POLICY BRIEF
June 2025

FEPS
FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES

LESSONS LEARNED FROM THE RECOVERY AND RESILIENCE FACILITY FOR A FUTURE EUROPEAN FISCAL CAPACITY

ABSTRACT

The creation of the Recovery and Resilience Fund (RRF) as a response to the pandemic was an unprecedented step in the development of the European Monetary Union. It represents the creation of an important fiscal risk-sharing mechanism aimed at fostering economic recovery and enhancing long-term sustainability through public investments in the green and digital goals and structural reforms.

This policy brief identifies four main functions of the RRF and characterises how successful it was in delivering on them: To serve as a fiscal stimulus and financial market stress reduction tool; to protect public investments; to facilitate the green and digital transition; to serve as an engine of structural reforms. Some challenges have crystallised, however, throughout the implementation of the RRF related to shortcomings in its design: The lack of flexibility to adjust National Recovery and Resilience Plans in light of multiple shocks related to inflation, geopolitical developments, new priorities in member states and government changes.

The performance-based approach and the bundling of multiple reforms and investments require rethinking and cannot be implemented in the same way in the next Multiannual Financial Framework. Joint issuance of debt, however, has been rather successful and needs to be considered further.

AUTHOR

ATANAS PEKANOV[1]
Economist, Austrian Institute of Economic Research (WIFO) and the Vienna University of Economics and Business

IN PARTNERSHIP WITH

Friedrich Ebert Stiftung
WIFO

FOUNDATION FOR EUROPEAN PROGRESSIVE STUDIES (FEPS)
European Political Foundation - No 4 BE 896.230.213
Avenue des Arts 46 1000 Brussels (Belgium)
www.feps-europe.eu
@FEPS_Europe

IN PARTNERSHIP WITH

FRIEDRICH-EBERT-STIFTUNG (FES) EUROPEAN UNION & GLOBAL DIALOGUE | BRUSSELS OFFICE

Rue du Taciturne 38
1000 Brussels (Belgium)
https://brussels.fes.de/
@FES_Europa

AUSTRIAN INSTITUTE OF ECONOMIC RESEARCH (WIFO)

Arsenal, Objekt 20
1030, Vienna (Austria)
www.wifo.ac.at
@WIFOat

This policy brief was produced with the financial support of the European Parliament. It does not represent the view of the European Parliament.

This policy brief was developed as part of the EU Investment Capacity Group, an initiative by FEPS and FES to stimulate the elaboration of policy proposals within the progressive family around the next MFF. We are grateful for the valuable feedback and insights provided by participants of the Group during the seminar held at FEPS HQ on 20 May 2025.

Project Coordination: Anna Kolesnichenko (FEPS), Vanessa Zwisele (FEPS), Marie Hasdenteufel (FES)
Copy editing: Rosalyne Cowie
Design: Downtown
Cover photo: Shutterstock/ Xavier Lejeune Photo
Suggested citation: Pekanov, A. (2025). "Lessons learned from the Recovery and Resilience Facility for a future European fiscal capacity".

Legal deposit registration number: D/2025/15396./22
ISBN number: 978-2-39076-027-6 9782390760276

TABLE OF CONTENTS

1. Introduction

In 2020, the European Council created the NextGenerationEU (NGEU) fund in response to the economic crisis due to the COVID-19 pandemic. The primary aim of this new EU instrument is to protect the economy from financial market stress and support the stabilisation efforts of EU member states in the face of the pandemic by fostering a more resilient and sustainable European economy. The creation of NGEU enabled the European Commission to borrow on financial markets, up to €806.9 billion[2] until 2026, to fund several EU programmes, most importantly, the Recovery and Resilience Facility (RRF). The RRF represents the core of NGEU with a total initial allocation of €672.5 billion, consisting of a maximum of €312.5 billion in grants and €360 billion in loans. Member states can receive these until the end of 2026 under strict conditionality. The RRF is thus the largest-ever common EU stimulus instrument and the biggest driver of joint EU debt issuance so far, with a repayment horizon extending to 2058.

The inception of the RRF in 2020 was a historic milestone in the development of the European Economic and Monetary Union (EMU). It was the result of longstanding discussions on the ability of the EMU to absorb large and unexpected economic shocks and on the shortcomings of the EMU as an incomplete monetary union[3] not fully aligned with the optimal currency area (OCA) theory. The absence of comprehensive fiscal mechanisms at the EU level has so far meant that member states have lacked robust tools to address asymmetric shocks or very large EU-wide shocks. The NGEU, through the RRF, serves as a temporary yet crucial fiscal stabilisation instrument, allowing the issuance of EU bonds to fund specific investments and reforms at the national level.

