econPOL
POLICY REPORT

37
2022

April
Vol. 6

# Moving From Broad to Targeted Pandemic Fiscal Support

Friedrich Heinemann

CESifo ifo INSTITUTE


EconPol is CESifo's economic policy platform. With key support from the ifo Institute, it seeks to leverage CESifo's globe-spanning network of 1 800 high-ranked economists – eleven of whom have won the Nobel Prize – and ifo's decades-deep research expertise to provide well-founded advice to European policymakers. Drawing on the wide range of specializations of its members, EconPol's mission is to contribute to the crafting of effective economic policy in the face of the rapidly evolving challenges faced by the European economies and their global partners.

EconPol POLICY REPORT
A publication of the CESifo Research Network

Publisher and distributor: CESifo GmbH
Poschingerstr. 5, 81679 Munich, Germany
Telephone +49 89 9224-0, Email office@cesifo.de
Editors: Clemens Fuest, Florian Dorn


**EconPol Europe: www.econpol.eu**

# Moving From Broad to Targeted Pandemic Fiscal Support

*Friedrich Heinemann*[*]

ZEW-Leibniz Centre for European Economic Research, Mannheim, April 19, 2022

## Abstract

This paper conceptualizes an appropriate path for fiscal policy starting from the early phase of the pandemic up to the final transition to a post-pandemic new normal. Using this yardstick, it assesses the initial fiscal response of Member States. It exploits fiscal projections and program data to analyze the adjustment to the economic recovery. For loan guarantee and short-time work schemes, it identifies program-specific parameters that improve target precision and identifies examples of more and less convincing program designs.

## Acknowledgment

This study was originally published at the request of the Committee on Economic and Monetary Affairs of the European Parliament and commissioned by the Directorate-General for Internal Policies of the Union and supervised by its Economic Governance Support Unit (EGOV). The opinions expressed in this document are the sole responsibility of the authors and do not necessarily represent the official position of the European Parliament. The original paper is available on the European Parliament's webpage (here).

[*]Friedrich Heinemann, ZEW-Leibniz Centre for European Economic Research, Mannheim, friedrich.heinemann@zew.de

# TABLE OF CONTENTS

# Executive Summary

## Background

Fiscal policies in EU Member States have reacted with unprecedented speed and vigor to the economic threat of the COVID-19 pandemic. Almost two years after COVID-19 has started to hit Europe, the comprehensive answers of national and European fiscal and monetary policies have contributed to a progressing economic recovery. Although the pandemic situation remains fragile as a result of recurring infection waves and new virus variants, important arguments call for a recalibration of the initially massive reaction and the transition towards a much more targeted approach:

- Learning effects: Rapid advances in scientific knowledge about the virus, the effectiveness of non-medical interventions, testing, treatment, and the availability of vaccines have enabled European economies to keep value creation running at high levels even with a persistent pandemic.
- 'Too early' versus 'too late': Fiscal policy must balance the risk of a too early exit from fiscal support against the dangers of an exit too late. Expansionary fiscal policy is less useful in economies that increasingly suffer from various supply-side constraints. Generous support both to companies and workers may additionally hamper necessary structural adjustments to the new post-pandemic world.
- Fairness: The fairness argument for a more targeted approach is that broad and undifferentiated fiscal support necessarily entails windfall profits for companies that have not suffered from a pandemic decline.
- Long-run objectives: With the ongoing economic recovery, it becomes increasingly important to shift resources from income support to the long-run policy objectives such as digitalization, climate neutrality, human capital, technological innovations, and social cohesion.
- Fiscal and financial resilience: Avoiding the unnecessary build-up of public debt and accumulating new fiscal buffers is crucial to establish a country's fiscal preparedness for the next crisis.

## Aim

Against this background, the study's objective is

- to design an appropriate fiscal policy path that reflects the particular situation of the different pandemic phases,
- to assess the appropriateness of the initial fiscal response of EU Member States,

- to evaluate the ongoing adjustment of national fiscal strategies in the light of the conceptual optimal path,
- to identify program-specific parameters that can be used for a more targeted approach in the design of guarantee and short-time work programs.

### Phase-Specific Fiscal Support through the Pandemic (Section 2)

The study develops a stylized stage-specific scheme that provides the conceptual ground for its empirical analyzes. The scheme distinguishes between four phases:

- Phase 1 “Pandemic strikes”: This phase is characterized by extreme health and economic uncertainties. Fiscal policy operates under the primary objective to support the containment of the pandemic and to provide quick liquidity to companies and households. Due to time pressure, low information and limited administrative capacity, a low precision of fiscal instruments has to be accepted.
- Phase 2 “Fragile reopening”: In the second phase, crisis management benefits from gradual learning effects, for example on the effectiveness of non-medical interventions and other counter measures. Initially rigid lockdown measures can slowly be replaced by milder instruments. Fiscal crisis instruments must remain fully available to encounter setbacks.
- Phase 3 “Gradual stabilization”: With increasing vaccination rates, the general lockdowns of the earlier stages are no longer a serious option; the precision of fiscal instruments should increase significantly by phasing out the massive and undifferentiated rescue tools from the early phases.
- Phase 4 “Transition to a new normal”: COVID-19 has ceased to be a major determinant of economic growth; other structural obstacles take over as constraining factors. Fiscal policies should address the long-run objectives (digitalization, climate policy, human capital formation, innovation, social cohesion), support structural change and build fiscal buffers for future crises.

At present, the average situation in the EU can best be described as moving through Phase 3 – with some hope of reaching Phase 4 in the foreseeable future.

### Size of Initial Fiscal Reaction (Section 3)

The first analysis compares the size of fiscal packages across Member States and looks at the correlation between the magnitude of the initial fiscal reaction and the depth of the economic contraction in the first year of the pandemic. The results show that Eastern European Member States have provided less fiscal support compared to the larger packages in Member States in the West and South of Europe. The observed variation is in line with research insights from global studies. For example, countries with less effective welfare states or large contact-intensive sectors show stronger reactions. Nevertheless, some country specificities are noteworthy. The budgetary measures of

Greece are very large even in light of the fact that the country experienced the deepest contraction among all EU countries. For Italy, the large size of non-budgetary measures (mainly guarantees) is striking. The German fiscal answer – both for budgetary and off-budgetary measures – has been massive compared to countries with a similar size pandemic shock.

### Adjustment of crisis support (Section 4)

In the next step of the analysis, the speed of the ongoing recalibration of fiscal policy over the course of the progressing economic normalization is studied. It exploits information both from fiscal projections and from COVID-19 program features.

The projected improvement of budgetary balances in relation to the forecast economic normalization sheds a more favorable light on the position of Greece, which stands out as the country with the most ambitious plans for the return to a balanced budget. Corrective action in response to the high deficits is projected to be noticeably slower in Italy and France. Italy also compares unfavorably with Spain. While both countries can expect a comparable cyclical improvement, Italy's projected budgetary improvement is much smaller than that of Spain.

Projections for structural expenditures and revenues between 2019 and 2023 provide more evidence on potential crisis support inertia since this time horizon extends into the outlined Phase 4. The analysis indicates that the crisis reaction seems to be sticky to some extent for Slovenia, Greece, Italy, and Malta. Among these countries, Greece also appears in an unfavorable light, with a relatively substantial projected decrease of cyclically adjusted revenues.

The analysis of crisis program data allows to quantify expiry profiles for pandemic fiscal measures. Overall, these expiry profiles signal a clear intention to run the programs no longer than realistic expectations of the length of crisis Phases 1 and 2 would suggest. Estonia stands out as a country that terminates its pandemic measures particularly early.

### Target Accuracy of Loan and Short-Time Work Programs (Section 5)

The final analysis looks at program details of national loan guarantee and short-time working schemes, to identify best practices. The analysis describes the trade-off between the necessity for quick and unconditional support in the early phase of the pandemic and the downside of unconditional assistance. Broad-based and unconstrained assistance may hinder necessary sectorial adjustments and preserve non-viable firms

and jobs, a phenomenon discussed in a growing literature under the term “zombification”. The right balance in this trade-off varies across the pandemic phases. There are good arguments to largely ignore long-run disincentives in the early phase but to increase selectivity in the later phases once the economy has partially recovered.

For guarantee schemes, the analysis identifies various program features that can be utilized to focus resources on viable firms, such as: guarantee coverage, interest rate subsidies, limits on refinancing old debt, and constraints on dividends and manager remuneration. Spain’s COVID-19 guarantees, with their guarantee coverage as low as 60 percent of a loan, serves as an example for a best practice towards a more targeted loan approach.

Options that limit short-time work schemes’ disincentives are: support decreasing over time, incentives to return to normal hours, requiring workers to register with unemployment agencies and to start the search for alternative employment, and the shift of funds into active labor market policies. A country that is not complying with these recommendations is Germany, where the wage replacement rate is designed to even increase with the duration of short-time work.

# 1 Introduction

Fiscal policies in EU Member States have reacted instantaneously and massively to the potentially devastating economic damage of the COVID-19 pandemic. The 27 EU Member States enacted more than 1,000 budgetary measures to stabilize the economy (EU Independent Fiscal Institutions, 2021). The magnitude of the overall fiscal support has been unprecedented. According to IMF calculations (International Monetary Fund, 2021a), EU Member States have provided an average crisis support amounting to 24.8% of their 2020 GDP – with 9.6 percentage points in direct budgetary support and 15.2 percentage points in liquidity assistance (such as loans, guarantees and equity injections).

Learning effects from the financial crisis of 2009 helped to shorten reaction times to decide, enact and implement such a massive response. This response was backed by an overwhelming economic policy consensus that a large and speedy fiscal reaction is essential to prevent a crisis-induced vicious circle of declining expectations, a fall in real economic activity and financial destabilization. National fiscal measures were part of an even broader European macroeconomic answer to the crisis that included loan packages (SURE, EIB, and ESM), the far-reaching innovations of Next Generation EU (NGEU), and the financing support by the Eurosystem through the ECB's asset purchase programs and further monetary policy measures. Both the NGEU and the ECB measures helped to provide the fiscal space and the liquidity needed to finance the comprehensive national packages also for high-debt Member States (European Fiscal Board, 2021b).

