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Adjusting Support in a K-Shaped Recovery



Policy Department for Economic, Scientific and Quality of Life Policies
Directorate-General for Internal Policies
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Adjusting Support in a K-Shaped Recovery

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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.

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

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 to 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

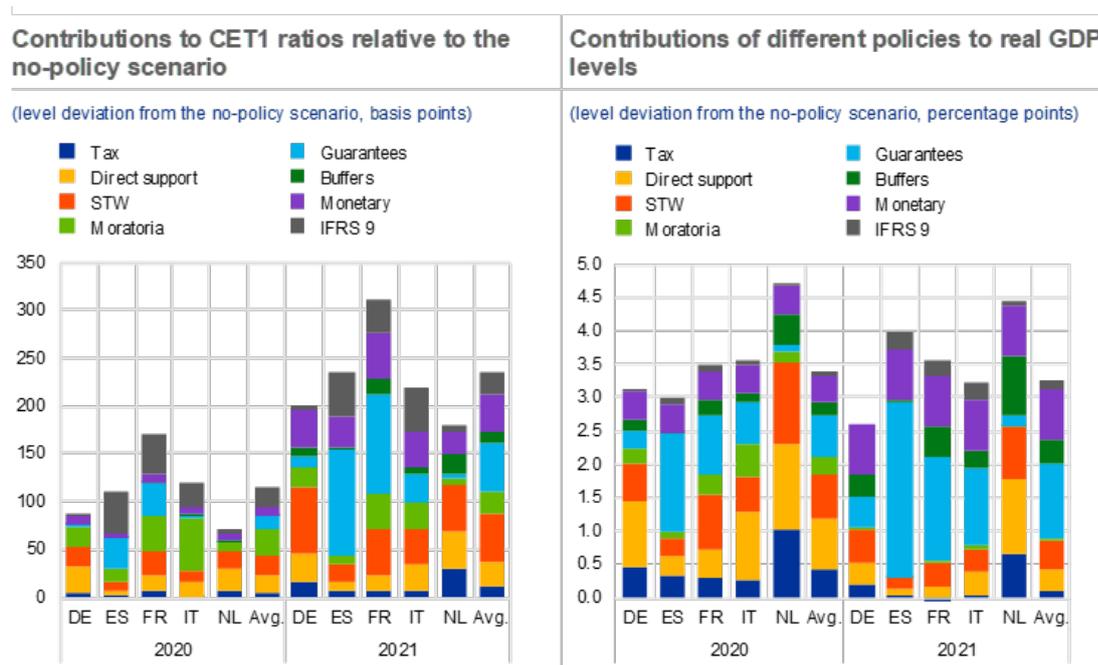
The latest ECB Financial Stability Review provides detailed estimates of the macro-financial impact of the policy measures. These estimates are based on the New Keynesian dynamic stochastic general

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



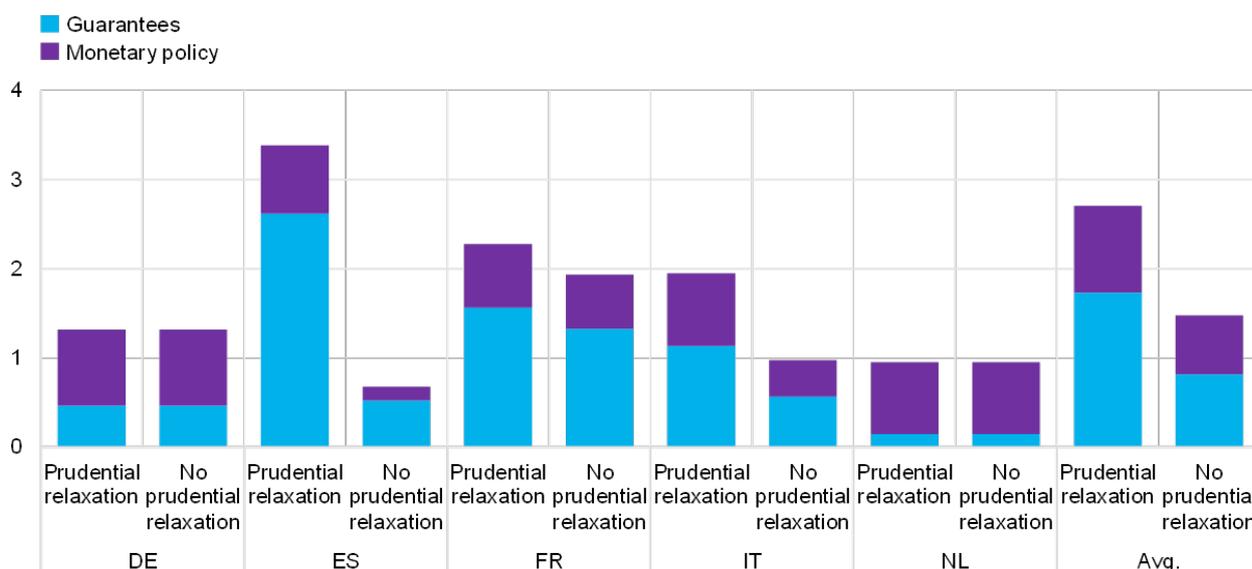
Sources: Financial Stability Review, November 2020.

