commission (2020), autumn forecast, own representation.

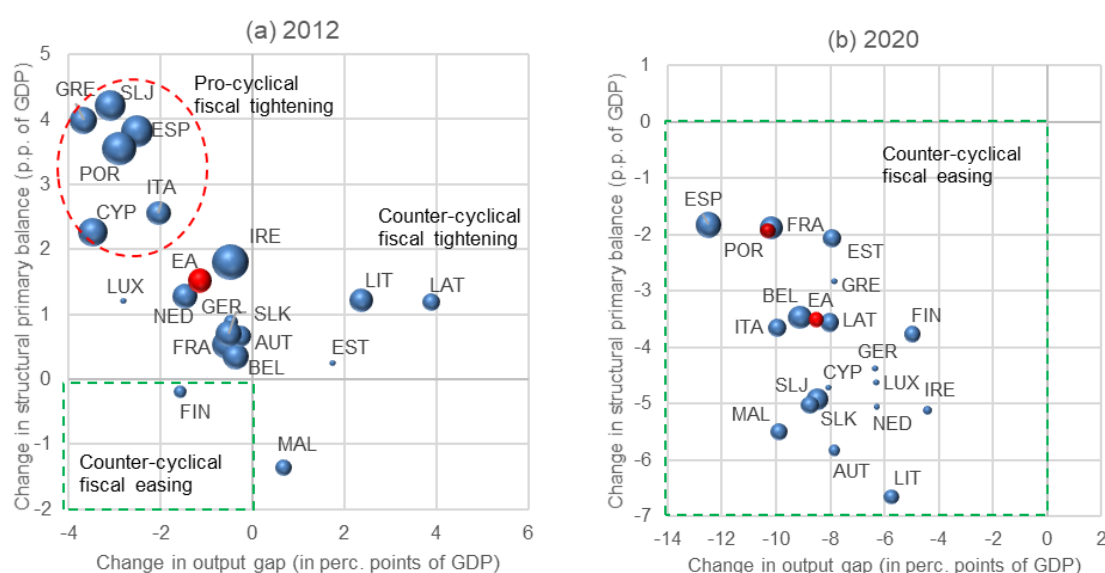
Note: For reasons of representation the graph uses a mix of denominators at the cost of introducing a small degree of imprecision. Output gap, one-offs and total structural balance: percent of potential GDP; Total budget balance and interest payments: percent of GDP. The structural primary balance is derived by deducting interest payments (percent of GDP) from the structural balance (percent of potential GDP). The cyclical component is derived by deducting the structural balance (percent of potential GDP) and interest payments (percent of GDP) from the total budget balance (percent of GDP).

Commission forecasts do not suggest a fiscal cliff looming. The deficit in the structural primary balance will decline only gradually, according to the autumn Commission forecast. This forecast is based on information as of October 2020, and governments in the euro area have in the meantime introduced additional fiscal support to assist the economy amid another phase of broad lockdowns in the winter months. As a result, the tightening of the fiscal stance will be even less pronounced than projected. Progress with the implementation of the NextGenerationEU programme, especially using the Recovery and Resilience facility it contains, provides an upside to the euro area economic outlook and can provide a significant boost to the EU economy in the next couple of years (European Commission, 2021).

Fiscal rules are suspended at least until the end of 2021. On 23 March 2020, the Council agreed to enforce a provision of the Stability and Growth Pact (SGP), known as the general escape clause, which in case of a severe economic downturn in the euro area or the Union as a whole allows Member States of the European Union to temporarily disregard the budgetary requirements that would otherwise apply under the SGP. In light of an incomplete recovery and increased downside risks for growth amid a resurgence of the virus in autumn, the provision was decided to remain in force also in 2021. The European Commission will re-evaluate the application of the general escape clause in spring 2021 (European Commission 2020b). The measure provided governments with the flexibility to undertake the fiscal effort deemed necessary to support the economy in view of the pandemic. As a result, the fiscal policy was eased in all euro area countries in accordance with an anti-cyclical fiscal stance (Figure 4). This is in stark contrast to the situation at the height of the European sovereign debt crisis in 2012,

when debt sustainability of several Member States of the periphery was questioned in financial markets and rising risk premia on these countries' government bond yields forced them to implement substantial fiscal consolidation measures, reducing demand further in economies that were already in recession. It should be noted, however, that the amount of stimulus seems to be positively correlated with the fiscal space available before the crisis rather than the depth of the economic contraction. Countries like Germany, the Netherlands, Austria and Ireland with ample fiscal space (as measured by the structural balance of 2019) and relatively modest debt levels implemented stronger fiscal efforts than countries like Spain or France that entered into the crisis with considerable structural deficits and already elevated debt levels. This evidence underlines the need to build up fiscal buffers in good economic times, in order to be able to implement appropriate fiscal responses in future crises.

Figure 4: The fiscal stance during crises: 2012 vs. 2020



Data source: European Commission (2020), autumn forecast.

Note: Bubble size represents the structural deficit in percent of potential GDP in the preceding year (structural surpluses shown as dots).

The general escape clause should be lifted once pandemic-induced restrictions on economic activity have been dropped. As long as the pandemic substantially affects economic activity, the general escape clause should remain in force. Economic activity will not fully normalise as long as there is no large-scale medical solution available since uncertainty and precautionary behaviour will remain and government restrictions will continue to be necessary to reduce social contacts. Currently effective vaccines are being rolled out in Europe, but vaccination of a sufficiently large share of the population will take time. Governments will continue to need full leeway to mitigate the social and economic damage of the crisis, at least through 2021. Once restrictions on economic activity aimed to contain the pandemic will not be necessary anymore, the general escape clause should be lifted. This could be the case in 2022, provided that vaccination rollout progresses swiftly and vaccines remain effective also against new variants of the virus. In this case, fiscal surveillance should be switched on again.

Fiscal surveillance should take due account of the increased uncertainty with respect to the cyclical position of the economy. The European fiscal framework is currently under review. It is accused of being overly restrictive and limiting the potential for growth, lacking compliance, being overly complex, and relying on shaky foundations with respect to methodology and legitimacy

(European Commission, 2020c). A timely agreement on a major reform may be difficult to achieve though, given the apparent differences in policy approaches across countries and political families. In the absence of a new consensus, the current rules would have to be phased in. Under the current framework, an initial period with a transitory arrangement could be useful, in which all Member States remain under the preventive arm of the SGP and no new excessive deficit procedure would be launched. In the initial period, the Commission should consider pre-crisis estimates of potential output as a benchmark to determine fiscal adjustment needs. This is to take account of the increased uncertainty about the long-run effects of the crisis on the economy and of the criticism that the Commission method is leading to estimates of potential output (and hence the output gap) that are heavily revised over time and risk contributing to procyclical fiscal policy adjustments (Gern et al., 2020).

Further fiscal policy initiatives should be targeted and designed to promote longer-term growth.

Against the backdrop of progress in vaccination – at least of those parts of the population that are particularly likely to experience a serious health problem when contracting COVID-19, especially the elderly – and helped by an expected seasonal decline in infections, lockdown measures are likely to be unwound gradually over the coming months. This would enable a gradual normalisation of economic activity, reducing the need for further fiscal support. The pace of recovery will, however, differ across economic activities, and a lifeline should remain in place for enterprises with business models that can be expected to be viable in a post-COVID-19 world, but remain seriously restrained for the time being.

The Kiel Institute has proposed to establish a mechanism of corporate stabilisation grants that would achieve targeted support in a consistent, fair and efficient way (Felbermayr and Kooths, 2020, Box 1). The main idea is to largely offset deteriorations in operating results of firms that emerge due to the pandemic via direct transfers by the government. Importantly, the payments would be proportionate to the average reduction of operating surpluses of firms in the same industry, thereby keeping individual incentives of firms to minimise losses intact. The advantage of this approach in the context of this paper is that corporate stabilisation grants work like an automatic stabiliser, self-adjusting the amount of grants according to the economic situation, and are thus by construction not running the danger of producing cliff effects.

Box 1: Kiel model of corporate stabilisation grants

In an economy-wide emergency, effective macroeconomic stabilisation requires a mechanism that prevents the collapse of sound production structures. Short-time work compensation schemes are an important instrument, but do not stabilise the corporate sector sufficiently as they do not prevent insolvency as a consequence of capital expenses and other fixed costs.

A corporate stabilisation scheme to preserve viable economic structures in the presence of a massive macroeconomic interruptive shock should meet a number of criteria, including: It should be non-discriminatory between industries, company size and legal forms; sectors that are more affected should also receive greater support; companies that were already struggling before the crisis should receive less support; the mechanism should be linked to criteria that are easy to determine and cannot be changed by companies in retrospect. It must not undermine incentives for companies to manage the crisis on their own. It must be targeted, self-adjusting and legally secure, as well as quickly operational in crises of various kinds. The instruments used to date – in Germany: particularly turnover compensation ("Novemberhilfe") and fixed cost compensation ("Überbrückungshilfen") – generally do not meet these criteria.

The Kiel model builds upon grants that compensate the lion's share of crisis-induced reductions of operating surpluses to design a consistent and (vertically and horizontally) fair policy response. The

impact of the crisis is measured along sufficiently disaggregated industry averages (further differentiated by regions). Industry-wide operating surpluses are beyond the reach of individual beneficiaries. Thus, idiosyncratic success factors and productive incentives are preserved.

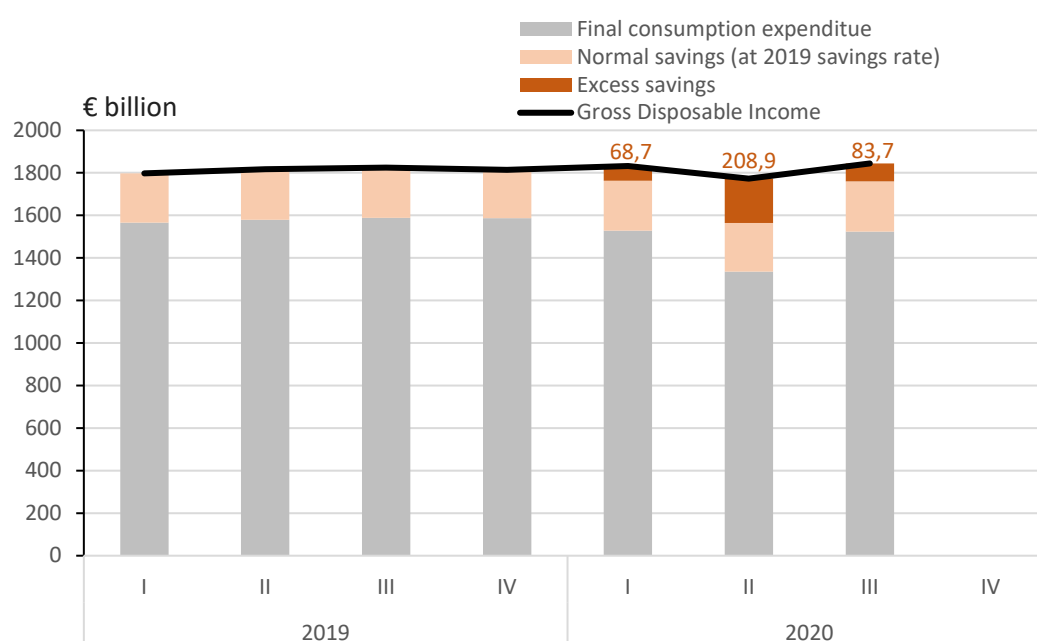
Universal criteria apply for all industries, enterprise sizes and legal corporate structures. The transfers enhance the resilience of corporates by stabilising equity buffers independently from their form of financing and without nationalising general entrepreneurial risks or hampering structural change.