The RRF also introduced a novel performance-based mechanism for the disbursement of EU funding, making it conditional on the delivery of a specific set of reforms and investment projects by member states. National recovery and resilience plans (NRRPs) negotiated and agreed upon between member states and the European Commission set the official list of milestones and targets to be achieved for the disbursement of funds to member states. These NRRPs should follow the country-specific recommendations to member states issued by the European Commission as part of the European Semester, as well as the overall priorities of the Commission in regard to the twin goals of decarbonising and digitalising the EU economy.

In this policy brief, I define four main functions of the RRF and evaluate its performance in fulfilling them. I also analyse the challenges the RRF is currently facing. The RRF experience has been marked by unique circumstances, but its performance should provide us with an important set of lessons for the future of the EMU.

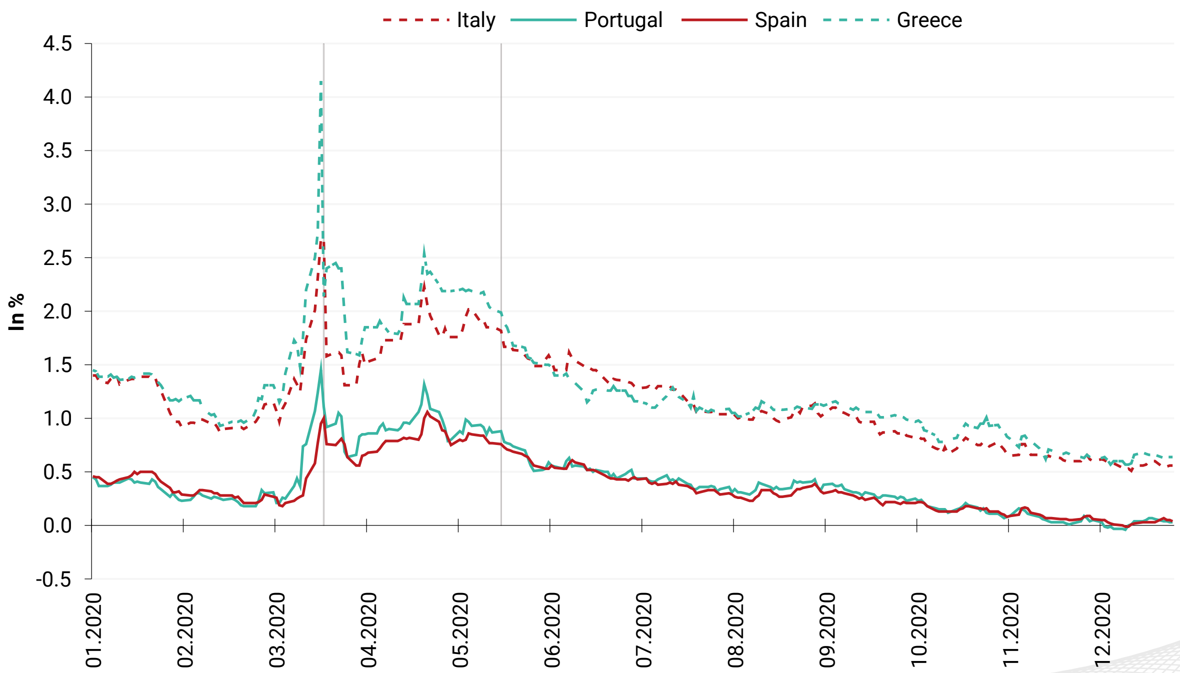
2. Core functions of the RRF

2.1 Crisis management and financial stress reduction

The RRF created, for the first time, a true anti-crisis mechanism at the EU level with fiscal risk-sharing characteristics. NGEU had the direct effect of reducing market stress during the acute shock after the introduction of lockdowns in the pandemic, and it helped to limit financial market amplification of the stress by controlling excessive risk premia reactions across member states. Figure 1 shows the notable increases in government bond yields of selected periphery countries with respect to German ten-year government bond yields in the first weeks of the pandemic and were initially dampened by the European Central Bank (ECB) intervention in March 2020, creating the Pandemic Emergency Purchase Programme.[4] Shortly afterwards, yields started rising again in April 2020, as member states considerably increased government spending to help businesses and address the healthcare crisis.[5]

The announcement of the creation of the RRF in May 2020 reversed this trend of increasing spreads with notable and permanent effects for the rest of the year. On 18 May 2020, Germany and France proposed an aid package of €500 billion in grants to ensure liquidity for EU member states. This proposal was then extended to the Commission proposal of 27 May 2020 on NGEU for an amount of €750 billion.[6] Similar to interventions during the eurozone debt crisis ("whatever it takes"), the mere announcement of the programme had a positive effect and instantly stabilised the highly volatile financing conditions for the most affected countries, as Figure 1 shows. This major positive impact is notable given that, at the time of the initial announcement, concrete details of the EU bond issuance and financing of this new programme had not yet been settled. In fact, even in 2025, the repayment sources for NGEU debt have not yet been decided. Even so, due to the credibility of future EU budgets to ensure the repayment of the common EU debt, financial markets have highly rated NGEU debt.