Almost two years after the virus has arrived in Europe, the success of this coordinated stabilization effort has become visible. Economies have recovered most of the decline from the pandemic slump. Already in the third quarter of 2021, output and employment are estimated to be back to pre-crisis levels for the EU as a whole (European Commission, 2021c). The extent of the recession has been significantly milder than feared, with 2020 GDP contracting by 5.9% for the EU and 6.4% for the euro area (European Commission, 2021c). While this outcome still constitutes the most severe post-war recession in Europe, it contrasts favorably with even gloomier predictions at the height of pessimism in summer 2020, when the European Commission forecasted a -8.3% GDP recession for the EU and -8.7% for the euro area (European Commission, 2020).

There is no doubt that the initially massive reaction has contributed to contain the crisis. Nevertheless, the time has come to review the fiscal approach taken, to take advantage of pandemic learning effects and to adjust the fiscal course to the changing environment. Switching to a more targeted fiscal approach is the overwhelming recommendation from various institutions in the second half of 2021 (EU Independent Fiscal

Institutions, 2021; European Commission, 2021a; European Fiscal Board, 2021b; International Monetary Fund, 2021c). In light of the speed of accumulation of further public debt, it is evident that the exceptional fiscal policies of 2020/21 cannot continue unchanged and that a recalibration is needed. The following arguments emphasize the need for a more targeted fiscal approach.

**Learning effects:** Over the last two years, the scientific knowledge on the pandemic parameters (infectiousness, health consequences) and the effectiveness of non-medical interventions has massively increased. The availability of vaccines and improved treatments offer a much higher level of health protection than in the early phase of the pandemic. The very broad and non-targeted measures in spring 2020 were the single available defense against an unknown enemy at that time. Since then, our state of knowledge and means to defend have massively improved. Even with the new infection waves and newly emerging virus variants, this knowledge allows the application of containment strategies that are economically much less costly compared to the crude approaches of the initial phase, which even included border closures and the mandated comprehensive lockdowns of services and production beyond contact-intensive sectors. The improved capability to keep value creation running in most economic sectors even in the pandemic environment is an important first argument in favor of a trimmed and targeted income and liquidity support.

**'Too early' versus 'too late'**: The arguably too rapid withdrawal of fiscal support after the financial crisis points to the risks of a premature normalization of fiscal policy. However, policy must balance the risk of "too early" against the risk of "too late". Fiscal policy should react in a symmetric way towards negative and positive growth surprises. The same arguments that speak for a swift response to negative shocks justify an equal speed of reaction to positive ones (International Monetary Fund, 2021c, p. 12). Moreover, the powerful recovery of global demand and world trade in 2020/21 has led to an increasing shortage across various types of goods and an unexpected inflationary pressure. Such a "shortage economy" hardly provides convincing arguments for a massive and undifferentiated fiscal stimulus, given the falling size of fiscal multipliers in such an environment (Auerbach et al., 2021).[1] On the contrary, the risks that public spending becomes wasteful and pro-cyclical are rising. Distorted resource allocation and asset prices, and the postponement of necessary reallocation of labor and capital according to the needs of the new post-pandemic economy are further dangers of a "too late" exit (European Systemic Risk Board, 2021).

**Fairness**: A continuation of a broad and non-targeted financial support for private households and companies would increasingly raise fairness issues. The short- and

[1] The possibility that an excessive fiscal stimulus could lead to resource misallocation and inflation is subject to a lively debate for the US with respect to President Biden's American Rescue Plan (DeLong, 2021; Summers, 2021).

long-run impact of the pandemic on economic fortunes is hugely diverse. Windfall profits have occurred in the early phase of the pandemic due to the impossibility of detailed means testing under dramatic time pressure (International Monetary Fund, 2021b, p. 14). With the ongoing stabilization, public administrations should put more effort in the design of support schemes that channel aid to the negatively affected.

**Long-run objectives**: With the ongoing economic recovery, the case for a pure demand management weakens and structural growth considerations become more relevant. It becomes increasingly important to redirect fiscal resources to again address long-run bottlenecks and policy objectives (International Monetary Fund, 2021c, p. 11). This future-orientation of public spending should entail investments into digitalization, climate neutrality, human capital and technological innovations.

**Fiscal and financial resilience**: A more targeted approach to budgetary policy is a contribution to a country's future crisis resilience. Avoiding an unnecessary build-up of public debt and accumulating new fiscal buffers is crucial to establish a country's fiscal preparedness for the next crisis. While there is currently an important debate on whether permanently low interest rates have increased fiscal space, all EU Member States already face considerable fiscal challenges due to ageing populations (Carnot, 2021; European Commission, 2021b; Mehrotra and Sergeyev, 2021). Moreover, the current tranquility in euro area bond markets depends to a significant extent on ongoing ECB support through the Eurosystem's bond purchases (Corradin et al., 2021; Havlik et al., 2021). It cannot be taken for granted that this support is perpetual. A tapering of ECB bond purchases, let alone a reduction in the stock of Eurosystem bond holdings, will be challenging for high-debt euro countries. From this perspective, a rapid transition towards a smarter support is an indispensable contribution to fiscal and financial stability.

Against this background, this study wants to assess and understand the types of fiscal reactions observed across EU Member States that differed considerably in size and structure. As a conceptual basis, the study develops an ideal stage-specific adjustment path of fiscal policy over the course of the pandemic (Section 2). This stylized adjustment path serves as the reference point for the further analysis. On this basis, the analysis proceeds in three steps:

- First, I study the correlation between the magnitude of the initial fiscal reaction and the depth of the economic contraction in the first year of the pandemic (Section 3).
- Second, I analyze the speed of the ongoing recalibration of fiscal policy in the course of the progressing economic normalization. For this purpose, I exploit information both from fiscal projections and from COVID-19 program features to provide a country-specific 'expiry profile' of crisis measures (Section 4).

- Third, I analyze program details of national loan guarantee and short-time work (STW) schemes to identify options that help avoid undesirable side-effects of crisis measures in terms of preserving non-viable firms and jobs ("zombification") in Section 5.
- Section 6 concludes and summarizes the main results.

# 2 Fiscal Support over the Pandemic Cycle

A targeted fiscal policy should consider the changing needs across the pandemic phases. For this purpose, the following stylized stage-specific scheme will provide the conceptual ground for the further analysis. The scheme distinguishes between four phases: first "*pandemic strikes*" (Box 1), second "*fragile reopening*" (Box 2), third "*gradual stabilization*" (Box 3), and fourth "*transition to a new normal*" (Box 4)

**Box 1: Phase 1 - Pandemic Strikes**

**Pandemic stage**: high uncertainty on pandemic parameters, the effectiveness of counter-measures, the seriousness of the health risks and the duration of the pandemic.

**Policy priorities:** preventing a short-run collapse of the health system and saving lives.

**Economic situation**: huge economic uncertainty across all sectors; undifferentiated comprehensive lockdowns, infections and quarantining lead to a massive decline of economic activity; private households are confronted with income losses; companies suffer from a strong decline of liquidity; dramatic slump in both consumer and producer confidence.

**Role of fiscal policy**: mobilize fiscal resources for the health sector and for pandemic monitoring, containment and mitigation; provide transfers to private households; fast liquidity support for companies.

**Precision of fiscal targeting**: necessarily very low - due to time pressure, limited administrative capacity, low information and high uncertainty on both the further pandemic and economic development.

### Box 2: Phase 2 - Fragile Reopening

**Pandemic stage**: gradual learning effects on pandemic parameters; non-medical interventions prove their effectiveness and are continuously readjusted towards milder measures; priority: reviving economic life in an environment with repeated pandemic setbacks.

**Economic situation**: significant economic recovery still excludes various contact-intensive services, hence stronger sectoral differentiation of pandemic burden; duration of pandemic drains the equity of affected firms and savings of households with income losses. Economic expectations still massively reduced.

**Role of fiscal policy**: continue fiscal support for the particularly affected households and firms; provide resources for smarter containment measures and a swift vaccination campaign; support revival of economic production; keep fiscal support ready for possible new infection waves and partial lockdowns.

**Precision of fiscal packages**: still limited, but information on winners and loser of the pandemic is improving.

### Box 3: Phase 3 - Gradual Stabilization

**Pandemic stage**: with increasing vaccination rates, the health threat to the overall population is declining, although new infection waves may still occur; the massive and unspecific lockdowns of the earlier stages are no longer a serious option; priority: increase vaccination rates; cautiously open up social and economic life throughout all sectors.

**Economic situation**: rebound of global trade supports further economic recovery, employment recovers, but does not yet reach pre-crisis levels; confidence rebounds; long-run structural impact of the pandemic on viability of companies and business models starts to become visible.

**Role of fiscal policy**: phase out massive and undifferentiated rescue tools; increase consideration of moral hazard effects and zombification risks; eliminate schemes with a large potential for unjustified windfall gains; adjust fiscal stance to growth environment and possible symptoms of overheating; fund programs that prevent lasting damage (‘scarring’) to individuals and firms.

**Precision of fiscal packages**: should increase significantly, phasing-out of general rescue measures, increase of means testing.

**Box 4: Phase 4 - Transition to a New Normal**

**Pandemic stage**: vaccination, natural immunization and effective treatments prevent COVID-19 from becoming a serious threat to the functioning of health systems.

**Economic situation**: COVID-19 has ceased to be a major determinant of economic growth; other structural obstacles take over as constraining factors; innovations and behavioural changes from the pandemic phase exacerbate structural change, with winners and losers.

**Role of fiscal policy**: phase-out crisis-related spending; build up new fiscal buffers for the next crisis; support structural change through future-oriented spending (digital economy, climate policy, human capital, innovation, social cohesion).

**Precision of fiscal packages**: Full normalization and return to non-crisis mode of welfare spending (including, for example, active labor market policies).