To activate the mechanism for a period of no more than two years, an act of parliament is required declaring a state of macroeconomic emergency.

Source: Felbermayr and Kooths (2020).

The effectiveness of generalised demand stimulus measures such as increasing income, cutting taxes or providing benefits has been reduced by the specific nature of the crisis, as containment measures and behavioural responses have prevented consumers from making purchases. The resulting jump in the personal savings rate from around 12 to 25% in the early phase of the crisis (second quarter 2020) has only partly been reversed in the following months. This suggests that there is plenty of pent-up purchasing power to fuel consumption once a normalisation of economic activity is possible (Figure 5). Assuming that the average savings rate in 2019 was more or less normal, excess savings in the euro area amount to a cumulative EUR 360 billion up to the third quarter of 2020 (3.4% of GDP). As private consumption decreased once again by more than 3% in the fourth quarter (official figures are not yet published), an estimated EUR 100 billion of additional excess savings are likely to have been added until the end of the previous year. Unlike broad-based demand stimulus, targeted transfers to specific households, such as families or low-income households, can nevertheless be appropriate to mitigate the social cost of the crisis and may have a stronger impact on demand as these households can be expected to have a high propensity to consume.

Figure 5: Excess savings in the euro area



Source: Eurostat, National accounts.

Public investment can play a central role in the path to recovery. Gaps in public infrastructure have been diagnosed before the crisis following years of underinvestment in many countries. Additional investment needs have become evident in Europe with the political commitment for a transition towards a green economy and with the accelerated demand for IT infrastructure in the wake of COVID-19. IMF (2020) finds high multipliers for high quality public investment in terms of GDP, private investment and employment. The NextGenerationEU Programme, adopted in late July in response to the crisis and designed to complement the 7-year multiannual financial framework 2021-2027, could be instrumental in financing public investment initiatives. The programme consists of EUR 390 billion in grants and EUR 360 billion in loans. For the first time in history, the EU will issue joint debt that is not directly accompanied by claims against the receivers of funds (as in the case of EIB loans).

3.3. Monetary policy

The COVID-19 crisis threatened to trigger a second euro area sovereign bond crisis and called on the ECB to act swiftly. National governments responded with bold fiscal measures in order to mitigate the social and economic damage incurred by measures to contain the virus and by behavioural changes to avoid infection. The fiscal implications of the crisis apparently led financial markets to reassess the fiscal solvency of a number of highly indebted countries. In March, increasing spreads on returns of government bonds threatened to constrain the fiscal capacity of some Member States to mitigate the crisis, and a sovereign debt crisis was looming at the most inopportune time. In this situation the ECB stepped in and announced a number of monetary easing measures, partly in response to the general deterioration of the outlook for growth and inflation, but partly also to prevent further repercussions from tensions and turmoil on financial markets.

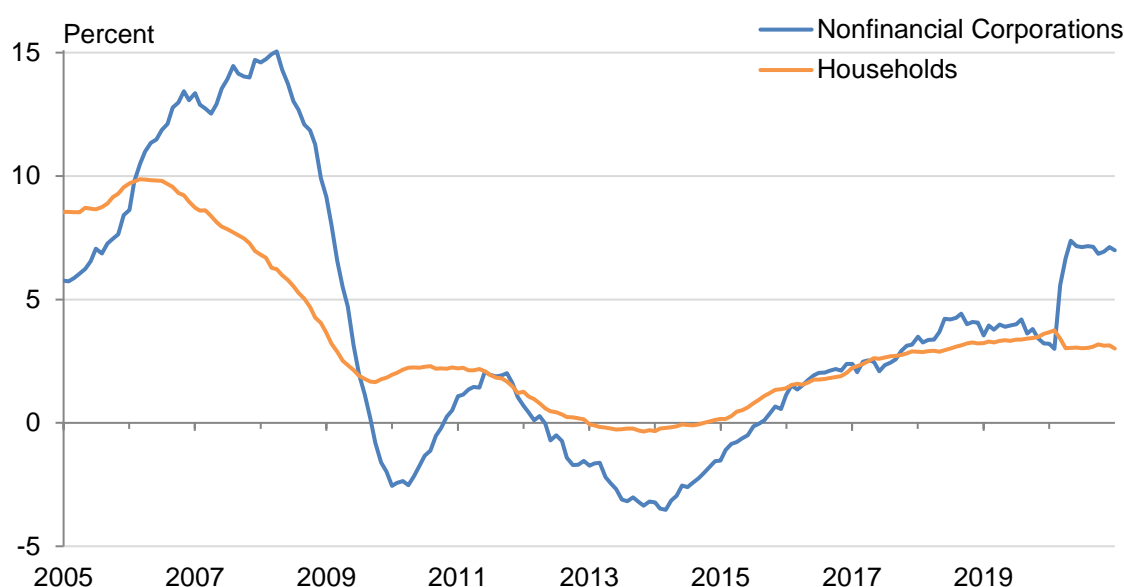
The ECB responded with another large increase of asset purchases. On 18 March 2020, the pandemic emergency purchase programme (PEPP) was announced with an initial volume of EUR 750 billion until the end of 2020 (ECB, 2020a) on top of the EUR 20 billion asset purchases under the framework of its existing asset purchasing programme (APP). PEPP was endowed with more flexible provisions with respect to the allocation across jurisdictions. In addition to asset categories eligible under the existing APP, non-financial commercial paper is also eligible for purchases under the PEPP. Moreover, a waiver for the eligibility requirements was granted for securities issued by the Greek government. The envelope of the PEPP was increased by EUR 600 billion in June and another EUR 500 billion in December, and the time frame was extended to at least mid-2021 in June and to at least March 2022 in December. Principle payments from maturing securities under the PEPP will be reinvested until at least the end of 2023. The ECB also committed to continue with net purchases under the APP at the current pace until shortly before starting to raise key ECB interest rates.

The economic impact of the asset purchases has been substantial in the acute phase of crisis, but it remains unclear what the contribution of additional liquidity is – once uncertainty has returned to normal levels. After the PEPP was announced in response to increasing signs of market fragmentation, there were first indications of stabilisation in early April that continued and became more evident during May. The ECB attributes these developments to the PEPP (Lane, 2020), which is consistent with evidence from asset purchases at the height of the crisis during other episodes. The ECB itself estimates that the PEPP decision, together with the scaling-up of the APP, have reduced GDP-weighted 10-year sovereign yields by almost 45 basis points (Hutchinson and Mee, 2020). The emergence of the COVID-19 pandemic and the massive restrictions of economic activity as a result of measures to contain it have been a singular event that led to an almost unprecedented surge in economic uncertainty. In such an environment, the assumption of risk by the central bank by provision of additional liquidity against unusually weak collateral and through unusual channels makes a huge

difference and is an appropriate response. However, the value added of a continued expansion of the central bank's balance sheet is more questionable in a situation of "normalisation", with the economy recovering and the possibility to exploit experience and increased knowledge to implement a more targeted policy response to new increases of COVID-19 infections (Beckmann et al., 2020).

Another part of the ECB response consisted of a number of measures designed to support liquidity and funding conditions. These included an improvement of the conditions of its targeted long-term refinancing operations (TLTRO III) and the introduction of pandemic emergency longer-term refinancing operations (PELTROs) for banks that hit the TLTRO bidding limits, banks with non-eligible lending and banks who do not apply for TLTRO due to excessive complexity. PELTROs were initially planned to be offered until the end of 2020, but in December the ECB decided to add four additional PELTROs in 2021 on a quarterly basis. In addition, the ECB implemented several rounds of collateral easing measures and expanded the range of eligible assets under the corporate sector purchase programme (CSPP) to non-financial commercial paper in order to provide liquidity and support bank lending. The collateral easing policy has been criticised as being indecisive as the ECB continued to seek to strike a balance between liquidity provision and risk control (Vestergaard and Gabor, 2020). The evidence of a strong increase in bank loans to the private nonfinancial sector, particularly corporations, however, does not support the concern of insufficient incentives to provide credit (Figure 6).

Figure 6: Euro area credit growth: loans to Non-MFIs



Source: ECB.

Note: Monthly data. Annual growth rate of loans (adjusted for loan sales, securitisation, and notional cash pooling) from euro area monetary and financial institutions to the private sector.

3.4. Prudential measures

Prudential rules in the financial sector have been eased to facilitate moratoria on loan repayments. Many euro area countries implemented support for the private nonfinancial sector in the form of general moratorium, payment holidays stemming from public measures or industry-wide payment relief (EBA, 2021). The decision which borrowers qualify for these programmes is usually left to the banks. In April 2020, the European Banking Authority (EBA) provided guidance on the application

of the prudential framework with respect to these generalised measures. The guidelines sought to ensure that banks were able to grant payment holidays to customers as a regulatory measure to fight the impact of the COVID-19 pandemic. Under normal circumstances, a bank must then make a provision in its accounts for a loan that is not repaid after three months, which is automatically considered non-performing. According to the guidelines, banks can grant additional moratoria without affecting their balance sheet, when certain conditions are met. These include inter alia that the moratorium was launched in response to the COVID-19 pandemic and has to be broadly applied. This does not apply to new loans granted after the launch of the moratorium. The guidelines were phased out in September, but reintroduced in December in face of renewed implementation of lockdown measures although with some modifications to limit the risk of an undue increase in unrecognized losses on the banks' balance sheets. The modified guidelines apply until 31 March 2021.