Figure1. Ten-year government bond yields, government benchmarks, 2020.



Source: Eurostat, Macrobond.

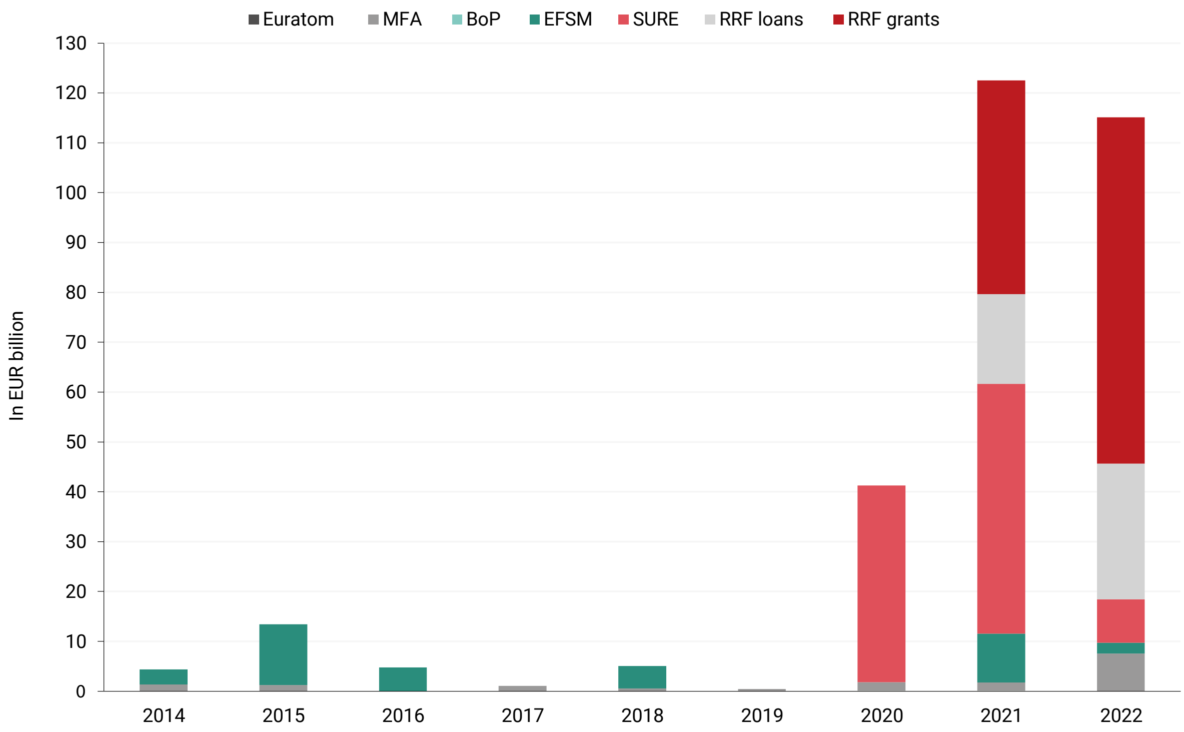
The issuance of NGEU bonds can be assessed as being successful so far, with solid demand from international investors and competitive funding costs. The European Commission reported that the average cost of funding for NGEU bond issuances in 2021 was 0.14% across maturities from five to 30 years and was therefore lower than most of the member states' bonds, pointing to a credible and strong position of the EU as a debtor.[7] Between May 2020 and the end of 2024, the EU issued more than €350 billion in cumulated debt related to the NGEU through syndicated transactions and bond auctions.[8] Merler notes, on a weighted average, the EU bond issuances have been oversubscribed 8.3 times since 2020.[9] The issuances were well received, as evidenced by high subscription rates – they were oversubscribed by between 1% and 20% each in the period between May 2020 and August 2023. Yields have remained low and lower than those paid by most EU members – a signal of sufficient demand for EU debt.[10]