A common thread for the recommended use of fiscal instruments through these phases is to move from the broad and undifferentiated approaches towards more closely tailored measures (up to phase 3) and to phase-out crisis support altogether in the transition to phase 4. Freed-up resources should be directed towards the long-term challenges (Hepburn et al., 2020). Even within the EU, countries may find themselves in different phases at a given time. For example, countries with a fast vaccination progression move earlier from phase 2 to 3. Hence, the optimal fiscal response may differ between any two countries given their state of the pandemic. Moreover, pandemic setbacks may occur that push countries back into an earlier phase. The uncertainty about a new virus variant at the time of writing this report is a vivid example for a possible reversal. But till, the extensive learning after the first pandemic years should prevent a return into the emergency mode of phase 1 and even make a fall back into the "fragile reopening" highly unlikely.

With all due caution, the following timing for these phases with respect to the COVID-19 pandemic in the EU in general (and disregarding national specificities) seems appropriate:

- Phase 1 ("*pandemic strikes*") had started with the sudden arrival of the virus in Europe in February 2020 that led to a series of stringent lockdowns and border closures.
- Europe entered the "*fragile reopening*" Phase 2 in spring and summer 2020, when the non-medical interventions proved to be effective to contain the first wave of infections.

- The year 2021 has seen the roll-out of vaccines and brought EU countries into the "*gradual stabilization*" Phase 3, albeit at different speeds.
- At the beginning of 2022, it is definitely too early to already declare the arrival of Phase 4. The "*transition to a new normal*" still seems some way off. The repeated infection waves and the resulting strain they put on the health systems, as well as the renewed uncertainty from virus variants, currently bars the smooth path into the "new normal".

The following analysis is based on the assessment that we can currently classify the EU on average as moving through Phase 3 – with some hope of approaching Phase 4 in the foreseeable future. With respect to the recommended fiscal course, this implies a two folded message. On the one hand, governments should stand ready to reactivate support for households and firms that suffer from sudden unexpected pandemic setbacks. At the same time, governments should improve the precision of their pandemic assistance with the priority on households and firms who could suffer from long-run scarring effects (European Commission, 2021c, p. 10). Furthermore, instruments should increasingly anticipate the arriving of Phase 4.

For this preparation to be effective, a crucial misperception must be avoided. It is unlikely that the "new normal" represents a complete return to the previous economic environment. Various traditional business models (for example of offline retailers, event industry and business travel service providers) might no longer be viable in the future. This implies that a perpetual support for companies severely affected by the pandemic is not a reasonable option. Excessive support, for example through overly generous credit lines, would foster the "zombification" of firms in sectors with outdated business models (Anderson et al., 2021). Equally, wage compensation through short-term working schemes can also go beyond an optimal extent if it keeps workers formally in jobs that are no longer viable, and thus impedes the necessary reallocation response to COVID-19 (Barrero et al., 2020).

The latter concerns apply all the more to a scenario in which seasonally high infection rates and new virus variants become a long-term feature of global life. In this case, pandemic conditions become rather a permanent constraint to which business models and jobs have to adjust. Conceptually, there is an analogy to the mitigation-adaptation logic of climate policies: To the extent that the measures to overcome the pandemic have only limited success, society and economy have to adjust to new realities. Fiscal policy is well advised to cushion temporary pandemic shocks, but it should abstain from obstructing crisis-induced structural change through permanent transfers and wrong incentives.

# 3 The Size of the Initial Fiscal Reactions

A natural starting point to assess whether national fiscal answers were appropriate is to correlate the magnitude of a Member State's fiscal reaction with the size of the initial economic shock it received. This analysis is related to the suddenly emerging pandemic in Phase 1 and compares country reactions under the immediate impact of this shock. Concerns about a possible waste of resources due to an inappropriate fiscal answer have clearly more substance for countries for which the magnitude of additional spending appears largely out of proportion with the size of the initial shock[2].

While this is an informative first step of analysis, one must not jump to premature conclusions from any such simple descriptive exercise. Several caveats apply[3]. First, the realization of the economic shock in 2020 is heavily determined by a country's fiscal reaction. It may well be the case that a country went through a relatively mild recession just because of a massive fiscal program. Hence, we do not observe an objective measure of the exogenous severity of the pandemic shock that does not already mirror the success of countermeasures. Second, uncertainty was huge in spring 2020 and recession expectations were often more pessimistic than the actual outcomes (see Introduction). Hence, a fiscal reaction that appears excessive *ex post* may still have been appropriate *ex ante*. Third, various different determinants beyond the GDP development have an impact on the fiscal reaction. Box 5 summarizes insights from recent research that tries to explain the global variance in the fiscal answers to the pandemic crisis. According to this evidence, factors such as the welfare state effectiveness, fiscal space or GDP per capita contribute to explain the variance in national fiscal reactions in addition to the severity of the GDP contraction.

With these caveats in mind, Figure 1 presents the size of the pandemic fiscal packages relative to GDP for all EU Member States as well as the US, UK and Japan for the three main types of fiscal support:[4]

- The first type includes measures with an immediate budgetary impact ("*above the line*") such as spending on health, transfers to private households through STW schemes, lockdown compensations for companies but also tax cuts and deferrals of tax payments.

[2] A report from the independent fiscal institutions of EU Member States considers the fiscal reactions as appropriate in general but deems an "excessive reaction" in four countries" without revealing country names for the critical cases (EU Independent Fiscal Institutions, 2021, p. 16).

[3] On top, there is a mechanical effect if such an analysis is based on the ratio of fiscal measures over GPD. The use of the 2020 GDP as denominator increases the ratio for countries with a particularly sharp recession.

[4] See for this classification: International Monetary Fund (2020: Box 1.1.).

The other two classes of fiscal support do not have an immediate impact on the fiscal balance ("*below the line*").

- With the second type of support, loan programs or equity measures, governments create financial assets, typically through state banks. Examples are equity injections for strategic companies such as airlines or SME loan programs. These measures entail an obvious investment risk for the public creditor or investor.
- The third type of fiscal support is of a contingent nature and includes guarantees for example for loans from private banks that are to maintain bank lending in the time of pandemic distress. The less restrictive and selective the guarantee scheme the greater the expectation that loans will default and banks will fall back on the governmental guarantee.

**Box 5: Determinants of the Size of Fiscal Reactions to the Pandemic: Research Insights**

Aizenman et al. (2021) survey the literature on the determinants of fiscal stimulus programs related to COVID-19 and conduct an own analysis for 98 countries. According to this recent literature, the following preliminary insights have emerged:

- Countries with higher **infection and mortality rates** had to implement larger stimulus packages. The evidence on the link between stimulus size and **lockdown stringency** is mixed with studies supporting both a negative and a zero correlation.
- **GDP per capita** mattered. High-income countries enacted larger packages than middle- or lower income countries. High-income countries were also more likely to use 'below the line' measures', such as equity injections or loans. Low-income countries followed more often a narrower approach and concentrated their limited pandemic-related extra spending on the health sector.
- **Fiscal space** as measured through credit ratings or sovereign bond spreads mattered. Countries with limited fiscal room implemented smaller fiscal responses. The same pattern did not hold if fiscal space is measured through the **debt-GDP level**. High-debt countries did not have systematically smaller fiscal packages.

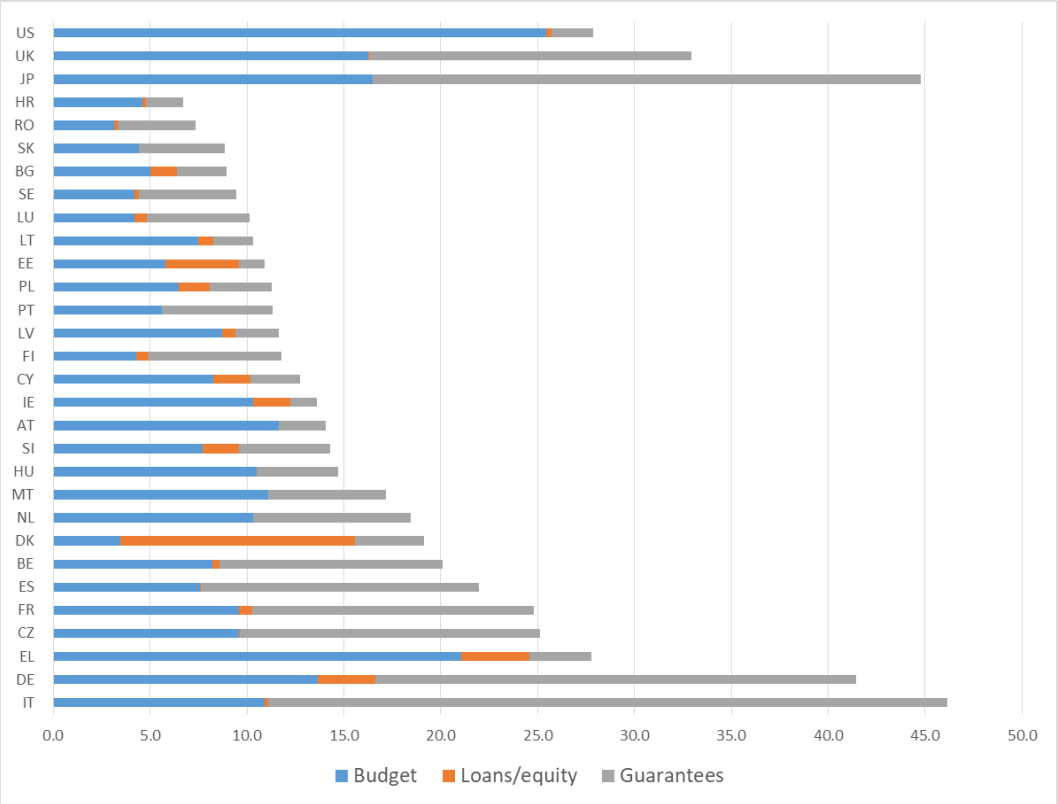
- If central banks provided support through **Quantitative Easing** in the early phase of the pandemic, the respective countries adopted larger stimulus packages. In this sense, monetary and fiscal policy seem to be complements, not substitutes in the pandemic macroeconomic-policy mix.
- Within the group of high-income countries, those with a larger **welfare state** showed smaller discretionary budgetary reactions, but larger non-budgetary reactions (i.e., loans, equity injections, guarantees). This observation is in line with the fact that a developed social safety net provides automatic stabilization and can replace discretionary efforts.
- The sectoral structure of the economy such as a particularly large **role of tourism** mattered.
- Political factors played a role: countries with high **political cohesion, political stability, and more electoral competition** show a larger fiscal reaction in the pandemic.