The use of capital buffers supports lending and economic activity. Measures adopted by macroprudential and supervisory authorities included temporary capital relief through lowering macroprudential buffers, allowing banks to fully use capital buffers, and adjustments to the composition of Pillar 2 requirements (P2R). These measures amount to more than EUR 20 billion of Common Equity Tier 1 capital held by euro area banks (ECB, 2021b) and can be expected to facilitate the absorption of credit losses and support lending to the economy (ECB, 2020).

Bank supervisors need to strike a balance between supporting the economy and keeping the financial system sound. The regulatory response to the COVID-19 crisis complicates the assessment of the risk profile of banks. Key prudential measures of asset quality and regulatory capital may not accurately reflect bank's financial soundness, especially if loss recognition is delayed as a consequence of applying the guidelines on loan moratoria. Early exit from the regulatory relief measures could lead to premature tightening of credit supply and weigh on the recovery, but waiting too long may undermine confidence in the regulatory systemic stability (Ehrentraud and Zamil, 2020).

4. THE INTERACTION OF COVID-19-RELATED POLICY MEASURES AND PROBLEMS OF PHASING OUT

Stimulus measures in the different policy areas are mutually reinforcing. Fiscal policy has been quick to assist vulnerable households and ailing businesses by direct transfers, tax relief measures and liquidity support, and funded large-scale utilisation of short-time work and furlough schemes to relieve firms and keep workers employed. Monetary policy has lowered the overall level of bond yields and, in combination with the creation of a large-scale common European fiscal initiative, has effectively prevented an increase in interest rate differentials, enabling all euro area countries to issue debt in sufficient quantity at favourable terms. The central bank has provided additional liquidity for banks at exceptionally low interest rates and lowered collateral standards to support the flow of credit to the non-financial private sector. Support measures for households and firms, together with loan moratoria, have reduced the likelihood of corporate defaults and insolvencies and – in combination with loan guarantees – supported bank solvency ratios. At the same time, prudential authorities have increased the bank lending capacity by freeing up bank capital and reducing the need for provisioning, in order to strengthen the capacity of banks to provide credit for the private sector and businesses afloat. According to ECB simulations (Rancoita et al., 2020), without prudential policies, the stimulus to the economy provided by government loan guarantees would have been one percentage point lower. They have also increased the impact of the additional monetary policy (by 0.3 percentage points of GDP).

The relative importance of the different policy measures varies substantially across countries. While short-time work schemes are an important instrument to support firms and households in all countries, among the larger economies they are particularly heavily used in France and the Netherlands. Direct support of firms and households is relatively important in Germany and Italy as a proportion of total support, whereas the use of tax deferrals is particularly pronounced in the Netherlands. With respect to guarantees, Spain and France stand out. The significance of payment holidays is disproportionately large in Italy and France, while the release of capital buffers in the banking sector is especially important in the Netherlands and in Spain.

Cliff effects could be particularly important in the case of fiscal measures and loan moratoria, but they need not bite. Direct fiscal support measures are generally expiring relatively early and would on current schedules to a large extent be withdrawn in the course of the first half of 2021. They can, however, easily be extended or adjusted to changing circumstances, if necessary, and experience suggests that this will be the case. A gradual withdrawal of fiscal support is appropriate if the economy starts a sustained recovery from spring onwards as projected, on the back of a seasonal decline in infections and the rollout of vaccines that allows current pandemic-related restrictions on economic activity being progressively lifted. Output of goods and services that have not, or only to a limited degree, been available during the pandemic (such as restaurant visits, entertainment and cultural activities, and travel) can be expected to rebound quickly as soon as circumstances allow, given presumably high pent-up demand and the large amount of excess savings. A decline of transfers to troubled firms and households would largely reflect the normalisation of economic activity and should not be regarded as fiscal tightening. Premature termination of important support measures would, however, be contractionary and would risk being reinforced by adverse effects on bank's balance sheets and bank capitalisation. It should be avoided, although a gradual reduction of the fiscal burden through a careful re-adjustment of measures with the aim of better targeting those most in need may still be possible without jeopardising the recovery. An extension of loan moratoria will be more problematic due to the associated negative impact on bank revenues, but is less significant as a share of overall support. The positive effect of loan guarantees and prudential easing measures is by contrast relatively persistent until the end of 2022, according to the ECB simulations.

Monetary policy needs to act as a backstop for fiscal policy in the short-term, but in the medium-term sufficient fiscal space to cope with another crisis needs to be created. Fiscal policy is the appropriate instrument to deal with the economic fallout of the COVID-19 pandemic as it can deliver targeted support with respect to the object, the dosage and the timing of measures. Monetary policy should be concerned with the repercussions on the macroeconomic level, respond to increased levels of uncertainty and downward pressure on consumer prices, and stabilise financial markets. In the euro area, with its unique institutional architecture consisting of a common monetary policy and fiscal policy at the national level, the ECB also needs to mitigate financial fragmentation stemming from different sovereign risk profiles across countries. The PEPP has been instrumental in arresting the rise in risk premia that was observed in the early phase of the crisis. Without the intervention of the ECB, a number of governments would probably not have had the fiscal capacity to adequately respond to the crisis. A substantial increase in government bond yields remains a serious risk for the fiscal outlook in high-debt countries like Italy (Consiglio and Zenios, 2020).

The ECB is in a position where fiscal dominance is a valid concern. Fiscal dominance is a situation where the central bank neglects its objective of maintaining price stability in order to support government spending (Fiedler et al., 2020). This may not be a problem as long as inflation is below target and monetary and fiscal policies are strongly complementary, as is currently the case (Schnabel, 2020). While it appears that a sustained increase in underlying inflation is unlikely for the foreseeable future, implying that interest rates can remain low and much higher debt-to-GDP ratios are sustainable (Blanchard et al., 2020), it cannot be ruled out that the repeated provision of large amounts of liquidity into the economy will eventually lead to a substantial increase in consumer price inflation. Governments should use the coming years to reorganise EU institutions and reduce debt to levels that appear sustainable also in a less benign interest rate environment. Institutional reform should include the introduction of a fiscal backstop mechanism, either on a permanent or a temporary basis, in order to safeguard effective monetary policy independence in the longer term (Gern et al., 2020).

The medium-term risks of continued massive policy support rise with the duration of the crisis. The longer fiscal, monetary and prudential measures to shore up the economy are in place the larger negative side effects can be expected to be. Structural adjustment could be suppressed that may be necessary to cope with the longer-term implications of the pandemic, such as an accelerated utilisation of digital business models and a recalibration of international value chains. This would reduce potential output in the longer run. With regulatory relief measures in place, credit risks continue to rise on the bank balance sheets without being fully reflected in benchmarks to assess the health of financial institutions (e.g. non-performing loans ratio or Tier 1 bank capital ratio). Financial stability could be at risk, if credit losses that eventually materialise after the end of loan moratoria become too large. Prudential authorities need to strike a delicate balance between continued support of borrowers facing difficulties due to the pandemic and the assumption of insolvencies that appear unavoidable in a scenario of prolonged crisis.

Fiscal reconstruction after the crisis must be reconciled with other goals on the European agenda. Economic policy needs to regain fiscal space after the crisis in order to prepare for the next major macroeconomic challenge that will inevitably come. This should, however, be achieved in a growth-friendly way, preserving public expenditure for productive investments, education and research. Common funds provided by the EU, such as in the NextGenEU framework, can potentially play an important role in stimulating potential growth and supporting the transition towards a carbon-neutral economy, particularly if they are directed to countries with high debt levels. But achieving both fiscal consolidation and sustainable and inclusive growth will not be possible without the implementation of structural reforms at the national level and appropriate changes in the European institutional framework.

5. CONCLUSION

Economic policy makers in the euro area have successfully managed to implement a strong response to the pandemic. Economic policy responded swiftly with a concerted implementation of fiscal, monetary and prudential measures on an unprecedented scale. The paper investigates potential cliff effects that may arise from the temporary nature of the measures adopted and their different phase-out schedules.

The concern that premature policy tightening could jeopardise the recovery seems overblown. Simulations suggest that cliff effects are particularly important in the case of fiscal measures and loan moratoria, but they need not bite. Fiscal policy has shown that additional measures will be implemented if necessary. A gradual withdrawal of fiscal support is appropriate provided the economy starts a sustained recovery from spring onwards as projected.

The major challenges for economic policy lie in the medium term. The medium-term risks of continued massive policy support rise with the duration of the crisis. The longer fiscal, monetary and prudential measures to shore up the economy need to be in place the larger negative side-effects can be expected to be, with corresponding negative impacts on potential growth. Fiscal reconstruction after the crisis must be reconciled with the goal of sustainable and inclusive growth, which will be difficult to achieve.

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From the Cliff to the Top: The Path to a Resilient and Sustainable Europe

Jan Phillip FRITSCHÉ, Anna GIBERT and Chi Hyun KIM



Abstract

The European Union has put in place an extraordinary array of policy measures to mitigate the devastating economic consequences of the COVID-19 pandemic. The sheer amount and extent of the support economic lifelines makes a rushed termination of policies potentially subject to dire cliff effects. Avoiding these cliff effects requires a combination of decisive and long-lasting fiscal stimuli with an accommodating monetary stance, as well as a renewed European strategy that presents a unified fiscal policy, growth-enhancing investments, and a green modernisation of the economy.