The size of this new debt has transformed the presence of the EU and the European Commission in financial markets. The EU has been issuing common debt for many years now, but, to a very limited extent, to fund liquidity and lending programmes to countries during the European debt crisis, for balance of payments crises and for foreign aid.[11] The amount issued annually before the pandemic very rarely exceeded €10 billion per year, while since 2020, more than €100 billion per year were issued (Figure 2). The scaling up of bond issuance to such an extent led to a revamped issuance strategy by the European Commission – the new Unified Funding Strategy, similar to the one used by sovereign issuers. Unlike the back-to-back approach used before, where funding was directly transferred to the beneficiary who was also bearing the full interest rate risk, the new strategy provides flexibility to the Commission. Such maximum flexibility is crucial for RRF disbursements, which cannot be precisely timed ex ante, as they require a Commission assessment after each individual payment request by a member state. This flexibility enables the Commission to disburse the funding, without an obligation to do so, if it finds the implementation of reforms and investments unsatisfactory.

The considerable increase in EU issuances has increased the supply of euro-denominated safe assets across all maturities. With the Unified Funding Strategy, the EU established a significant presence in all medium- to long-term benchmark maturities (from three to 30 years), while also introducing, for the first time, short-term borrowing in the form of newly introduced EU bills (with less than one year maturity). The diversity of maturities gives investors ample opportunity to choose the best fit for them and strengthens the position of EU bonds as financial assets. The strengthened presence of the EU on financial markets is also reflected in the broad investor base of the NGEU bonds in terms of investor types and geographical location, including non-EU investors.[12]

According to the European Commission,[13] NGEU bonds have increased the contribution of the EU to the overall pool of safe assets denominated in euros to 27%, even though, at the same time, sovereign issuers also boosted their issuances. The volumes issued by the EU in 2021, for example, were comparable to those by large EU economies, such as Spain. In 2021, the EU issued €133 billion in debt, while Spain issued €152 billion, Italy issued €227 billion, Germany issued €237 billion and France issued €261 billion.[14] Safe assets can be important alternatives for banks and other financial entities seeking highly liquid, highly rated assets. This could enable domestic banks to reduce the holding of the bonds of their sovereign jurisdiction and can thus help address

Figure 2. Amount of new EU debt issued.



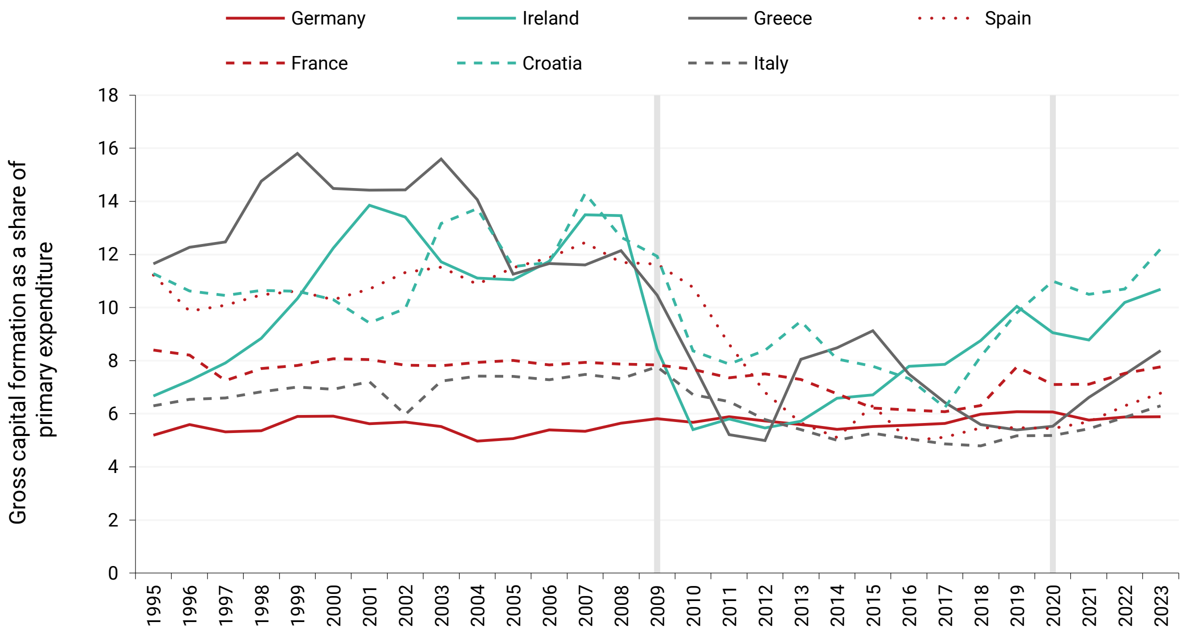
Source: European Commission, annual accounts 2014-2022.

the problem of the sovereign-bank nexus and the doom-loop ensuing from home bias in bond holdings during crises periods.[15] Temprano Arroyo[16] argues that this new issuance of high-quality bonds for NGEU and SURE[17] has strengthened the international role of the euro. Some of the benefits of an improved position of the euro have, however, been mitigated by the temporary nature of these bond issuances.