The comparison shows that most Eastern European Member States have provided much less fiscal support (exception: Czech Republic, with a relatively substantial answer) compared to the larger packages adopted in Member States in the West and South of Europe (exception: Portugal, with a more moderate fiscal reaction). The very high total amounts for Italy and Germany were largely driven by high guarantees. Greece is the country with by far the largest direct budgetary fiscal support relative to GDP (21.1%). Germany comes second on this indicator (13.5%).

To some extent, this variance corresponds to the research insights from the global studies (Box 5). Southern European countries were hit hard and early by the pandemic, with a high initial mortality, very stringent lockdowns, and, as a consequence, particularly severe economic downturns. The extent of the contraction was also a result of the large role of contact-intensive sectors in these countries' economies (mainly tourism). The more modest reactions in Scandinavian countries like Sweden and Finland reflect their strong social safety nets. Countries with a less effective social protection (in the South) had to implement larger pandemic packages (Alberola-Ila et al., 2020). The size of fiscal packages in the East and South East of Europe corresponds to the finding that lower income countries tended to implement smaller budgetary responses to the pandemic.

The general insight that high public debt levels did not prevent countries from pursuing a very active fiscal course in the pandemic is confirmed as well. Four out of five EU countries with the highest debt to GDP levels in the EU (Greece, Italy, Spain, and France) rank at the top in terms of the size of the fiscal stimulus. This can be read as evidence that the European Central Bank's strong involvement through massive sovereign bond purchases (through the PSPP and PEPP) successfully avoided these countries' limited fiscal spaces to become a binding constraint in the crisis.

**Figure 1: Size of Pandemic Fiscal Reaction (in % GDP 2020)**



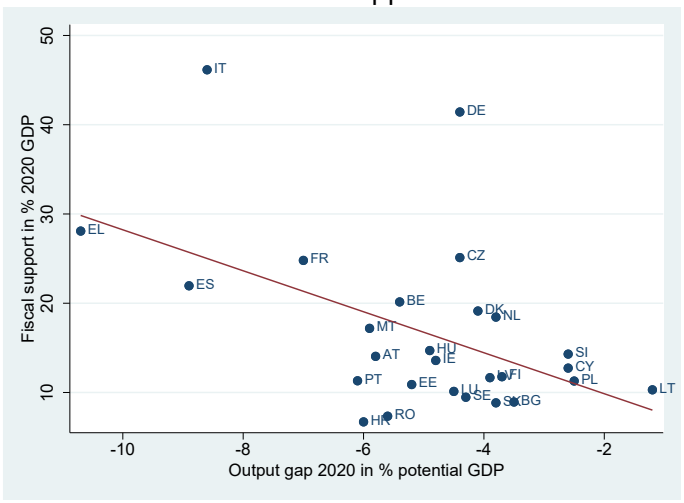

Source: International Monetary Fund (2021a). Data refer to COVID-19 related fiscal measures taken or announced between January 2020 and June 2021 for implementation in 2020, 2021 and beyond.

Figure 2 correlates the size of the output gap in 2020 with the size of the fiscal reaction, in total and decomposed into budgetary ("above the line") and non-budgetary measures ("below the line"). Overall, the scatter plots confirm the link between the extent of a country's recession and its fiscal responses. For Greece, Spain, and France, the larger magnitudes of the fiscal reaction correspond to the deeper contraction. At the same time, the smaller stabilization packages in the Eastern EU Member States reflect - at least to some extent - the milder economic crisis. However, some country positions clearly stand out. The budgetary measures of Greece are very large, even in light of the fact that the country experienced the deepest contraction among all EU countries. For Italy, the large size of non-budgetary measures (mainly guarantees) is striking. However, such a guarantee exposure is unlikely to result in the same final fiscal burden as exposure of the same size to measures with immediate budgetary effect would cause. First, take-up rates of guarantee envelopes announced are often far below 100% and in some countries even below 10% (as of spring 2021: EU Independent Institutions, 2021, p. 15). Second, firms with a viable post-pandemic business model are likely to repay their loans in full so that no final burden materializes for the guarantor. The German fiscal answer – both for below and above the line measures – is massive compared to

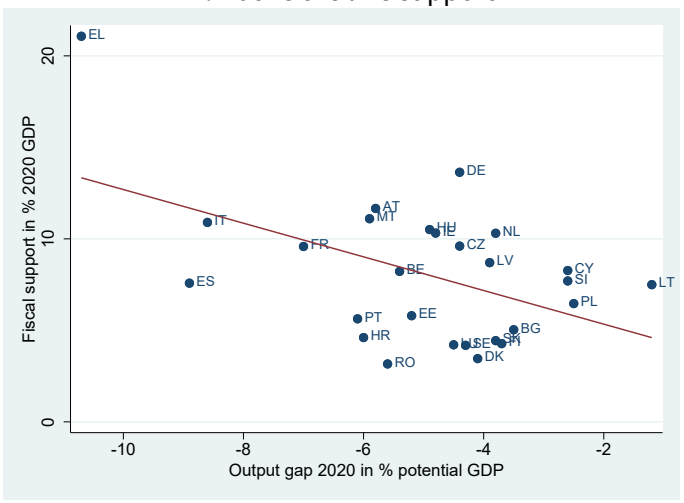
countries with a similar size of the pandemic shock. On the other side, Croatia and Romania enacted particularly limited fiscal measures in comparison to other EU Member States hit equally hard.

**Figure 2: Size of Pandemic Fiscal Packages and 2020 Output Gap**

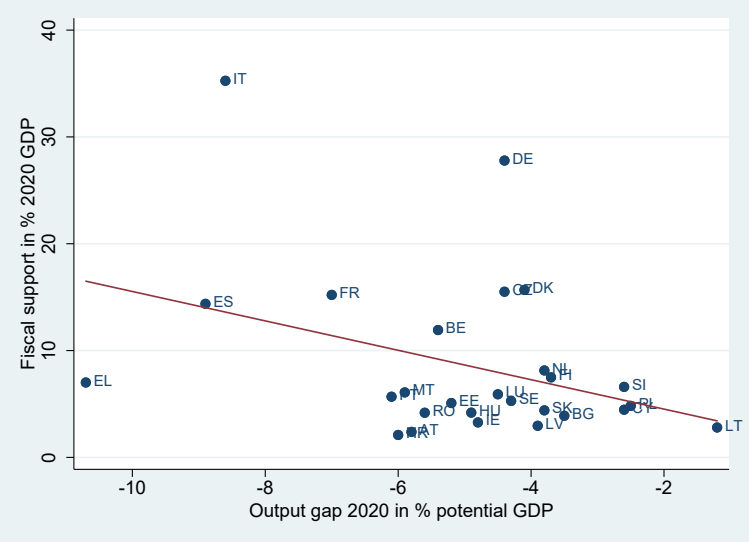
A. Total support




B. Above the line support



C. Below the line support




Notes: Output gap from AMECO database (Autumn forecast 2021), fiscal support data: International Monetary Fund (2021a). The output gap is defined as the difference between an economy's actual output and its potential output. The more negative the output gap (countries to the left), the deeper the recession.

This analysis tentatively provides a first indication of which countries should pay particular attention to a timely reduction of support in the transition to phases 2 and 3. This is clearly the case for Italy with respect to its guarantees[5], for Greece with respect to its budgetary measures, and for Germany for its broader set of instruments.

While this analysis relates to the Phase 1 reaction, the next step is to look into the gradual adjustment of fiscal policies when EU Member States leave this initial phase.

# 4 Adjustment of Crisis Support after the Initial Phase

## 4.1 Approach

Already with the transition from Phase 1 to the "fragile reopening" of Phase 2, the demand for some of the initial rescue instruments should fall automatically. For example, the recovery of employment in the service sector should reduce the take-up of short-term work benefits. With the "gradual stabilization" of Phase 3, the time to reduce the

[5] On guarantees, essential issues are the final take-up of the financial envelopes that were provided and, for the actual loans, the final share of non-performance. Take-up rates as of spring 2021 differed largely between almost 100% (in Greece) until below 10% (e.g., in Germany and Italy) (EU Independent Institutions, 2021, p. 15).

massive and undifferentiated support from the first year of the pandemic has come. An increased awareness of moral hazard effects and a shift from mere financial support to spending resources on the long-run policy objectives must take place to prepare the transition to the "new normal".

In order to assess to which extent EU Member States have already started to prepare this required transition of their pandemic budgetary policies, I present the following forward-looking analyzes:

- In a first step, I assess the projected improvement of budgetary balances in relation to the forecast economic normalization. If a country's budgetary improvement lags behind its economic recovery, this could hint towards a problematic stickiness of the initial crisis support.
- In a second step, I analyze projected change in structural expenditure and structural revenues between 2019 and 2023, based on the most recent projections from the European Commission Autumn 2021 forecast. Since a short-run shock is no justification for a long-run increase in spending or permanent tax cuts, this analysis provides further evidence on potential crisis support inertia.
- In a third step, I study disaggregated program-specific information. Specifically, I look into the enacted expiry dates of the pandemic fiscal measures to provide time-projected profiles of crisis support phase-out for a selection of EU countries. A lack of sunset-provisions would indicate a tendency to turn crisis support into permanent support.