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LIST OF ABBREVIATIONS

APP	Asset purchase programme
BVerfG	German Federal Constitutional Court
CIP	Covered interest rate parity condition
COVID-19	Coronavirus disease 2019
EBA	European Banking Authority
ECB	European Central Bank
EC	European Commission
ECOFIN	Economic and Financial Affairs Council
EIB	European Investment Bank
ESM	European Stability Mechanism
EU	European Union
FX	Forex
GDP	Gross domestic product
IMF	International Monetary Fund
OMT	Outright Monetary Transactions
PEPP	Pandemic emergency purchase programme
PSPP	Public Sector Purchase Programme
SGP	Stability and Growth Pact
SMEs	Small and medium-sized companies
SURE	Support to mitigate Unemployment Risks in an Emergency
US	United States

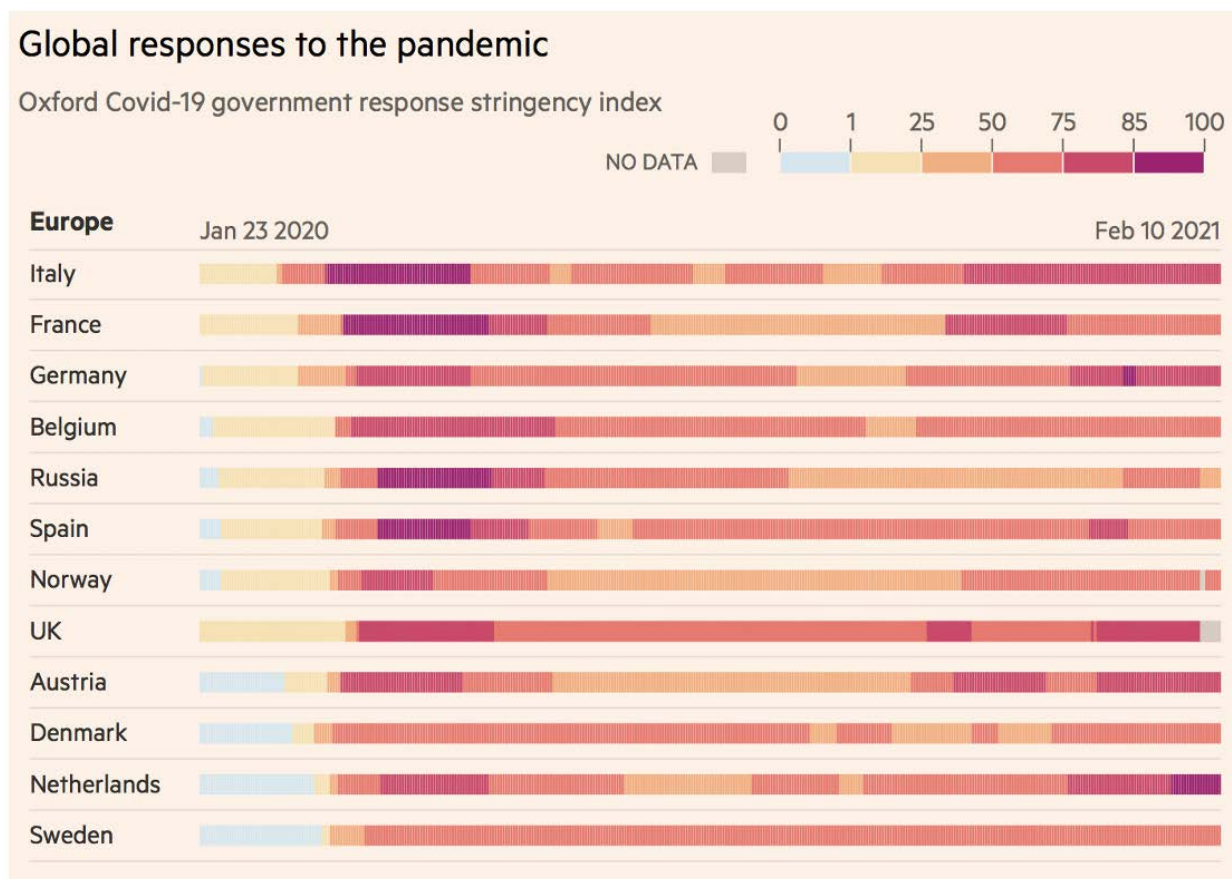
EXECUTIVE SUMMARY

- **Swift and large-scale economic measures have helped protect households and firms from severe economic distress.** The COVID-19 pandemic triggered exceptional fiscal, prudential, and monetary policy measures to stabilise the real and financial sectors. The swift reaction of policymakers was crucial in protecting households and firms from severe economic stress. These measures include broad-based stimuli (including unemployment benefits, grants, and transfers) and liquidity facilities (including low-rate loans and tax deferrals). Monetary policy interventions prevented an even greater economic toll of the pandemic.
- **However, terminating such support measures could trigger “cliff effects” for the real sector and the financial sector.** Policy interventions were designed to be exceptional, targeted, and short-lived. As economic activity is stalled, a rushed and/or uncoordinated termination of these support measures could worsen the situation, known as “cliff effects”. For the private sector, cliff effects can result in layoffs, furloughs, bankruptcies, and depressed consumer confidence. For the financial sector, cliff effects could result in a banking crisis. Finally, the euro area economy will also have to deal with increased political risk following the pandemic, which will further endanger the economic stability of the monetary union.
- **Policymakers should shift their focus from emergency support to fostering a deeper engagement of European institutions to promote long-term sustainable growth and job creation for the new economy.** Safeguarding long-term growth, in turn, will shield the euro area economy from short-term cliff effects when the pandemic comes to an end. The recovery package “Next Generation EU” is a step in the right direction. Euro area countries can make use of this fund to finance large-scale projects that address climate change, digitalisation, and EU-wide infrastructure systems, thus creating new jobs and fostering sustainable growth. Such projects can be financed through a European safe asset, jointly issued by the Member States of the monetary union. Additionally, a European safe asset would make financial markets more resilient, increasing the ability to share risks in the future.
- **Current European institutions are well equipped to tackle cliff effects with additional policy instruments.** Policymakers can ease the job of the European Central Bank by democratically validating that the current course of the institution is in line with the mandate. Further, rethinking mandate limits will contribute to planting the seeds of the Europe of tomorrow. The European Investment Bank should be made the competent authority for digitalisation, transition risks, and fostering sustainable long-term growth.

1. INTRODUCTION

Since the outbreak of the Coronavirus (COVID-19) at the end of 2019, its rapid spread has upended the lives and livelihoods of millions of people around the world. In Europe, governments implemented lockdowns, shelter in place orders, curfews, and other measures in an attempt to flatten the spread of the virus. These protective measures reached peak toughness in April 2020 and were progressively eased through the summer months. Nevertheless, the resurgence of a second wave in the majority of European countries in the fall resulted in the reimplementation of previous restrictions to greater or lesser degrees, as shown in Figure 1, which depicts an index of measure stringency, as developed by researchers at Oxford University.

Figure 1: Severity of the Oxford stringency index of pandemic measures



Source: Max Harlow, Caroline Nevitt, Alexandra Wisniewska. Blavatnik School of Government, University of Oxford. Copyright: Financial Times.

These containment measures severely affected economic activity. World gross domestic product (GDP) is estimated to contract in 2020 by -3.5%, according to the International Monetary Fund (IMF), and estimates are worse (-7.2%) for the Euro area (IMF, 2021). Therefore, stimulus packages became indispensable, softening the economic impact of containment measures. Across European countries, responses to the crisis were broadly similar, including substantial targeted fiscal, monetary, and financial measures (Blanchard et al., 2020). There is ample consensus that these swift and substantial economic measures helped protect people and firms from additional severe economic distress and will ease the road to economic recovery (IMF, 2020c; Baldwin et al., 2020).

However, the path towards the new normal is riddled with downside risks from so-called cliff effects, which describe the short-term negative side effects following the abrupt termination of an economic support measure. If these materialise, it may complicate the return pre-pandemic levels of activity.

In light of the current situation in Europe, where the vaccination rollout is proceeding slowly and new variants of the COVID-19 virus are rapidly spreading, the outbreak of a third wave is a realistic threat for the European economy. The high uncertainty with respect to the pandemic's end date will probably lead to extensions of most relief measures for an undetermined period. In this case, the economic damage caused by short-term cliff effects may become a secondary concern for policymakers, as these are less likely to happen in the immediate future. Rather, policymakers must focus on how to improve already-existing policy measures that are designed to sustain the long-term stability of the euro area economy, which will also help mitigate the cliff effects once the pandemic comes to an end.

Euro-wide coordination of fiscal authorities, combined with new monetary policy measures, will prepare the euro area for the post-pandemic period. Regarding the fiscal side, we explore the implications of a (i) euro-wide cooperation in debt management and (ii) the introduction (and fast execution) of pan-European projects that can boost economic activity in a sustainable manner. From the monetary side, it is desirable that the European Central Bank (ECB) maintains its accommodative policy stance and provides liquidity to the financial markets.

This paper reviews the policy responses to the COVID-19 outbreak and the possible cliff effects that their termination poses to the European Union (EU). We argue that this might be the moment to solidify some of the emergency measures and transform them into mid- or long-term structural features of the European architecture, resulting in a more resilient and thriving Europe.

2. POLICY RESPONSES TO COVID-19

In response to the COVID-19 pandemic, governments took extraordinary measures to protect people's health, workers' jobs, and firms from the consequences of an economic halt. These measures included broad-based stimuli (including unemployment benefits, grants, and transfers) and liquidity facilities (including low-rate loans and tax deferrals). The measures had two foci: (i) sustain the livelihoods of the citizens during lockdown, and (ii) build confidence in the eventual economic recovery. Monetary accommodation using conventional and unconventional tools prevented an even greater economic toll of the pandemic.

In what follows, we briefly describe the functioning of the widest spread policy responses in the euro area.

2.1. Fiscal and monetary interventions

Fiscal measures were among the first and most frequently used measures that countries all around the globe resorted to during the pandemic. Worldwide fiscal response reached unprecedented highs. According to the IMF, as of 11 September 2020, announced fiscal measures amounted to USD 11.7 trillion globally; that is, approximately 12% of global GDP (IMF, 2020).

Initial interventions in the euro area comprised individual country aid packages in the form of fiscal support. At the European level, the ECB was quick to react, supporting the individual countries and, later on, new pan-European policy interventions were devised to inject funds and liquidity into the member countries.

2.1.1. Individual country measures

In the euro area, all countries adopted stimulus packages. Fiscal support has been massive and swift, much larger than the fiscal response to the global financial crisis. Governments activated all the policy measures in their toolkit, be it discretionary measures, automatic stabilisers, and off-budget assistance. Jointly, discretionary fiscal measures increased to 3.25% of GDP (European Commission, 2020), whereas other liquidity support measures amount to approximately 20% of the euro area GDP (European Semester 2020: National Reform Programmes and Stability/Convergence Programmes). Initial responses to the coronavirus mainly targeted two objectives: (i) protect people in an environment of high contagion risk, and (ii) stimulate demand in the wake of a recession driven by low aggregate demand.

First and foremost, policies had to address the immediate health consequences of the spread of the virus. Right from the start of the outbreak, a large effort was made to strengthen the health system, including buying specific equipment and hiring professionals, setting up containment and tracking infrastructures, as well as investing in the development of vaccines and therapies.

While the world waited for the development of a vaccine or a treatment that is effective and universally accessible, public health policies concentrated on containing the spread of the virus by promoting social distancing. These public health policies reduced production by reducing the number of hours worked and amplifying the supply-side shock to the economy. Contrary to appearances, though, Chetty et al. (2020) show that measures that contain the spread of the virus are effective tools to support the recovery because they save lives, restore confidence, and allow for a safe reopening of activity.