2.2 Fiscal stimulus and public investment protection

The RRF also aimed to act as a fiscal stimulus by spurring public investment during the crisis phase of the pandemic and by protecting public investments in the mid-term phases of future fiscal consolidation. As the first months of the pandemic were marked by considerable losses of economic activity, the RRF was a necessary crisis absorption tool to limit economic damage and reduce economic uncertainty for firms and households. In addition to their stimulus character, investment projects in the RRF are combined with structural reforms to enhance potential output in the long term. During economic downturns, public investments are often reduced significantly, even though they may have high long-term benefits for potential output, as they can be cut more easily without significant political costs, unlike current expenditures, government transfers or other programmes. Historically, economic crises and the ensuing fiscal consolidation periods have resulted in sustained decreases in public investments. Specifically, public investments

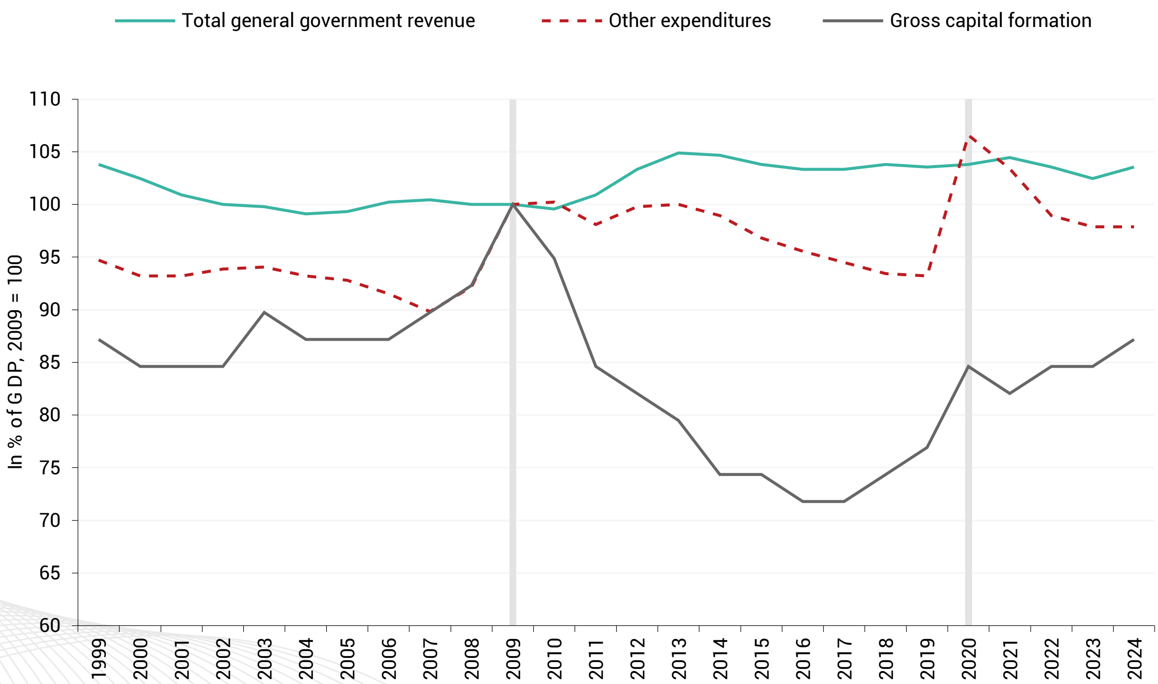
Figure 3. Public investment as a share of overall government expenditure for selected countries.



Primary expenditure: total general government expenditures minus property income.

Source: Eurostat.

Figure 4. Eurozone general government revenue, investment and other expenditures, in % of GDP.



Other expenditures = total general government expenditure minus gross capital formation.