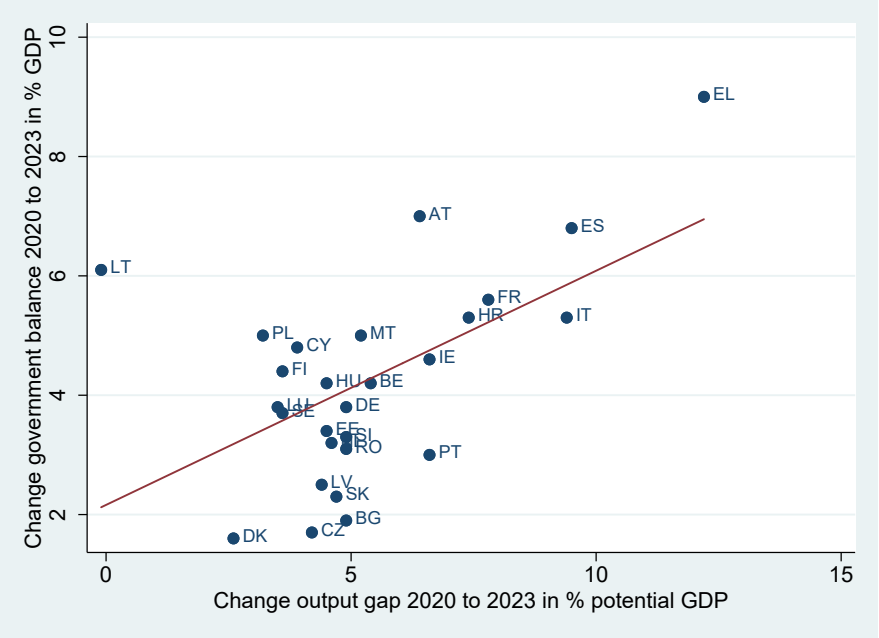
## 4.2 Projected Rebound of Budgetary Balance

The economic recovery from the pandemic should result in improving budgetary data as tax revenues recover, transfers decrease, and discretionary emergency support can be scaled back. If this improvement occurs to be slow, this could point to some stickiness of the crisis measures and a lack of political determination to end the generous crisis support from the initial phases. Figure 3 correlates the projected improvement in the budgetary balance from the recession year 2020 to 2023 with the projected change in the output gap – indicating the speed of the economic recovery. Projections are taken from the European Commission's 2021 Autumn forecast (European Commission, 2021c). The use of medium-term projections until 2023 puts the analysis into the conceptual context of the transition to a new normal in Phase 4.

While the positive correlation is evident in the scatter plot, there are distinct differences for countries with a similar speed of economic recovery. However, this variability can simply be the result of a mean-reversion process: Countries that had a particularly high (low) deficit in 2020 should realize a more (less) marked improvement. Figure 4 confirms

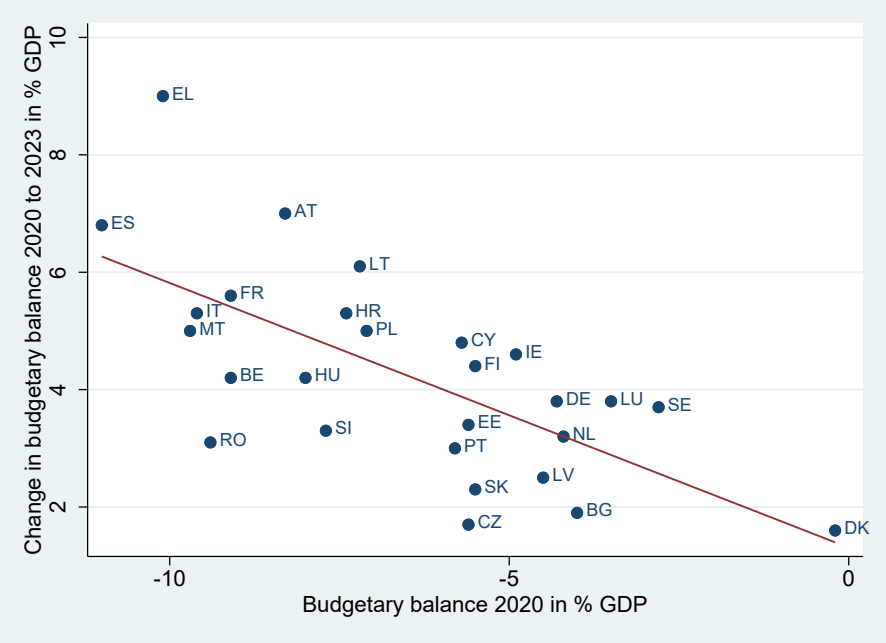
the expected tendency of mean-reversion. The improvement in the budgetary balance tends to be larger for those countries with higher deficits in the first year of the pandemic. This analysis sheds a somewhat more favorable light on the position of Greece, which appeared as an outlier with respect to the very large size of its initial fiscal reaction (section 3). According to the current projections, Greece also stands out as the country with the most ambitious plans for the return to a balanced budget. Of course, it remains to be seen whether the plans behind the current projections will materialize, but at least the country's fiscal projections signal an exit from the massive COVID-19 packages. Compared to Greece, the correction of a very high deficit in the first pandemic year is noticeably slower in Italy and France. Italy also compares less favorably to Spain in Figure 3: Although both countries can expect a comparable cyclical improvement, Italy's projected budgetary improvement is much smaller than that of Spain.

**Figure 3: Projected Increase in Government Balance 2020/2023 and Change in Output Gap**




Notes: Projections from AMECO database (Autumn Forecast 2021). The change in output gap is defined as the forecast output gap 2023 minus the output gap 2020.

**Figure 4: Change in Budgetary Balances 2020/2023 and Budgetary Balance 2020**




Notes: Projections from AMECO database (Autumn Forecast 2021).

## 4.3 Development of Structural Spending and Revenues over the Crisis

If countries successfully move forward to a more targeted fiscal approach, the crisis should only leave a limited impact (if at all) on structural spending and revenues with the completion of the post-crisis Phase 4 as compared to the pre-pandemic reference point. Conversely, a sustained increase in cyclically adjusted spending could sign sticky crisis measures and a lacking political determination to readjust fiscal policy to economic normalization.[6] By the same token, a permanent fall of structural revenues could hint to a lacking determination to phase out measures of crisis-motivated tax relief.

With this rationale, Figure 5 depicts the current projections of the change of the cyclically adjusted primary spending between 2019 and 2023. Figure 6 does the same for the cyclically adjusted revenues. Countries are ranked according to the size of the change in % of potential output. As in the previous analysis, the use of the 2023 projection provides a medium-term perspective, and thereby links to Phase 4.

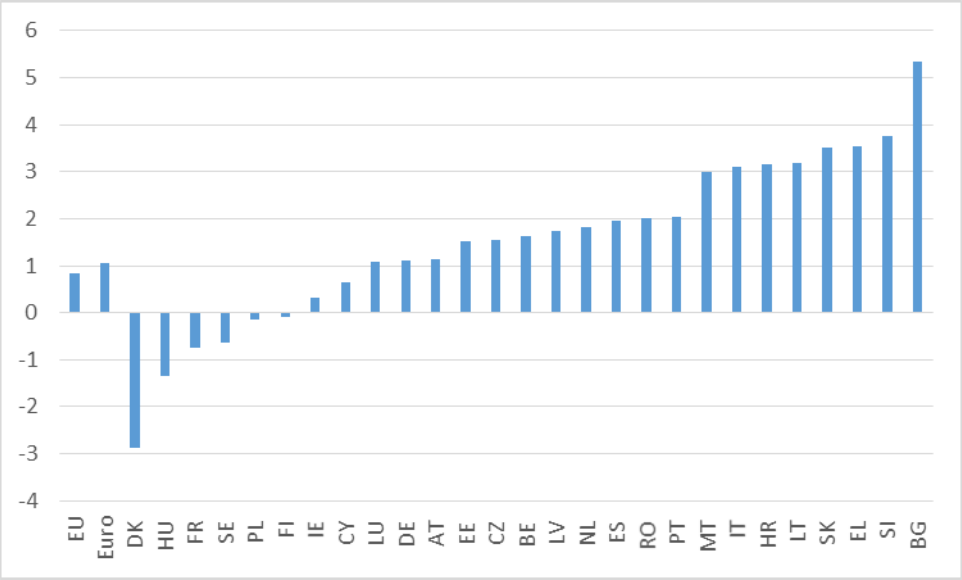
[6] The possible increase in permanent public spending in several EU countries is also one of the concerns of the independent fiscal councils (EU Independent Fiscal Institutions, 2021).

For the interpretation, some additional considerations are important. Next Generation EU is providing additional resources for government expenditure through the national Resilience and Recovery Plans in the coming years, with an average magnitude of 4% of GDP in total, but reaching magnitudes of 10% of GDP and above for the largest recipients (European Fiscal Board, 2021a, p. 14). This could finance an increase in cyclically adjusted government spending in 2023. Moreover, larger investment into the green and digital transition might justify an increase in public spending in the transition to the "new normal" if a budgetary neutral spending shift is politically infeasible. On revenues, governments may aim at a decrease of the tax burden as an intentional element of their growth strategy. Despite these additional considerations, increases in total spending of a Member State far above the EU average, or a strong permanent fall in revenues, do provide an additional piece of evidence that could point to a self-perpetuating ratchet effect of consistent high spending or lasting measures of tax relief.

This analysis reveals that expenditures (net of interest payments, adjusted for cyclical component) for the EU expand on average by one percentage point of GDP between the pre- and the post-crisis time. However, some Eastern and Southern European countries expect a much larger primary spending expansion. Focusing on those countries with a particularly massive Corona pandemic fiscal package in 2020/2021, this indicates that the crisis reaction seems to be sticky to some extent for Slovenia (+ 3.8 pp), Greece (+3.5 pp), Italy (+3.1 pp) and Malta (+ 3.0 pp). Among these countries, Greece also appears in an unfavorable light on its revenue expectations with a projected decrease of cyclically adjusted revenues by 1.7 pp.