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?

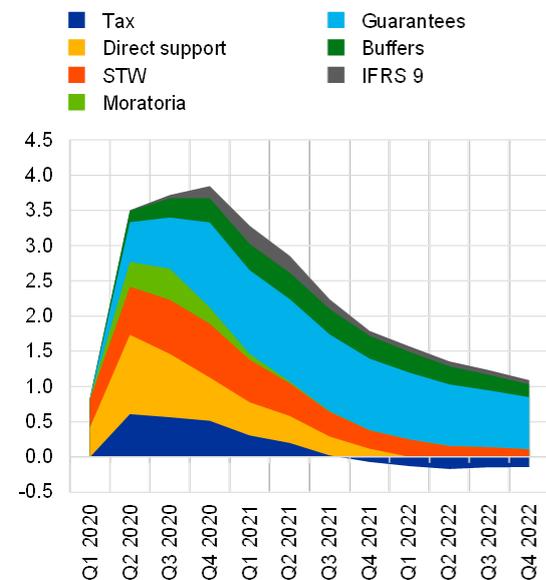
It is clear that a sudden simultaneous withdrawal of all policy measures can expose the households and firms to cliff effects and significantly weigh on growth prospects. But this is not a realistic scenario.

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

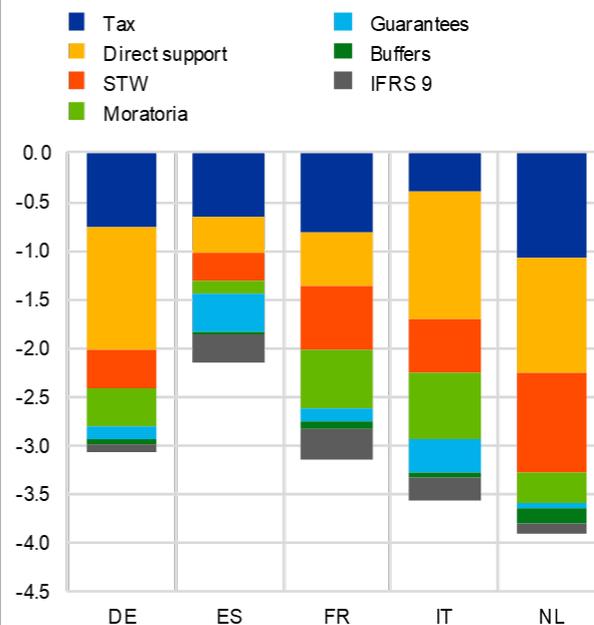
Policy support impact on the real GDP level of the five largest euro area countries

(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).