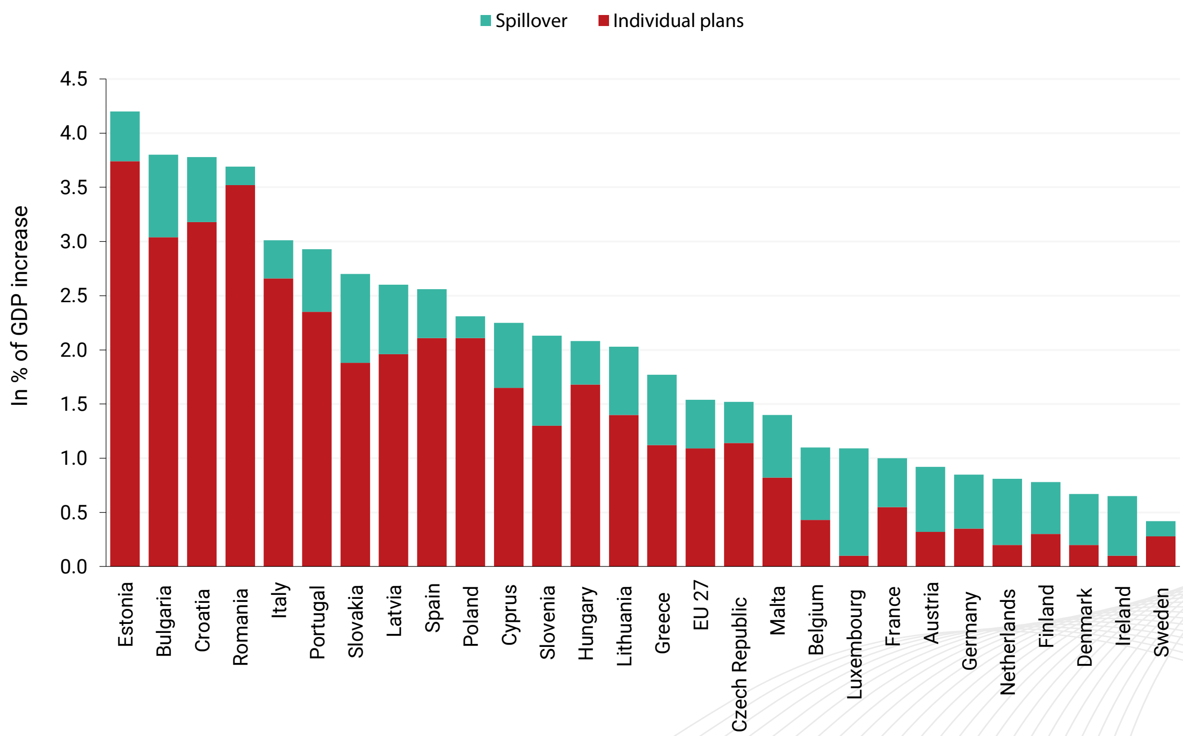
Source: Eurostat.

were considerably reduced in the aftermath of the Global Financial Crisis (GFC) and the eurozone debt crisis and did not recover in subsequent years, even during periods of very low or zero interest rates. Public investments have declined significantly as a proportion of current primary expenditures in the EU after the GFC, particularly in countries with higher debt levels (Figures 3 and 4).

Importantly, the fiscal stimulus role of the RRF is embodied in its "recovery" part – the goal was to mobilise public spending in the first months and years of the pandemic, when member states were suffering from losses of economic activity. Extensive empirical research points towards government spending increases yielding the highest multipliers exactly during times of dampened economic growth.[18] During an economic downturn, they are less likely to crowd out private investments but rather can lead to a "crowding-in" by creating higher aggregate demand and improving economic perspectives. This crowding-in is central to the argument for the need to protect public investment during recessions. The overall macroeconomic effects of the RRF have been estimated ex ante in a study by the European Commission[19] and are shown in Figure 5. In some countries, the direct effects from the increase in public and private spending will be augmented by considerable additional spillover effects from spending in other countries.

The ECB evaluates the impact of NGEU and the RRF on the eurozone economy.[20] This updated quantitative assessment estimates that the mixture of the RRF increased investments and structural reforms in member states should boost the eurozone GDP by between 0.4% and

Figure 5. Effects of NGEU on the EU's real GDP up to 2024 in a fast-spending and highproductivity scenario.



Source: European Commission.