Secondly, fiscal measures attempted to shield employment and firms from the massive slowdown in aggregate demand during the COVID-19 pandemic. Depressed demand was largely driven by an

unprecedented plunge in private consumption, which exceeded that of household disposable income. Thus, there was a sizable increase in the saving rate. Part of this increase is due to the inability to consume during lockdowns and, hence, it is expected to jump back when normalcy returns. However, it could also be that consumption levels may remain low for as long as there is uncertainty regarding new pandemic waves and the subsequent intensity and duration of the expansionary policy measures.

Fiscal measures to stimulate demand in the euro area generally took the form of cash transfers, unemployment benefits, and wage subsidies. The associated fiscal multiplier of these measures should be high, as “hand-to-mouth” behaviour is typical of constrained people (Bayer et al., 2020). Other off-budget fiscal measures included tax deferrals, tax reductions, equity injections, and direct or guaranteed loans, which were meant to support liquidity. In general, fiscal measures successfully mitigated the negative effect of the pandemic on economic outcomes¹.

2.1.2. Pan-European interventions

The fiscal measures of Member States were complemented by EU-level actions. The depth of the crisis and the heterogeneity in the fiscal space available across the members provided a rationale for an EU response to complement those of the Member States. As we argue in the next section, the announcement of the intervention at the EU level was welcomed, as evidenced by the subsequent stabilisation of the financial markets, thus indicating that the coordination between Member States was deemed beneficial for the management of the crisis.

These actions allow for a greater flexibilization of the use of structural funds, the creation of a support scheme to mitigate unemployment risks, a credit line to provide liquidity to firms, and a full-fledged EUR 750 billion recovery fund to support investment and structural reforms. Box 1 provides an overview of the various pan-European actions and their intended duration.

The ECB’s response to the crisis was crucial for avoiding bigger losses in the real economy and was helpful for stabilising the financial markets. Already in mid-March 2020, the ECB started announcing a range of monetary and credit policy measures. The central piece of those measures was the pandemic emergency purchase programme (PEPP). The PEPP was designed to “prevent the fragmentation of credit markets and the impairment of monetary policy transmission” (European Commission, 2020).

This kind of policy measure was not entirely new. The ECB was already purchasing sovereign and corporate securities through the asset purchase programme (APP), which was extended at the beginning of March with an additional EUR 120 billion for the rest of 2020. The rollout of the PEPP and the expansion of the APP contributed, at least in part, to stabilising financial markets (Lane, 2020; Bernoth et al., 2020; Ettmeier et al., 2020). Most importantly, these programs also facilitated the fiscal response by using its asset purchasing capacity to help member countries scale up debt issuance. Figure 2 depicts holdings of sovereign bonds from the four largest euro area countries (Germany, France, Italy, and Spain) and the projected increase (dotted lines) in the percentage of their securities held by the Eurosystem.

In June, in response to a downward revision of expected inflation, the size of the PEPP was expanded (to a total of EUR 1.35 trillion) and its minimum duration extended by six months until July 2021. In December, the size of the PEPP was further expanded, to EUR 1.85 trillion and extended until March 2022. As long as inflation expectations remain well-anchored and subdued, the asset purchases programs should also ease the monetary policy stance to aid the recovery (WEO, 2021).

¹ Fiscal multipliers are typically large in recessions driven by low demand (WEO, 2020). However, standard fiscal stimulus can be less effective than usual this time because the Keynesian multiplier is low when some sectors are shut down (Guerrieri et al., 2020) and its effect on employment may also be muted (Baqaee and Fahri, 2020).

2.2. Prudential measures and foreign liquidity

The pandemic's damage to the financial sector has been somewhat smaller than to the real economy. This is due to the fact that (i) the nature of the pandemic is a non-financial shock, and (ii) financial institutions were more experienced, regulated, and equipped with shock absorbers since the global financial crisis. In addition, central banks, prudential authorities, and regulators acted swiftly to prevent a virulent spillover to financial markets. They launched a complex combination of measures that supported each other. These included measures that ease the balance sheet of banks (capital buffers, moratoria for bank loans, dividend bans), moratoria for insolvencies of non-financials, and supporting foreign denominated liquidity via central bank swap lines.

Box 1: Actions at the EU level to assist and promote member countries' fiscal measures

Phase 1: Providing fiscal space

On 19 March 2020, the European Commission (EC) adopted a temporary state aid framework with the objective of supporting public assistance to European companies while levelling the playing field in the EU. Such initiatives were meant to be short-term measures for urgent needs. This state aid framework has been extended twice: 3 April and 8 May 2020.

On 23 March, the Economic and Financial Affairs Council (ECOFIN) activated the general escape clause of the Stability and Growth Pact (SGP). Consequently, Member States were allowed to depart from the budgetary requirements of the SGP under the condition that a severe economic downturn endangers the euro area or the EU as a whole. Member States should remain committed to respect the SGP and, thus, the response to the exceptional circumstances should be targeted and temporary.

On 30 March, the EC allowed the use of cohesion funds, structural funds and EU solidarity funds to address the consequences of the COVID-19 crisis. The scope of these legislative acts is limited to the budgeted funds.

Phase 2: Facilitating loans and credit lines

The EUR 100 billion Support to mitigate Unemployment Risks in an Emergency (SURE) scheme was approved. It consists of temporary loans that assist governments to set up and fund short-time employment schemes for the duration of the emergency.

On 16 April, the European Investment Bank (EIB) created a European Guarantee Fund of EUR 25 billion to scale up its support to small and medium-sized companies (SMEs) and others in the real economy by mobilising up to EUR 200 billion.

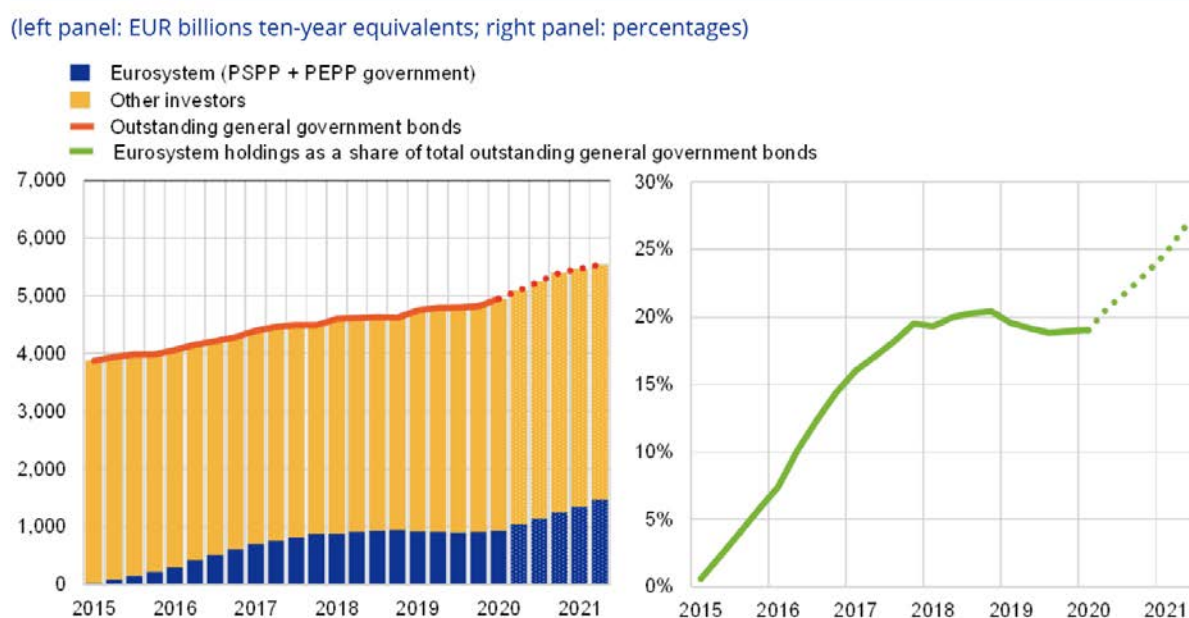
On 15 May, the European Stability Mechanism (ESM) established a Pandemic Crisis Support credit line worth EUR 240 billion for health-related issues related to the COVID-19 pandemic. Requests may be made until 31 December 2022.

Phase 3: Introducing a recovery package

On May 27, the Commission presented a recovery package containing an enlarged long-term EU budget for 2021-2027 and a new Recovery Instrument, "Next Generation EU". It consists of EUR 500 billion in grants and EUR 250 billion in loans for long-term strategic investments from Member States.

Source: ECB Economic Bulletin, Issue 1/2021 and KPMG "European Union. Government and institution measures in response to COVID-19."

Figure 2: Outstanding holdings of the Eurosystem and other investors



Source: Securities holdings statistics, government finance statistics, ECB and ECB calculations.

2.2.1. Non-bank financial intermediation and foreign liquidity provision

The total assets in the non-bank financial sector have risen by more than 80% since 2009 and have reached a share of more than 60% of the total financial sector (ECB, 2018). According to ECB estimates, money market and investment funds experienced significant stress during the March 2020 turmoil. Rising margins in the derivative markets and increased dollar funding costs amplified the stress (FSB, 2020). Risks in these sectors are particularly hard to control, since non-bank financial institutions do not have access to conventional central bank liquidity and are also only indirectly affected by the regulatory framework for banks - such as the countercyclical capital buffers. Nevertheless, the domestic and foreign monetary policy measures (Fed swap lines and PEPP) also eased the tensions in the non-bank sector.

Since the global financial crisis, deviations from the covered interest rate parity condition (CIP) imply large and persistent arbitrage opportunities - and potential inefficiencies - in one of the largest asset markets in the world. The fact that they are not exploited, implies high dollar funding and hedging costs for European institutions and a risk to financial stability². While the dollar funding premia came down from the financial crisis peak, they have never returned to pre-2009 levels. Around the end of February 2020, dollar funding conditions started to become tense again for European institutions (Persi, 2021). This led the major central banks to implement new facilities that provided Forex (FX) liquidity to foreign institutions (ECB, 2021).

² There are several recent studies discussing both demand and supply factors that explain CIP deviations; these are Bahaj and Reis (2020), Bräuning and Ivashina (2020), Cenedese et al. (forthcoming), Du et al. (2018), Iida et al. (2016), and Liao (2020). In summary, two main factors contribute to the collapse of the CIP: (i) Tighter post-crisis capital requirements for banks, which increased banks' balance sheet costs and inhibited banks' arbitrage trading between the spot dollar and FX swap markets; and (ii) A divergence in interest rates between the United States and abroad, which has led to a large demand from foreign banks to exchange their domestic currency for higher-yielding dollars that could not be accommodated at a constant price due to tighter bank capital.