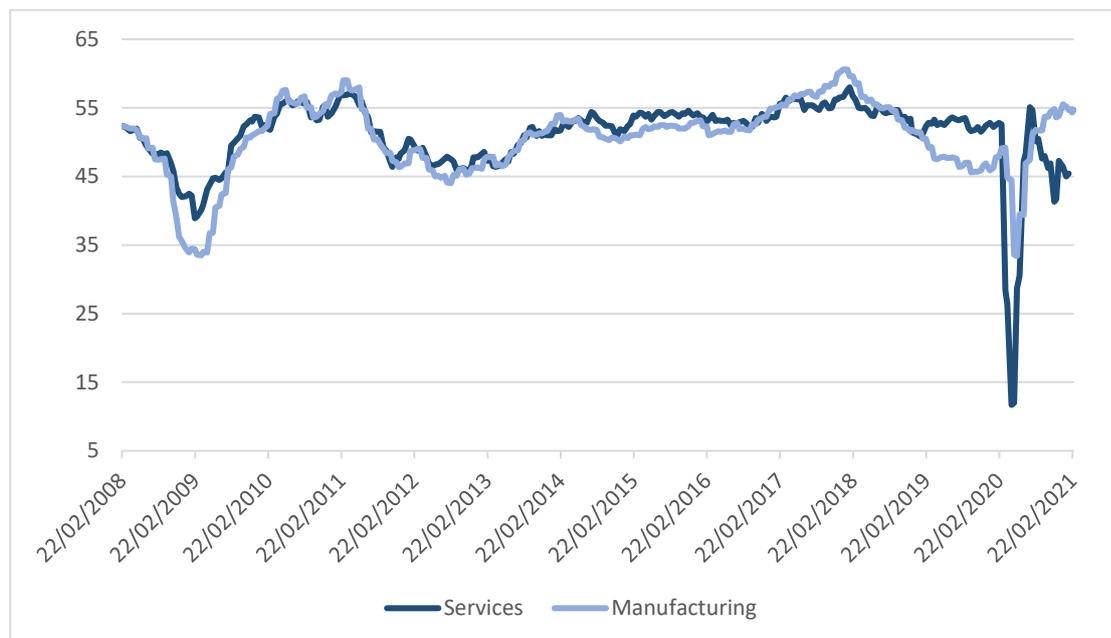
“The defining feature of the present situation is that the remaining demand and supply obstacles are highly sector specific. Aggregate demand management will thus be less effective. Income replacement measures, such as short-term work schemes, will be needed for some time, but should be applied flexibly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



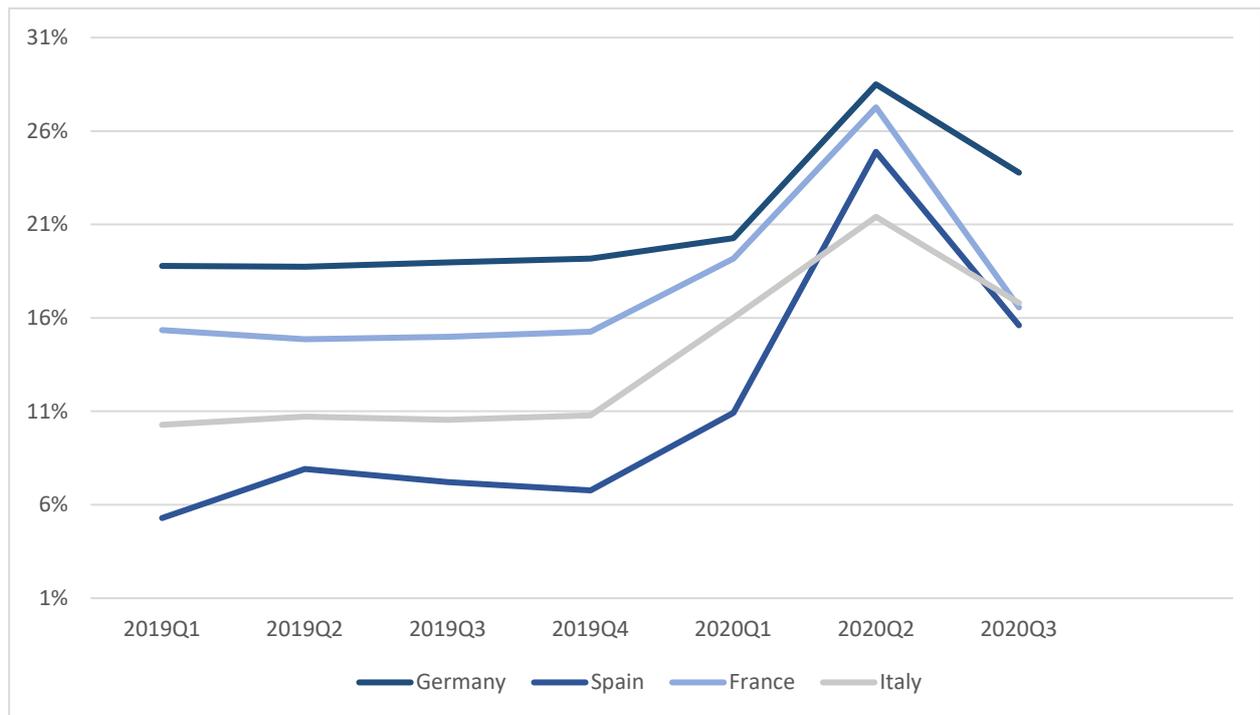
Source: Authors' calculation based on IHS Markit.