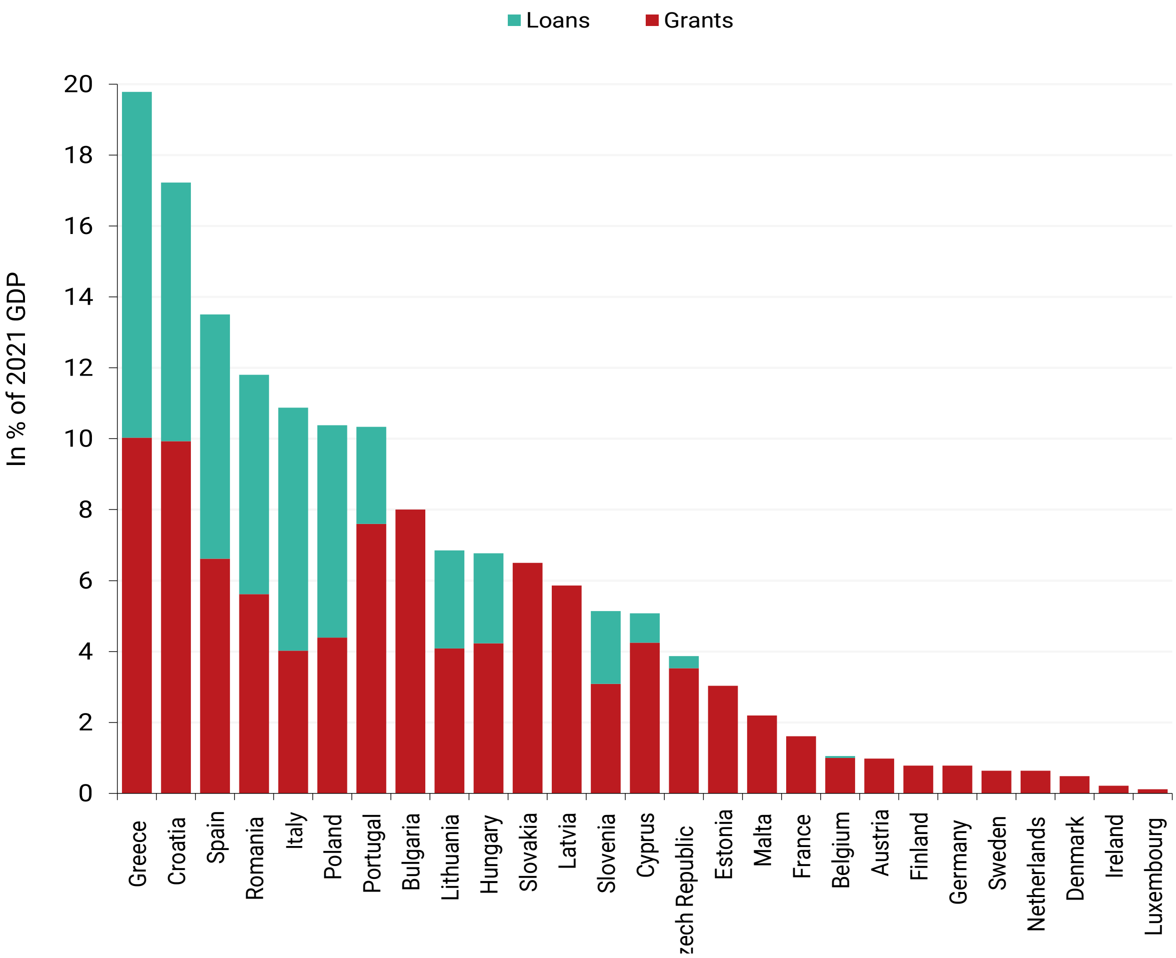
0.9% by 2026 and between 0.8% and 1.2% by 2031. The initial effect is driven mostly by increased public spending. which corroborates the case for the fiscal absorption function of the RRF. In the long term, however, the beneficial effects of the structural reforms, especially the ones in connection with the improvement in institutional quality, are expected to dominate. The paper also admits, however, that the already realised economic benefits from the RRF by the end of 2024 were still relatively modest due to delayed implementation. The total effect simulated by the authors will only be achieved if the NRRPs are fully implemented and the funds are fully absorbed by final recipients. This possible catch-up in implementation could, according to the authors, double the current output gains – yet such a catch-up faces many challenges.

An EU fiscal risk-sharing instrument to mitigate crises can also be seen as a necessary tool, according to the OCA theory, which identifies the conditions under which it is beneficial for a number of countries to share the same currency.[21] As currencies forming a currency union give up national monetary policy as a shock-absorption mechanism, they need other channels to absorb large or idiosyncratic economic shocks that cannot be absorbed by the common monetary policy. Such extra channels include full capital or labour mobility, so that the factors of production can relocate and mitigate economic shocks or fiscal policy at the currency union level, with a redistribution character – to smooth and stabilise economic output in regions that are disproportionately affected and for which monetary policy is insufficient. The USA, Canada and Germany have such common fiscal mechanisms in the form of their federal budgets, while the EMU was lacking a relevant similar instrument before the pandemic. The RRF is a significant, even if temporary, step in that direction.