**Figure 5: Change of Cyclically Adjusted Primary Government Expenditure 2019-2023**

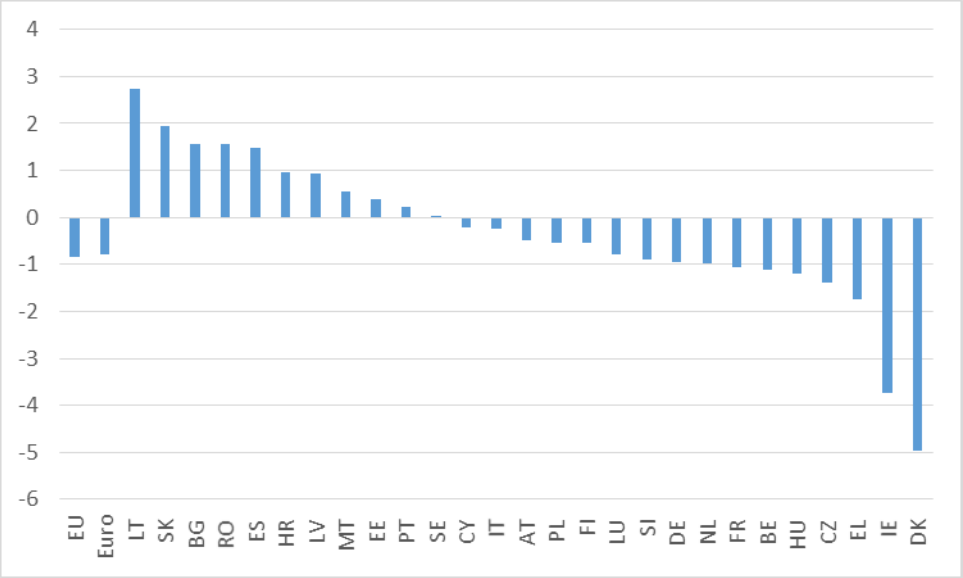
(in % of potential GDP)




Notes: Projections from AMECO database (Autumn Forecast 2021).

**Figure 6: Change of Cyclically Adjusted Government Revenue 2019-2023**

(in % of potential GDP)




Notes: Projections from AMECO database (Autumn Forecast 2021).

## 4.4 Program-Specific Expiry of Pandemic Measures

The next forward-looking step of analysis to assess a country's exit strategy from the crisis measures makes use of detailed disaggregated program data. For this purpose, I utilize the European Systemic Risk Board's (ESRB) database on "Policy measures in response to the COVID-19 pandemic".[7] This database provides program-specific data on pandemic measures, covering various program features including – and key for this study's analytical interest – the pre-defined end date for the application of the specific measure. Hence, these data allow to follow the planned phasing out of the programs over the coming years.

Figure 7 provides "expiry profiles" that indicate the legislated end of the programs over six-month intervals between 2020 and 2022, and combined beyond 2022, weighted by the size of the programs.[8] This analysis is conducted for a sample of eight countries (Denmark, Estonia, France, Germany, Greece, Italy, Poland, and Spain) based on the

[7] The ESRB collects these data in cooperation with the European Central Bank, the European Commission, the European Supervisory Authorities and national authorities. For details: www.esrb.europa.eu/home/search/coronavirus/html/index.en.html

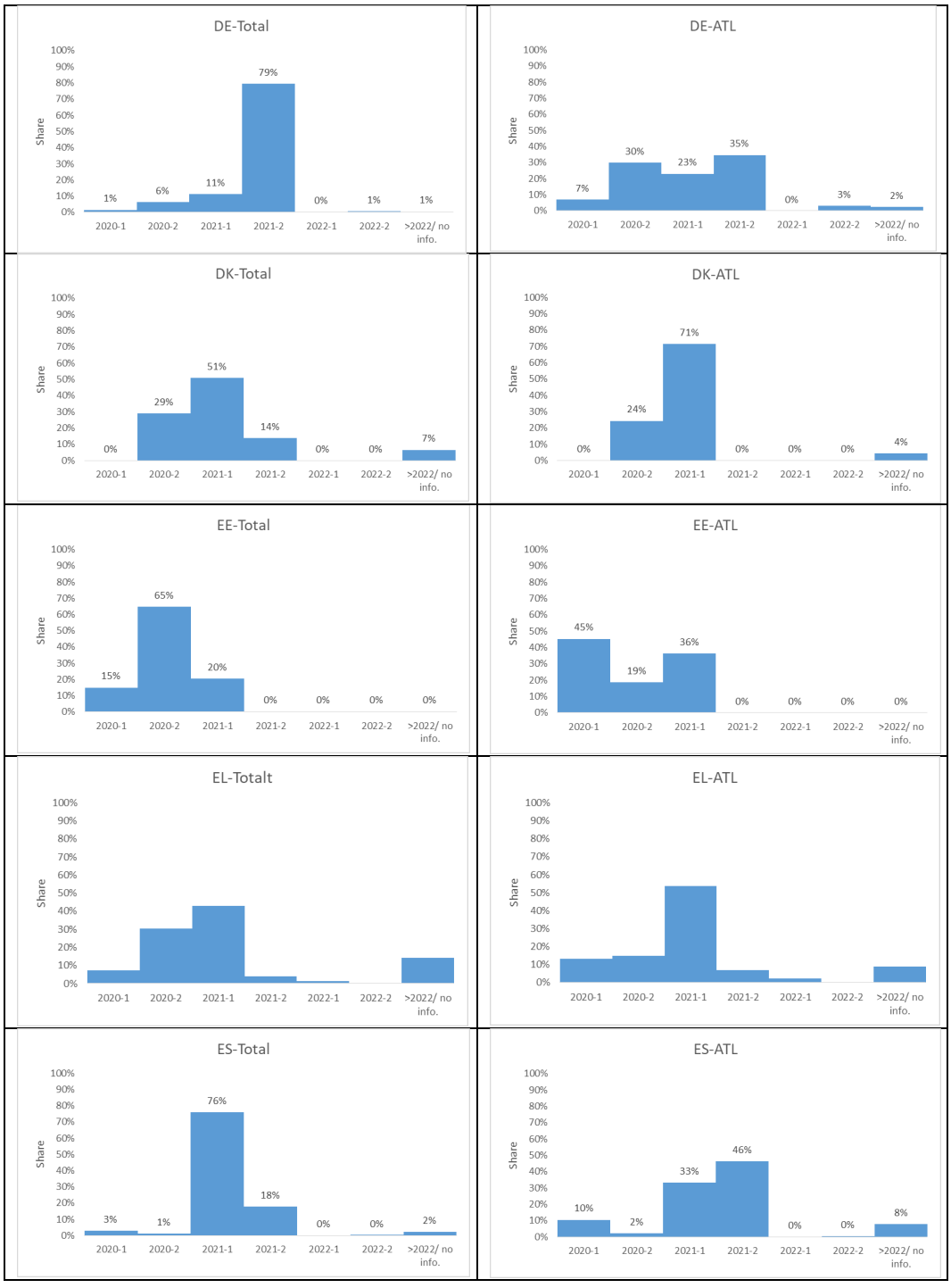
[8] See ESRB (European Systemic Risk Board, 2021, p. 15) for an expiry profile for the total of EU countries' measures.

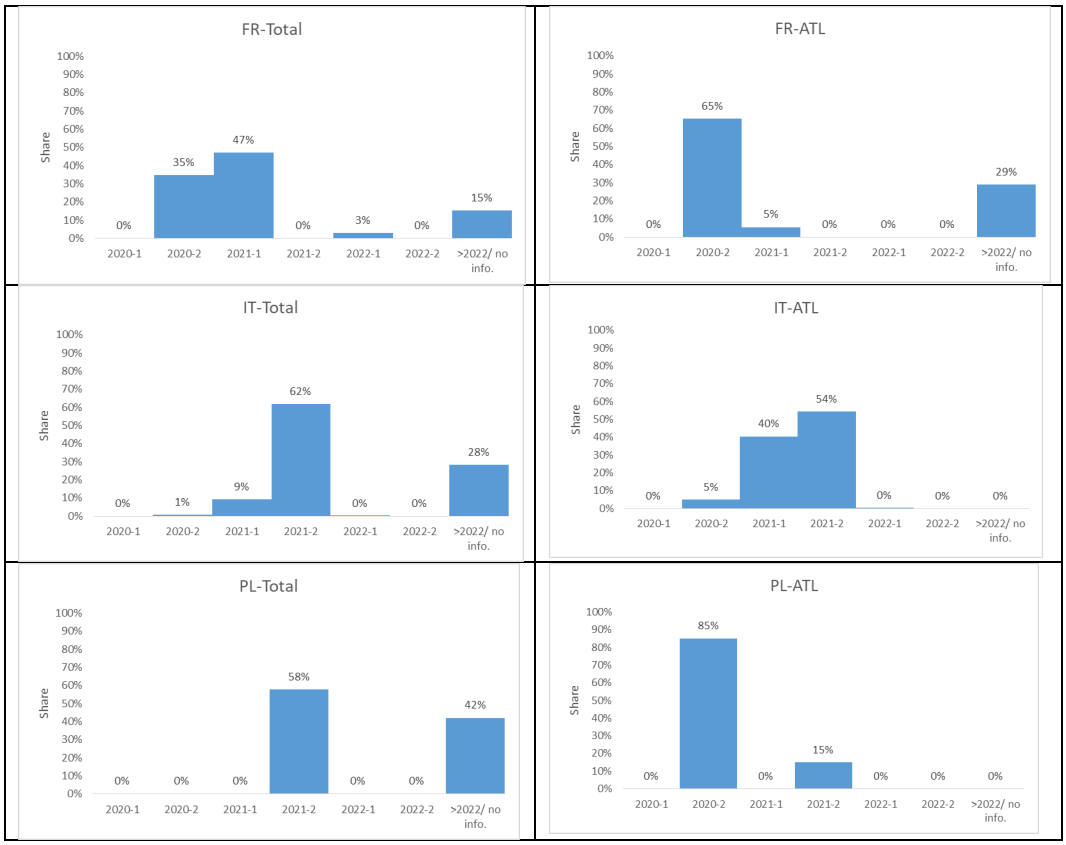
ESRB data as of 24 September 2021. The country sample is chosen to illustrate the plans of the largest countries, to cover cases from different European regions, and to include those countries, like Greece, for which the prior evidence already indicated a possible lack of target accuracy. Excluded from the analysis are measures of a non-fiscal nature, such as legislated moratoria for private sector loans. The expiry profiles cover first the total of all fiscal measures (budgetary support, loans, guarantees), and second the sub-sample of budgetary "above the line" measures with their immediate fiscal impact. Only those measures for which the database includes this information are included in the analysis.