The Federal Reserve took action as the overnight EUR/USD FX swap spread rose by about 6 percentage points (600 basis points) - a prohibitively strong increase. However, the announcement of the expansion of the US dollar swap lines with longer maturities, on 15 March 2020, was not enough to calm down the markets. The first operations with the eased pricing conditions on 18 March 2020 began to eliminate tensions in the market. Nevertheless, the volatility and funding costs remained high until 7-day US dollar operations were offered on a daily basis as of 23 March 2020. To prevent international spillovers and the forced sales of euro-denominated assets, the ECB reacted by extending its liquidity facilities.

3. OFF THE CLIFF: AFTER THE PANDEMIC

In the previous section, we documented the swift and sizable efforts that policymakers undertook to mitigate the economic consequences of the coronavirus outbreak. However, although these policy interventions are meant to be temporary; the early and/or uncoordinated withdrawal of these measures could disrupt the euro area economy, as the economic recovery process may last longer than the pandemic itself. This phenomenon is known as the “cliff effect”.

In this section, we start by presenting how cliff effects can affect the real and financial sectors of the euro area economy. We then introduce political risk as an additional cliff effect, as the pandemic resulted in exceptionally high debt levels of the member countries and an expanding balance sheet for the ECB.

3.1. The private sector

3.1.1. Firms

A study of Demmou et al. (2020) shows that, within a simulated exercise, without government intervention, 20% of firms would run out of liquidity after only one month of confinement, 30% after two months, and around 35-58% after three months. These numbers - even though they rely on assumptions and, thus, must be interpreted with caution - confirm the necessity and effectiveness of the swift and decisive fiscal interventions that were introduced during the pandemic. However, at the same time, it also highlights the heavy reliance of the corporate sector on fiscal support³. As the euro area has entered a second wave of the pandemic, the increased uncertainty with regard to the end of the pandemic forces firms to further deplete their cash and equity buffers. At this point, the question arises of whether firms can cope with these damages when government support expires after the pandemic.

In general, the pandemic has led to the quick depletion of firms’ cash buffers. Therefore, a (sudden) termination of government support would result in high and persistent insolvency rates. In addition, firms that have survived will have to focus on deleveraging their positions, for instance through job cuts, and, thus, may not be able to exploit new investment opportunities that are crucial for mid- to long-term growth.

Within this context, it is also important to address whether all corporations will be able to recover from the pandemic in a homogeneous manner. Mann (2020) argues that the recovery process of the manufacturing sector will be a “V” or “U” shape, while the service sector, including tourism, transportation, and local services, may take longer to recover. Or even worse, they may never fully recover, thereby exhibiting a “L” shape recovery. The reason for this reluctant recovery of the service sector can lie on health risks, but also on permanently shifted consumer preferences (Hacioglu et al., 2020; Hodbod et al., 2020a). Within this context, policymakers must examine the trade-off between (i) extending financial support for firms that will suffer from longer recovery rates, and (ii) allowing such obsolete firms to fail quickly such that resources can be reallocated to more efficient purposes⁴.

3.1.2. Households

As for firms, households have also suffered from lower income levels due to job losses or reduced

³ See also the report by Revoltella and de Lima (2020), which uses the Investment Survey of the European Investment Bank to visualize the negative impact of the COVID-19 shock on EU firms.

⁴ Jordà et al. (2020) and Hodbod et al. (2020b) discuss the danger of so-called “zombie” firms: low productivity firms that hamper productivity growth by crowding out opportunities for other new firms.

working hours. Fortunately, swift and large-scale responses of the euro area governments were successful in mitigating such damages: According to the Economic Bulletin of the ECB, although euro area households could have experienced up to a 22% decrease in their labour income due to reduced working hours, the short-time work benefits limited the drop in net labour income to an average of only -7% (ECB, 2020). Hacıoglu et al. (2020) shows that effective government transfers were able to mitigate the negative income effect of lower-income households in the United Kingdom, thus enabling them to limit the reduction of their consumption⁵.

However, an abrupt termination of such short-time work benefits can result in a direct increase in unemployment after the pandemic. As we discuss in the previous subsection, firms are likely to go through heterogeneous recovery paths - this combined with high uncertainty with respect to their earnings is likely to result in job reductions. In addition, high unemployment rates can dampen consumer sentiment and significantly affect household expenditures. This, in turn, builds a base for a vicious circle as low consumption can negatively influence corporate profits, which is crucial for job creation.

3.2. The financial sector

Even though the swift large-scale responses of the policymakers were crucial for stabilising the financial markets, the variety and magnitude of the introduced measures created a complex web of interdependencies. These bear their own risks if they are reversed as swiftly as they were implemented or reversed in the wrong order. Understanding the optimal timing and order is particularly challenging because it requires coordination among institutions that are designed to be independent of each other.

Overall, we see three highly impactful, but also unlikely, scenarios of cliff effects on the financial sector:

1. Cascade of mass insolvencies that transform into a banking crisis;
2. Repo runs and bank runs; and
3. Interbank dollarization and dependence on foreign liquidity.

3.2.1. Cascade of mass insolvencies that transform into a banking crisis and credit crunch

Countercyclical buffers can only be released once: if capital buffers are depleted, banks might be more vulnerable when a financial shock hits the economy. Guarantees, moratoria on bank loans, and moratoria on insolvencies support both the financial and real economies. Like capital buffers, these ensure that banks have enough leeway on their balance sheet to lend to economic entities and to ease the burden on those most affected by the crisis. Fading out the guarantees or moratoria too early could trigger a vicious circle of defaulting companies and tighter lending conditions.

3.2.2. Repo runs and bank runs

While a too accommodative monetary and regulatory stance might lead to excessive risk taking, a too swift monetary or regulatory tightening might cause interbank stress. Such stress could be amplified under a scenario where some countries, sectors, or banks must carry more of the burden of the crisis than others. For example, the macroeconomic imbalances and heterogeneous fiscal positions in the euro area have led to an asymmetric distribution of shocks across the countries. When an adverse shock hits, export-intensive countries with slower growing real wages suffer disproportionately less. This widens the already existing spreads between the euro area countries (see Figure 4). Consequently, high quality collateral, which supports the repo markets with liquidity, becomes scarce. This might be

⁵ Baker et al. (2020) and Chetty et al. (2020) also show similar results for households in the United States.

amplified by a concentration of business-model-related risks (e.g., tourism or health) or advantages in some countries. The seminal work of Brunnermeier and Pedersen (2009) highlights the importance of high quality collateral in the repo market and shows how liquidity spirals can end up in repo runs that eventually trigger large scale fire sales of assets. As the repo market is a cornerstone of the banking system and plays a key role in monetary policy transmission, its stability is a necessary condition for financial stability. Through this lens, the deviation from the capital key in PEPP is a right step for preventing liquidity spirals, as it enables the ECB to act as a circuit breaker in the amplification mechanism.

3.2.3. Interbank dollarization and dependence on foreign liquidity

When the dollar funding premia spiked during the March 2020 turmoil, major central banks took coordinated action. Most importantly, the Federal Reserve of the United States (US) acted swiftly, easing the dollar lending conditions for European institutions. Notably, here the Federal Reserve plays a dominant role since swap and repo agreements among central banks are predominantly denominated in US dollars.

While US dollar liquidity injections from the Federal Reserve are a short run remedy for volatile money and derivative markets, they might imply financial stability risks and obstruct the monetary sovereignty of the receiving country in the long run. Moreover, a very harmful cliff effect arises from the fact that the reversal of the Federal Reserve's policy is not controlled by a European institution. In theory, the US monetary authority could just refrain from lending to European institutions at all. This could cause the Eurodollar market collapse, with many unforeseeable consequences. However, with the stable political relation between the United States and the EU, this can be rendered as a very unlikely scenario.

However, there might be long term consequences that are more subtle. The more a country is dependent on liquidity provided by a foreign central bank, the more the monetary transmission mechanism will be dependent on the action of the donor central bank. Moreover, foreign-denominated liquidity and leverage is more difficult for domestic regulators to control. Search-for-yield motives and persistent interest rate differentials might incentivise some institutions to hold more dollar denominated assets to increase their returns. If this situation persists for decades, it could dollarize the interbank market and obstruct monetary policy.

Box 2: Central bank liquidity swap lines

With the 2008 global credit crunch, central bank liquidity swaps became of global importance. A bank liquidity swap is a currency swap used by a country's central bank to provide liquidity of its currency to another country's central bank. The provision of liquidity to a foreign country can prevent the fire sale - and thereby a devaluation - of assets that are denominated in the currency of the donor central bank. From another perspective, they can be seen as a political tie between countries. While one central bank acts as a lender of last resort to the receiving country, the receiving country has easy and secured access to the foreign currency. Evidence shows that with swap lines, the donor central bank can increase the dominance of its currency in international capital markets (Bahaj and Reis, 2020). In addition, Coffey et al. (2009) find that the supply of dollars by the Federal Reserve (Fed) to foreign central banks via reciprocal currency swap lines reduced CIP deviations during the global credit crunch. Nevertheless, as Gros and Capolongo (2020) note, it is not clear if the swap lines of the ECB are as powerful as those of the Federal Reserve when it comes to currency competition and providing international backstops against fire sales of assets.

Additionally, the ECB acted as a donor central bank and extended the provision of euro swap and repo lines to other countries. We see a small legal cliff risk regarding these instruments, which is not yet explored. While it seems natural, for pragmatic reasons, that a central bank can affect the international role of its currency, at least for the ECB, it is unclear how engaging in the competition is exactly related to its mandate and even ECB officials mainly point to the euro's international role when it comes to justifying them (ECB, 2020a). However, as the reversal of the ECBs repo and swap lines might trigger the sale of euro denominated assets in the receiving countries, the ECB can likely argue that maintaining the swap lines is a prerequisite for financial stability of the euro area.

3.3. The political sector

In this section, we discuss the political risks of the pandemic in greater detail to provide a better understanding of how to think about policy designs for the post-pandemic period. One potential cliff effect of removing fiscal support is a protracted downturn. If confidence does not return to the private sector and demand falls short of pre-pandemic levels, economies could find themselves in a prolonged recession. Ultimately, this may require further fiscal assistance down the line, at least in the form of automatic stabilisers, which would compound the problem of debt sustainability and its associated risks.