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).

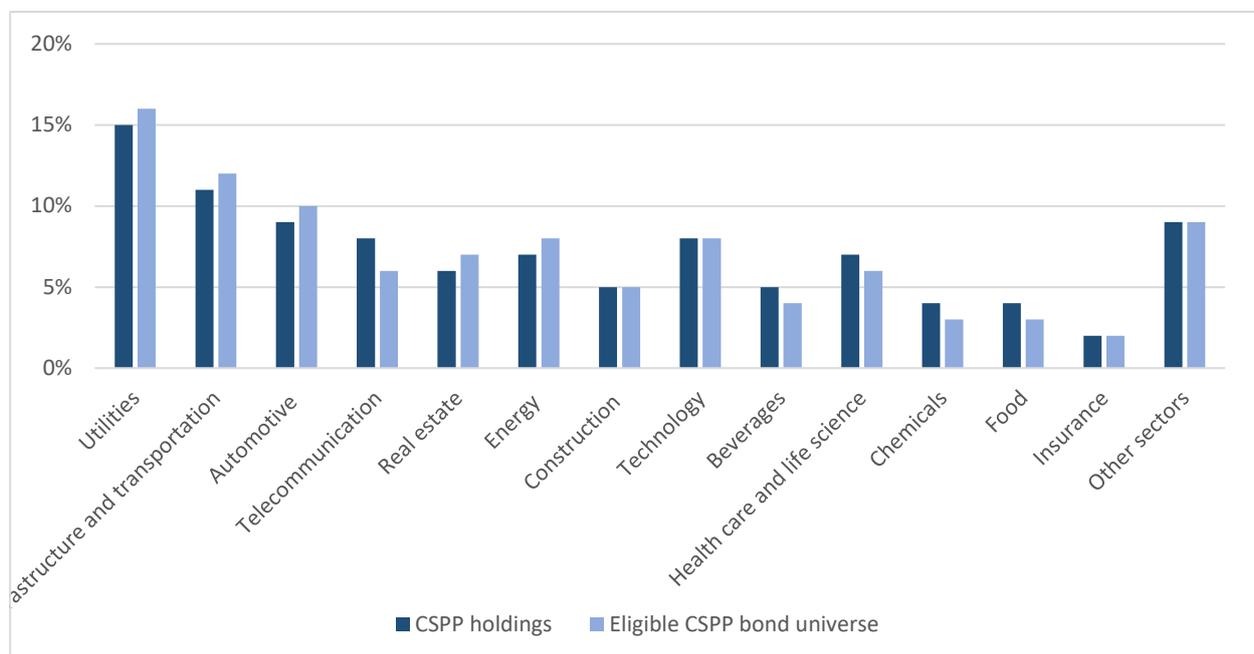
This is why Capolongo and Gros (2020) argue that the impact of the PEPP is likely to be overstated when one uses models calibrated on the experience of normal times and the PSPP.

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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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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