The data used refer to the database update from September 2021. Since then, due to the new infection waves and the need for new lockdown measures, some countries have started to extend the duration of their programs. However, the analysis is still informative as it illustrates those countries' *ex ante* willingness to limit their support to the Phases 1 to 3 and to phase the programs out in the transition to Phase 4. As far as sunset provisions define an end of crisis measures in the nearer future, this indicates the political willingness for an exit from the massive fiscal support.

Overall, the expiry profiles signal a clear intention to run the programs no longer than realistic expectations of the length of crisis Phases 1 and 2 would suggest. This is in line with the IMF's global observation that most of the measures to fight the pandemic are set to expire by the end of 2021 (International Monetary Fund, 2021c, p. 1). For these EU sample countries, the bulk of measures is planned to expire by June 2021 at the latest. Germany and Spain envisage expiry half a year later (by end of 2021) for a significant share of their budgetary measure, and Germany also for its liquidity support. Italy, with its large emphasis on guarantees, plans to wait until the end of 2021 with the full phase-out of these measures. For Poland, a large share of measures would expire only after 2022, or lacks a specified program end, according to the ESRB database. Given the moderate size of the Polish pandemic package, this finding is less critical. For Estonia, the other Eastern European Member State included in the analysis, the termination of its pandemic measures stands out as particularly early. This Baltic country did not only limit its fiscal reaction in Phase 1 to a comparably small amount, but also follows a quick exit strategy in the later phases.

**Figure 7: Time Profiles for the Expiry of COVID-19-related Fiscal Measures**






Notes: Expiry profiles indicate the share of COVID-19 measures (weighted by monetary size of the program) that have a legislated the end date for application, within the half-year indicated. Program data: ESRB database on policy measures in response to the COVID-19 pandemic, September 2020, ATL: above-the-line measures. For Poland, ATL measures covered in this database are negligible compared to the size of guarantees and liquidity-based measures. Therefore, the expiry share of total measures in 2020-2 is 0.2% although it is 85% for ATL measures.

# 5 Target Accuracy of Loan and Short-Time Work Programs

The final analysis shifts the perspective to program rules. The anticipation of a “new normal” that is most likely different from the pre-pandemic situation (see Section 2) requires foresight when constructing the pandemic programs. Measures such as loan guarantees or wage subsidies should keep firms (and jobs) in existence only when they have viable post-pandemic business models. Unconditional and long-lasting guarantees for the preservation of all pre-pandemic economic structures should however be avoided. From this perspective, another option to assess the target accuracy of pandemic measures is to have a more thorough look at program rules. This is the rationale

of this last analytical step, conducted in more detail for loan programs, followed by some reflections and country examples for STW programs.

On loan programs, the analysis' conceptual starting point is the acknowledgement of a trade-off in the design of liquidity support (Anderson et al., 2021). On the one hand, government-provided loans and guarantees should effectively and almost instantaneously provide liquidity to companies in Phase 1, when the pandemic struck. The rules should not exclude any company with a promising business model from having easy access. On the other hand, the long-run consequences of support must be considered. If support is comprehensive and unconditional, benefits reach firms in sectors with obvious post-pandemic downsizing needs as well; this could hamper necessary sectoral adjustment. The survival of non-viable firms, as a result of government subsidies or artificially low interest rates, is discussed in the literature on "zombification" (Laeven et al., 2020). The survival of "zombie firms" (and "zombie jobs") prevents an efficient reallocation of workers, entrepreneurs, and capital and is likely to reduce an economy's growth potential (Banerjee et al., 2020). More restrictive rules (for example, through extensive scrutiny of applicants or limited coverage in guarantee schemes) will reduce the zombification risk. A more selective approach also reduces budgetary costs. It reduces the probability of providing loans to non-viable firms with a high default risk. It would also reduce costly windfall profits for firms that have not been seriously affected by the pandemic.[9] However, stringent rules have the serious downside that they reduce the speed and coverage of support that is of such a crucial importance for a powerful fiscal reaction.

The right balance in this trade-off varies across the pandemic phases. There are good arguments to accept the financing of zombies and to largely ignore long-run disincentives in the early phase (Laeven et al., 2020): Other than in the financial crisis, prior excessive risk taking was not the reason for the pandemic crisis. The occurrence of COVID-19 in Europe and its initial economic consequences can be classified as a truly exogenous shock. Moreover, even if "zombie firms" hide behind the competitive firms that just suffer from liquidity shortages, this is acceptable at the outset of the crisis, since the economy is working far below potential. At this stage, there is hardly any benefit from a wave of zombie bankruptcies, since failing firms would send their workers into unemployment, with very low chances of immediate relocation to another firm or sector due to lockdowns and the resulting economic standstill (Gagnon, 2020).

The costs of keeping zombies alive increase in the later phases, once the economy recovers and the winners in this economically resurrecting world start to expand and hire workers. Then the time has come to roll back blanket loans and guarantees and allow

[9] The IMF finds in an international survey that one fifth of firms with access to emergency aid had not suffered a negative shock (International Monetary Fund, 2021b, p. 14).

for a more careful scrutiny of further liquidity support (International Monetary Fund, 2021b, p. 15; Laeven et al., 2020).

The following parameters provide triggers to move from a broad and undifferentiated credit-support to a more selective approach aiming at the exclusion of both non-viable firms and winners of crisis:[10]

- an early end date for the accessibility of the crisis program,
- a reduction of government guarantee coverage: the further a government guarantee is below 100%, the more "skin in the game" for banks, the higher the incentives to apply a careful credit screening,
- the length of maturity: short maturities that correspond to the length of the crisis and its immediate aftermath avoid the conservation of non-viable structures,
- caps on maximum loans/guarantees per firm: for example, limitation of support to SMEs,
- phasing out of interest rate subsidies/regulation: market rates that reflect market conditions including borrower creditworthiness reduce take-up rates,
- prohibition to refinance old debt: such a provision limits the liquidity support to immediate crisis effects,
- constraints on dividends or manager remuneration: concentrates effective support on wage bill and reduces windfall gains,
- sectoral constraints: eligibility only for firms from sectors with direct crisis damage avoids windfall gains, but does not reduce zombification risk,
- and the phasing out of simplified screening provisions: this enforces the return to a regular bank screening of applicants' creditworthiness.

The IMF mentions Spain's COVID-19 guarantees, with their limited guarantee coverage to 60–80 percent of a loan, depending on firm size and loan purpose, as an example for a best practice towards a more targeted loan approach (International Monetary Fund, 2021c, p. 27). In their comparison of five countries, Anderson et al. (2021, Table 5) diagnose the largest zombification risks for Italy, and the UK; with Germany and Spain as the best practices, and France in an intermediate position.

A comprehensive comparison of program details is beyond the scope of this study. However, Table 1 presents collected program features from the selected countries' guarantee programs from the ESRB database (see Section 4.4). For each country, particularly large and comprehensive guarantee programs have been selected, which enable banks to provide loans to companies across all (non-financial) sectors.

[10] Adapted from (Anderson et al., 2021, Table 4)

This comparison includes the same country sample as in section 4.4. Since Greece has failed to provide detailed program data to the ESRB database, it cannot be assessed properly. The following observations emerge for the remaining countries: A few countries have paid close attention to the zombification risk from the beginning of their guarantee programs. Both Estonia and Italy emphasize the exclusion of firms with payment arrears. Estonia has the earliest end date for the program application. Most countries tried to limit undesired use of the programs, for example through the prohibition of dividend payments or manager bonuses. Spain and Italy allow refinancing of pre-existing debt under their guarantee schemes, while the other countries limit the guarantees to new debt. Denmark and Poland only allow very short durations of loans provided. The Spanish program has the lowest coverage rates, with a minimum coverage of only 60%. The pricing of the guarantees often applies a privileged treatment of SMEs, France is charging the lowest guarantee fees, indicating a relatively high implicit subsidy.

All guarantee schemes covered have ended with the year 2021, according to the ESRB database information as of September 2021. In case some EU Member States might have extended the programs in reaction to the new infection wave, one implication is clear: Any such extension runs the risk of financing zombie firms further, as discussed above. Hence, program parameters should be adjusted in an increasingly restrictive way, for example, with falling coverage rates and shorter loan maturities.

**Table 1: Program Features of National COVID-19 Loan Guarantee Schemes**

| | Measure ID ESRB Database | Coverage | Eligible loans | Max. duration | Pricing in basis points (bp) | Restrictions upon receipt | Applicable until | Other conditions |
|---|---|---|---|---|---|---|---|---|
| DE | DE-205 | Up to 90% | New loans only | 10 years | Below 300 | No bonuses, no dividends | 31.12.2021 | NA |
| DK | DK-020 | 80% | New loans only | 6 months | NA | NA | 30.09.2021 | Fall in profit of at least 30%, max:70% of new loans |
| EE | EE-029 | Up to 90% | New loans only | 10 years | SME:25-100 Other: 50-200 | No dividends, no repayments of owner's loans, transaction at prices different to market prices | 31.12.2020 | Company not in difficulty/no overdue debt as of 31.12.2019 |
| ES | ES-127 | 60-80% | New loans and renewals | 5 years | 20-260 | Not usable for restructuring of old debt | 1.6.2021 | NA |
| FI | FI-004 | Default: 80% (90% as exception | New loans only | 5 years | 175 | NA | NA | Max 1 Mio. EUR |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FR | FR-009 | 90% (70-80% for large compa-nies | New loans only | 10 years | 25-50 | For large companies restrictions on dividends and share buybacks | 30.06.2021 | Max 25 of annual turnover or 2 years of payroll |
| GR | GR-028 | NA | New loans only | NA | NA | NA | NA | NA |
| IT | IT-040 | 70-90% | New and existing loans | 10 years | 25-200 | No dividend payments, no buybacks, firm has to keep level of employment | 31.12.2021 | Firm should not be clas-sified as non-per-forming as of 29 Feb 2020 |
| PL | PL-052 | Up to 80% | New loans only | 27 months | SME: 25-55 Other: 50-115 | Loans should not finance repayment of other loan | 31.12.2021 | NA |

Source: Information collected from ESRB database on policy measures in response to the COVID-19 pandemic, September 2020.