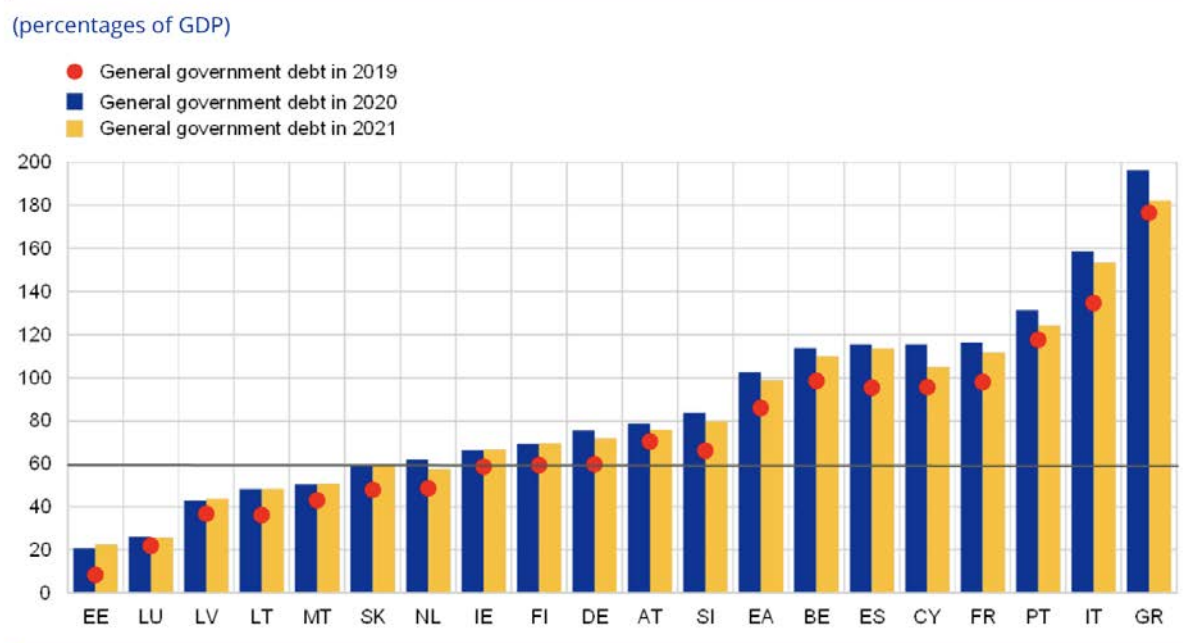
However, with high overall indebtedness levels, the risk of a debt rollover crisis cannot be ignored. The debt levels of many industrialised countries have reached new record highs since the pandemic, including euro area countries. Micossi (2020) shows how fiscal balances and sovereign debts of EU Member States - especially in the euro area - deteriorated in a drastic manner during 2020. Interesting is the fact that, different from the European sovereign debt crisis, debt levels have increased for all countries, reflecting the severeness of this crisis: from 2019 to 2020, Italy's debt level increased by 20%, Greece by 13%, Spain by 29%, France by 21%, and Germany by 23%.

Within this context, a question arises with regard to what will happen to this debt after the pandemic. As shown in Figure 3, the vast majority of Member States have already exceeded the requirements of the Maastricht Treaty, which states that the ratio of gross government debt to GDP must not exceed 60% at the end of the preceding fiscal year. In addition, the pandemic has hit the euro area countries in a heterogeneous manner, such that it is not clear when countries will be able to terminate their pandemic rescue programs in the subsequent years. Therefore, debt can further increase or stay at a high level that may not be sustainable in the long-term, leading to potential default scenarios of certain euro area countries⁶.

The introduction of ECB asset purchase programs, such as the PEPP, is also not without controversy. After the introduction of the PEPP in March 2020, German politicians filed complaints against the program; questioning the legality of the ECB's reaction to the pandemic. Already during the European sovereign debt crisis, the outright monetary transactions (OMT) and the public sector purchase programme (PSPP) of the ECB were challenged by legal issues, as German politicians took these programs to the German Federal Constitutional Court (Bundesverfassungsgericht, BVerfG) by accusing the ECB of exceeding its mandate. The active phase of the OMT lawsuit, in 2012 and 2013, was especially characterised by high political turbulence in Germany (and thus the euro area as a whole), as a German exit from the EU would have been the likely inevitable consequence had the BVerfG ruled against the OMT.

⁶ In addition to these factors, Gibert (2016) shows that using debt deleveraging as a signalling device may backfire when implemented as a "one-size-fits-all" policy for all countries simultaneously.

Figure 3: General government gross debt (2019-2021) as a percentage of GDP



Source: European Commission and ECB calculations.

With respect to the PEPP, Yves Mersch, former member of the Executive Board of the ECB and Vice-Chair of the Supervisory Board, argued that the “crisis measures [of the ECB] must be temporary and targeted. They are justified only in the light of the exceptional circumstances seen during the pandemic”. As soon as the crisis evolves, “the ECB will reconsider its tools and supervisory practices”⁷. Therefore, the careful timing of the termination of such asset purchase programs is critical for avoiding legal challenges that would negatively affect the financial stability of the euro area. Even though a study by Grund (2020) shows that PEPP is compatible with EU law, political turbulence is inevitable if these measures exceed.

To summarise, the unprecedented fiscal response to the pandemic increased the sovereign debt vulnerabilities of euro area member countries to an exceptional level. The euro area faces a dilemma at this point: on the one hand, the end of the pandemic is not yet in sight and an abrupt termination of government rescue packages could result in a protracted economic downturn, as the economic damages caused by the pandemic are artificially mitigated with governmental support. On the other hand, secular high debt levels of euro area governments and massive asset purchases by the ECB could result in high political uncertainty, thereby having the potential to threaten the stability of the monetary union. In addition, high uncertainty with regard not just to the duration of the pandemic, but also its long-term impact on the economy combined with political risks will exacerbate these cliff effects.

⁷ Keynote speech at the European System of Central Banks Legal Conference on November 2, 2020.

4. POLICY RECOMMENDATIONS FOR THE FUTURE OF EUROPE

Given the current situation in Europe, where the breakout of a third wave cannot be excluded, the policy measures introduced to mitigate the economic damage of the pandemic are very likely to be extended. In this case, we argue that short-term cliff effects may temporarily become a secondary concern for policymakers, as they are less likely to happen in the near future. Instead, policymakers should focus on improving the already existing policy measures. In this section, we emphasise the importance of EU-wide cooperation to initiate new projects and investments that boost economic activity in a sustainable manner. At the same time, it is important that the ECB further maintains its accommodative policy stance and provides liquidity to the financial markets.

4.1. EU-wide commitment to debt

The pandemic is causing exceptional economic damage resembling that of wars. Fiscal authorities have recognised the importance of working together to facilitate economic sustainability. The largest step was in May 2020, when Angela Merkel and Emmanuel Macron announced a EUR 500 billion spending programme, despite opposing opinions from the Frugal Four as well as French and German politicians⁸. A VoxEU report of Ettmeier et al. (2020) shows that this event had large stabilising effects on the financial markets compared to nation-specific fiscal rescue packages, thus emphasising the importance of fiscal cooperation in times of crises.

In this subsection, we focus on the fiscal side, showing how cooperation not just in debt management, but also mutual projects that foster mid- to long-term economic sustainability will help the euro area to enhance growth, which is crucial for mitigating the cliff effects of the post-pandemic period.

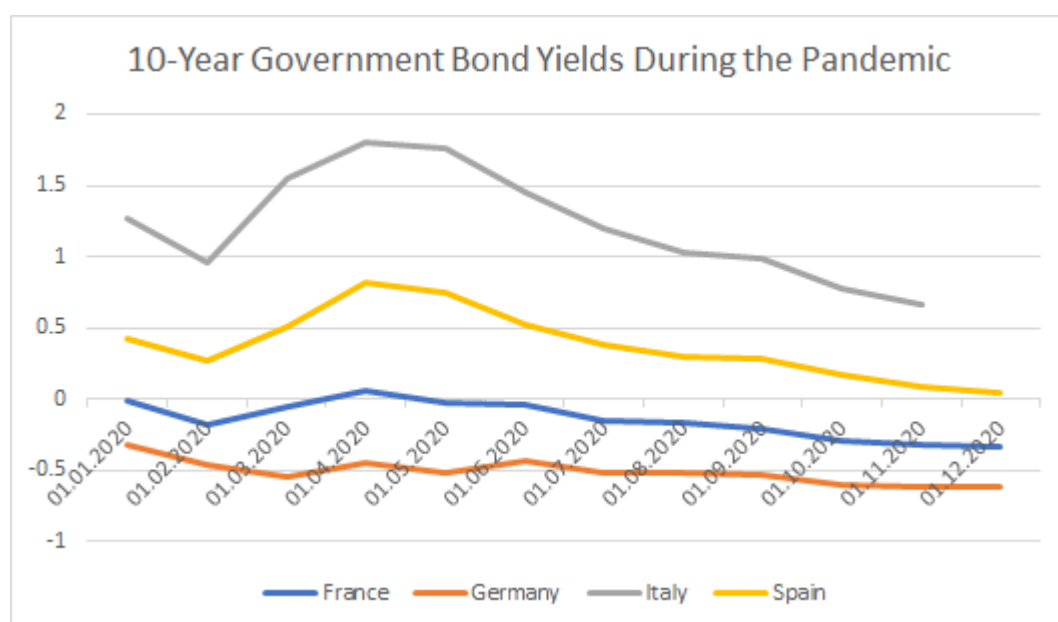
4.1.1. Further pan-European debt instruments

During times of high economic and financial instability, policymakers must focus on how to manage the high debt levels of its member countries. This is of particular importance as sovereign solvency plays a crucial role for their financial accessibility. Furthermore, we learned from the European sovereign debt crisis how default scenarios, deteriorating credit ratings, and concerns about a potential exit can threaten the euro area as a whole (Bayer et al., 2019). During the pandemic, credit risk increased more for peripheral countries like Italy and Spain, while France and Germany exhibited negative yields for their government bonds (see Figure 4)⁹. However, the increase in yields is not as severe as it was during the sovereign debt crisis. Nevertheless, a key question is how these borrowing conditions will evolve, as countries are heterogeneously affected by the pandemic - with Italy and Spain having worse circumstances than France and Germany. Therefore, it is not clear whether the pandemic will simultaneously come to an end for all member countries. These factors, in turn, can result in worsening economic outlooks for the peripheral member countries, leading to worsening conditions in the future.

⁸ The Frugal Four is term that groups European countries that share a similar conservative policy stance. This group includes Austria, Denmark, the Netherlands, and Sweden.

⁹ In section 3.2., we also show that heterogeneous credit risk of euro area countries can increase financial stress in repo markets.