Finally, analogous arguments as they apply to liquidity support can be made for assistance that subsidizes employment through STW schemes. STW programs have played a large role in European crisis toolboxes and provide a prominent example of "semi-automatic" stabilization instruments that can quickly be activated in a deep recession (Blanchard and Summers, 2020; Bouabdallah et al., 2020): Even though in countries like Germany, France, and Belgium, STW schemes do exist as a regular labor market instrument, their access and generosity is limited in normal times. Hence, the activation or extension of the rules (easier qualification, higher replacement rates, longer duration of payments) offer effective triggers to step up conventional automatic stabilization in the case of a deep recession.[11] The optimal design of these schemes must consider a similar trade-off as the loan schemes. On the one hand, a very generous approach is warranted in the early phase of the pandemic, when the identification of zombie jobs is difficult and a wave of dismissals would have high economic costs. On the other hand, continuous support in the form of overly generous schemes hinders the necessary growth-inducing reallocation of labor between sectors and towards productive firms. The transition from the early to the later phases of the pandemic should therefore prompt governments to adjust their STW schemes. Non-viable jobs should not benefit from government support indefinitely, but rather be allowed to end. Funds used for STW schemes are better moved to active labor market policies that support workers to adapt to new job opportunities. Scarpetta et al. (2020) discuss options on how to enhance the targeting of STW and other job retention schemes with the ongoing recovery from the acute phase of the crisis:

[11] In the light of different set-up across countries, the classification of STW funding as either discretionary or automatic fiscal spending is not uniform. The ESCB classifies STW funding as discretionary except in Germany (Bouabdallah et al., 2020, p. 131).

- requiring employers to cover an increasing part of the costs of hours not worked (as it has been introduced in France and the United Kingdom in mid-2020 already),
- limiting the duration of support, albeit with some flexibility, to react to pandemic setbacks,
- introducing temporary subsidies for a return to normal hours (Spain has done so through reduced social security contributions),
- increasing control measures to tackle abuse,
- introducing a ban on dividend and management bonus payments for companies applying STW (as applied in Spain and the Netherlands),
- reducing difference between the usually much more generous STW benefits and unemployment benefits (as done by France as early as November 2020),
- requiring workers in STW to register with the unemployment agency in order to start search for job alternatives,
- and funding training schemes that help workers in STW qualify for alternative employment opportunities.

While the above mentioned country examples, taken from Scarpetta et al. (2020), highlight good practices, some features of the German STW scheme point into the opposite direction. The wage replacement rate is not decreasing but increasing in the duration of use, a unique case among EU Member States (European Trade Union Confederation, 2020). The scheme starts with 60% of the net wage in the first three months, which increases to 70% between the fourth and sixth month and reaches 80% for the seventh to the twelfth month, with even higher rates for workers with children. Thus, the German policy design is setting a disincentive to leave the scheme that is increasing over time – and thus contrary to what is recommendable.

# 6 Conclusion

My empirical findings can be summarized as follows: The initial fiscal reactions of EU Member States have differed considerably. However, this variability is largely consistent with the magnitude of the economic shock or country-specific structural features. Only for a few countries (Greece, Italy, Germany), the magnitude of the reaction is striking and thus suggests a particular urgency to scale back the fiscal support with the progressing economic normalization. However, for the guarantee components, effective take-up has to be considered, which was very low in Germany and Italy by spring 2021, but reached almost 100% for Greece (EU Independent Fiscal Institutions, 2021, p. 15).

Overall, the evidence suggests that the projected phase-out of crisis measures is well on its way. This follows from the analysis of fiscal projections, but also from more disaggregate program data. However, for Italy and France, fiscal projection might hint at a lack of ambition in the readjustment of high crisis deficits. Greece, whose program has been massive, is a country with a very strong projected long-run increase in structural spending over the crisis. However, this might be partially due to the high NGEU allocations the country expects over the coming years. The programs' expiry analysis confirms that most of the explicit crisis programs have an expiry date no later than end of 2021. Estonia – not untypical for the Eastern Member States – has not only tailored a relatively modest crisis program, but also ends its fiscal support particularly early.

Additional insights emerge from the more in-depth analysis of program parameters in COVID-19 guarantee and STW schemes. The schemes differ across countries in terms of precautions taken to avoid zombification risks. On guarantees, the Spanish approach, with relatively low coverage rates, seems particularly appropriate to avoid these risks. On STW schemes, the German rules are very generous, and appear problematic, as wage replacement rates that increase over time are exactly the reverse of what is recommendable.

# References

Aizenman, J., Jinjarak, Y., Nguyen, H., and I. Noy (2021), "The Political Economy of the COVID-19 Fiscal Stimulus Packages of 2020", *NBER Working Paper* no. 29360.

Alberola-Ila, E., Arslan, Y., Cheng, G., and R. Moessner (2020), "The Fiscal Response to the COVID-19 Crisis in Advanced and Emerging Market Economies", *BIS Bulletin, No. 23: Bank for International Settlements*.

Anderson, J., Papadia, F., and N. Véron (2021), "COVID-19 Credit Support Programs in Europe's Five Largest Economies", *Peterson Institute for International Economics Working Paper* no. 21-6.

Auerbach, A.J., Gorodnichenko, Y., McCrory, P., and D. Murphy (2021), "Fiscal Multipliers in the COIVD19 Recession", *NBER Working Paper* no. 29531.

Banerjee, R.N., Kharroubi, E., and U. Lewrick (2020), "Bankruptcies, Unemployment and Reallocation from COVID-19", *BIS Bulletin* no. 31.

Barrero, J.M., Bloom, N., and S.J. Davis (2020), "COVID-19 Is Also a Reallocation Shock", *NBER Working Paper* no. 27137.

Blanchard, O.J., and L.H. Summers (2020), "Automatic Stabilizers in a Low-Rate Environment", *Peterson Institute of International Economics Policy Brief* no. 20-2, February.

Bouabdallah, O., Checherita-Westphal, C., Freier, M., Muggenthaler, P., Müller, G., Nerlich, C., and K. Sławińska (2020), "Automatic Fiscal Stabilisers in the Euro Area and the Covid-19 Crisis", *ECB Economic Bulletin* no. 6: 115-132.

Carnot, N. (2021), "The Public Debt Outlook in the EMU Post Covid: A Key Challenge for the EU Fiscal Framework", Paper Presented at the EFB Annual Conference, February.

Corradin, S., Grimm, N., and B. Schwaab (2021), "Euro Area Sovereign Bond Risk Premia During the COVID-19 Pandemic", *ECB Working Paper* no. 2561.

DeLong, J.B. (2021), "Dubious Inflation Worries", *The International Economy* (Winter): 35-36.

EU Independent Fiscal Institutions (2021), European Fiscal Monitor, June.

European Commission (2020), "European Economic Forecast, Summer 2020 (Interim)", *Institutional Paper* (132).

European Commission (2021a), "The 2021 Stability & Convergence Programs, an Overview, with an Assessment of the Euro Area Fiscal Stance", *Institutional Papers* (157).

European Commission (2021b), "Debt Sustainability Monitor 2020", *European Economy - Institutional Paper* 142, February.

European Commission (2021c), "European Economic Forecast, Autumn 2021*", Institutional Paper* (160).

European Fiscal Board (2021a*), Annual Report 2021*, Brussels.

European Fiscal Board (2021b), *Assessment of the Fiscal Stance Appropriate for the Euro Area in 2022*.

European Systemic Risk Board (2021), *Monitoring the Financial Stability Implications of COVID-19 Support Measures*.

European Trade Union Confederation (2020), "Covid-19 Watch", *ETUC Briefing Note*, Short Time Work, 27 November 2020.

Gagnon, J.E. (2020), "Who's Afraid of Zombie Firms?", *Realtime Economic Issue Watch*.

Havlik, A., Heinemann, F., Helbig, S., and J. Nover (2021), "Dispelling the Shadow of Fiscal Dominance? Fiscal and Monetary Announcement Effects for Euro Area Sovereign Spreads in the Corona Pandemic", *ZEW Discussion Paper* 21-050.

Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., and D. Zenghelis (2020), "Will COVID-19 Fiscal Recovery Packages Accelerate or Retard Progress on Climate Change?" *Oxford Review of Economic Policy*. 36 (Supplement_1): S359-S381.

International Monetary Fund (2020), 2Policies to Support People During the COVID-19 Pandemic", *Fiscal Monitor* (April).

International Monetary Fund (2021a), *Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic*, July 2021.

International Monetary Fund (2021b), "A Fair Shot", *Fiscal Monitor* (April).

International Monetary Fund (2021c), "Strengthening the Credibility of Public Finances", *Fiscal Monitor* (October).

Laeven, L., Schepens, G., and I. Schnabel (2020), *Zombification in Europe in Times of Pandemic*, Vox EU.

Mehrotra, N.R., and D. Sergeyev (2021), "Debt Sustainability in a Low Interest Rate World", *Journal of Monetary Economics*.

Scarpetta, S., Pearson, M., Hijzen, A., and A. Salvatori (2020), "Job Retention Schemes During the Covid-19 Lockdown and Beyond", *OECD Tackling Coronavirus (COVID-19): Contributing to a Global Effort*.

Summers, L.H. (2021), "The Biden Stimulus Is Admirably Ambitious. But It Brings Some Big Risks, Too", *The Washington Post*.

# List of Figures



# List of Tables

# Author of this Issue


## Friedrich Heinemann

Friedrich Heinemann is head of the research department “Corporate Taxation and Public Finance” at ZEW – Leibniz Centre for European Economic Research, Mannheim, as well as professor of economics at the University of Heidelberg. His research interests are empirical public finance and political economy with a focus on European integration, taxation and fiscal institutions in the European Union and the euro area.

Contact: friedrich.heinemann@zew.de