Figure 4: Long-term government bond yields in the four largest EU countries



Source: Federal Reserve Economic Data.

As one solution, pan-European bond issuance is vividly debated among policymakers. However, this debate is unlikely to come to a quick conclusion because some countries still have concerns about debt mutualisation. It is feared that a common debt instrument may lead to bad incentives for certain fiscal authorities to not manage their debt in a sustainable way.

Nevertheless, the introduction of such common debt instruments can have many advantages that outweigh their disadvantages. First, the issuance of common bonds does not rely on a specific sovereign credit rating, but rather is backed by the whole monetary union. This will not only improve the credit conditions of many euro area member countries, but the issuance of pan-European debt instruments can also have a signalling effect to global markets, reassuring them of a true European commitment. Additionally, these instruments would be available for all member countries, compared to other European Stability Mechanism (ESM) programs that have strict requirements and carry a stigma of only being used by countries with weak economic conditions. Finally, a European safe asset would provide clear advantages for euro area financial markets. First, it would foster the liquidity of the repo market and support the stability of funding markets during times of financial turmoil. Second, a common debt instrument would also solve the problem of the ECB having to buy the bonds of individual member countries.

In addition, as we cannot foresee the end of the pandemic yet, the issuance of European bonds can have immense advantages in ensuring stable credit conditions for the future, thus minimising cliff effects. In particular, a common European debt instrument can support the heterogeneous fading out of fiscal reliefs, as certain countries that may suffer longer from the pandemic than others do not have to worry about worsening credit conditions.

4.1.2. Focus on sustainable projects

One further advantage of the euro-wide commitment to debt is the possibility to coordinate and finance projects that need the cooperation of all member countries to enhance the stability of the Economic and Monetary Union as a whole. As the introduced relief measures that provide short term support cannot persist forever, policymakers must implement and design new tools that allow for a

transition to measures fostering long term growth and sustainable innovation. This could also create attractive euro denominated investment opportunities and prevent an excessive reliance on dollar denominated investments as discussed in section 3.2.2.

Indeed, with the Next Generation EU stimulus package agreed to in July 2020, the European Council established an unprecedentedly large, EUR 750 billion, stimulus fund to not only support member countries during the pandemic, but also to encourage investment in green finance and digitalisation to boost the European economy in the long run. Such pan-European projects are key to enhancing the stability of the monetary union as a whole, as they facilitate long-term growth that generates a base for quick economic recovery following the pandemic.

Within this context, policymakers have already emphasised the importance of green and digital transformations. For instance, the World Economic Outlook sees the pandemic as a chance for fiscal authorities to give a big push to green investment to overcome subdued economic activity while simultaneously addressing climate change related problems¹⁰. Other than climate change, additional large-scale investments in digitalisation, but also EU-wide infrastructures, would also have positive long-term effects on economic activity by creating new jobs and optimising economic processes. Further, fiscal expenditures on research subsidies to support innovation in these fields would induce waves of technological changes that can boost productivity in the medium- to long-term.

In fact, the EU already possesses mutual instruments to collect funds for such large-scale projects: since 2007, the European Investment Bank (EIB) issues "Climate Awareness Bonds" to finance projects that address climate change. In October 2020, the European Commission announced its issuance of EU SURE bonds of up to EUR 100 billion as social bonds to support jobs in 17 Member States during the pandemic¹¹. All these instruments can be used and expanded to push further projects that will support long-term economic growth in the EU.

4.2. Validating central banking and upgrading the institutions of Europe

Section 3 mentions a set of cliff effects that, hopefully, will not materialise. Nevertheless, the ECB's toolkit is well equipped to tackle economic risks coming from an eventual third wave of the pandemic or the scenario of heightened economic uncertainty as a residual effect of the pandemic. If one of the cliff risks/effects was about to materialise, we are likely to see a prolonged and further expansion of the ECB's balance sheet. With limited technical possibilities for conventional measures¹², monetary policy will continue to resort to unconventional measures. Even if fiscal capacities might reach its limits and regulatory easing is impeded or undesirable for financial stability reasons, the ECB still has some powerful tools left for the worst-case scenario (Fritzsche and Steininger, 2019).

Nevertheless, the legal challenges around the ECB's mandate and programs are an effective limit to its credibility. These could be most efficiently addressed by lawmakers, who can validate or reject the action of the ECB, by specifying its mandate. The ECB's existing mandate was successful, equipping the euro with attributes of a dominant currency (Fritzsche and Harms, 2020). Therefore, lawmakers should

¹⁰ Their policy design suggests the introduction of higher carbon prices combined with government support for sustainable investment and technologies, where the negative economic effects of higher carbon prices are mitigated through a strong increase in economic activity through higher net investments. Source: World Economic Outlook, October 2020. "A long and difficult ascent".

¹¹ More detailed information on the SURE bonds is provided in Box 1.

¹² Monetary policy is partly constrained by the effective lower bound. Altavilla et al. (2019) show how the monetary transmission channel changes with negative interest rates. In particular, "healthy" commercial banks (whose solvency and liquidity are not affected) pass on the negative interest rates, while "weaker" banks are likely to have difficulties passing on negative rates.

not play around with the ECB's mandate recklessly, as an inconsiderate change could do more harm than good. To not interfere with the independence of the institution, the debate around the ECB's mandate must be as independent as possible of the current policy stance of the central bank.

While the ECB might be able to tackle structural risks and carry out programs that foster long term sustainable growth, it would require an immense change in the mandate to do this on a large scale and in an effective manner. Other institutions, such as the EIB, are already institutionally ready to carry out such operations.

4.2.1. Helicopter money

Helicopter money is a debt-free direct transfer to individuals and/or the government. A direct transfer to the government would probably constitute a breach of mandate or would be legally extremely restricted. Emitting helicopter money to individuals in the euro area would be relatively simple in technical terms, but a novelty in monetary policy terms (Bützer, 2017). Nevertheless, there is already promising evidence by van Rooij and de Haan (2016), who document positive effects of helicopter income on both inflation expectations and growth.

4.2.2. Buying uncollateralised bank debt

Unsecured bank bonds represent a large segment of the European bonds that have not been bought in any of the ECBs purchase programs. Purchasing these bonds would provide additional relief and liquidity to the banks. At the same time, these bonds are generally considered less safe than secured bonds that have been purchased by the ECB in the past. Currently, the ECB only buys bonds from banks that are collateralised with mortgage loans.

4.2.3. Central Bank Digital Currency

Like other central banks, the ECB is also currently designing and prototyping a central bank digital currency. While the People's Bank of China is already live with the third iteration of testing its currency in Shenzhen, the ECB is focusing on understanding the needs of users better in the course of the "ECB digital euro consultation". A digital currency would not only be a safer and less volatile alternative to current digital currencies for users but could also help to stabilise the business cycle more directly with the ECBs conventional monetary policy tools¹³. By being a backstop against the excessive use of crypto currencies or the widespread use of foreign currencies, this could foster the ECB's ability to achieve its current monetary policy objectives (Davoodalhosseini et al., 2020).

4.2.4. Limits of the ECB

However, a central bank's power is always limited by its credibility. At least since the launch of its asset purchase programs, the ECB has been operating in an environment of legal challenges. Moreover, there is a vivid debate about the role of financial stability as a prerequisite to price stability. Legal ambiguity is an effective limit to the credibility of the central bank and only lawmakers have power to create legal clarity.

Agreeing on an updated and long-lasting legal framework for European monetary policy will have beneficial effects as the current programs are likely to continue to operate in an environment of legal challenges. Legislators can eliminate doubts about the legality of these programs by specifying the ECBs mandate. Obviously, modifications to the mandate of a central bank carry some transition risk.

¹³ This holds true under the assumption that the technical risks are at least equally well addressed as in other digital currencies and that the digital euro is designed as a stablecoin that is tied to the euro.

However, a debate about what the ECB shall do in the future can only be carried out in the Parliament. Within the ECB, debates can only point to past legislation and its current mandate. There is wide consensus in economics that a linear combination of inflation and GDP-related targets are working well to stabilise the business cycle of an economy. There is also evidence that the current ECB hierarchical mandate, which focuses primarily on price stability, has not led to comparative disadvantages relative to other central banks. However, this is all conditional on economic history, with inflation expectations being less anchored and natural interest rates being much higher than in 2021. With new challenges and risks ahead, the ECB might need new instruments to tackle climate change or prolonged periods of natural interest rates below zero. As an alternative or complement to passing new legislation on the tasks of the ECB, an extension of the budget and mandate of EIB might be worth discussing. As the EIB has been responsible for the European investment policy in recent decades, its staff and infrastructure might be better at managing the risk of loan programs that are more closely related to the non-financial side of the economy – such as credit lines for sustainable companies and programs that foster long term growth and digitalisation. Additionally, dividing the tasks would prevent a power concentration, increasing the checks and balances across European institutions.

Finally, to gain a better understanding of the risks in the financial markets, policymakers could strengthen the oversight, making it mandatory to report granular data. Further, making the data collected under the European Market Infrastructure Regulation, Money Market Statistical Reporting, Securities Financing Transactions Regulation, Common Reporting and Financial Reporting framework available to a broader set of institutions could help to get a more diverse perspective and deeper understanding of the proceedings at the core of financial markets.

5. CONCLUSION

We will not fall into the trap of not seeing the forest for the trees. Indeed, cliff effects can become significant drivers of short-term economic instability that policymakers must take into consideration. However, the end of the pandemic might not be imminent and (most) policy interventions will need to continue for now to further support attenuated economic activity. Therefore, we believe it is necessary to find strategies that will not just improve existing policy measures but also help to secure long-term economic growth.

Despite the huge economic and social damages provoked by COVID-19, the pandemic reminds us of the importance of euro-wide cooperation to overcome such crises. Since its outbreak in Europe, national governments have not only committed to joint debt management, but have also introduced pan-European projects designed to kick-off long-term economic activity by investing in sustainable projects that address climate change and build new infrastructures. Pushing this agenda will not only help the euro area secure long-term growth, it will also create new jobs and investment opportunities that will mitigate cliff effects in the post-pandemic period.

The ECB is well equipped to tackle these potential cliff effects. It is also likely to maintain an accommodative stance for a prolonged horizon. Policymakers can ease the job of the ECB by democratically validating that the current course of the institution is in line with its mandate. Nevertheless, the ECB should not be the sole authority confronting euro area challenges. Sustainable long-term growth and digitalisation is better promoted by other institutions, like the EIB.

Decisive steps towards a more comprehensive integration, such as establishing pan-European debt, promoting green finance, and widening the role played by the European institutions, will better equip the European Union for a better future.

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