As an optimal crisis-response mechanism, the RRF also has a redistribution element. The redistribution is because RRF allocations to member states are based on a specific formula, where member states that were more affected by the COVID-19 pandemic, have a relatively lower GDP level or entered the pandemic in a cyclically weaker economic situation, receive more funding as a percentage of their GDP. Based on the fact that the pandemic shock was impossible to predict or prepare for ex ante, this redistribution element is a feature and not a flaw in the design of the RRF that makes it optimal in terms of its insurance function for this large and asymmetric shock.[22]

In absolute numbers, Italy and Spain get the largest allocations and countries that normally profit from cohesion funds and other Multiannual Financial Framework (MFF) funding also receive big shares of RRF funding. The RRF allocations show a strong correlation with the amount of 2021-2027 MFF funding received by member states, yet the focus on less-developed member states is less pronounced than within the Cohesion Policy, where the aim is mainly to support faster convergence of less-developed regions. Figure 6 shows the country allocations of RRF funding from grants and loans in relation to GDP in 2021, given the amounts of loans requested by member states. Countries with lower losses from the pandemic or with high GDP per capita, such as Luxembourg, Denmark and the Netherlands, receive an allocation of up to around 1% of their GDP as grants. On the other end, countries with low GDP per capita, such as Croatia, Greece and Bulgaria, get an allocation of up to a maximum of around 6-10% of their GDP. Interest in the loans part of the RRF was mixed – only ten member states requested the loans component of RRF funding before the deadline of 31 August 2023, and €77.5 billion in RRF loans were left unrequested.[23] Loan requests were clearly correlated with national

Figure 6. Total RRF allocation (grants + maximum loans).



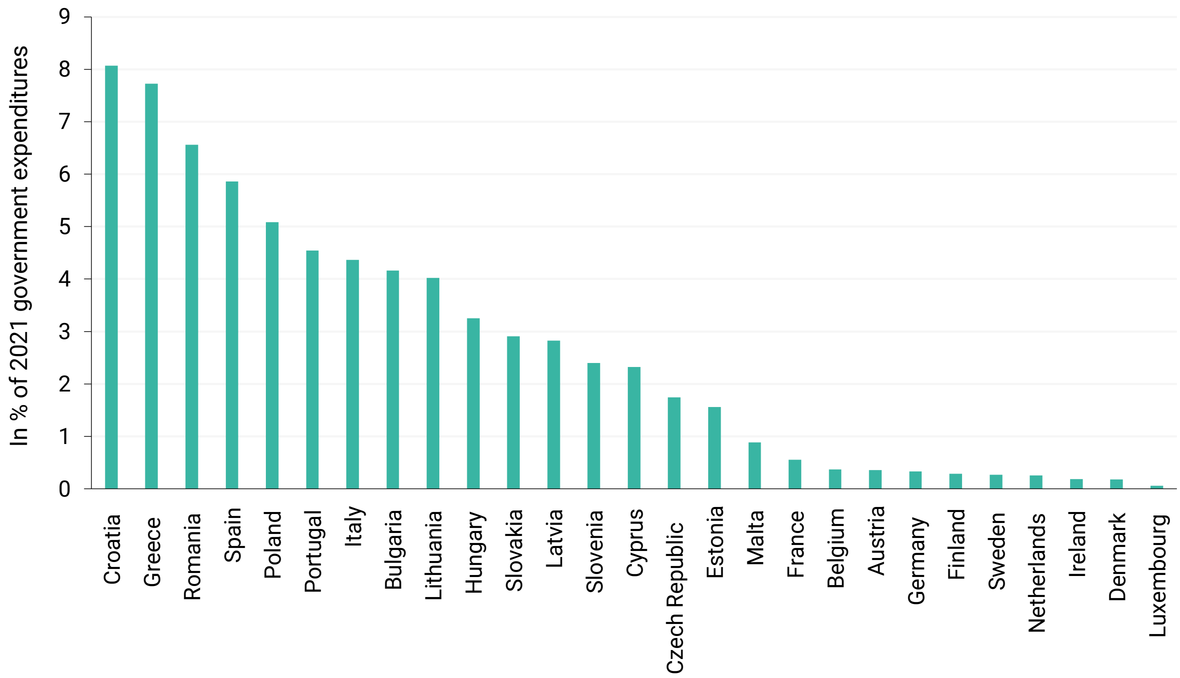
Source: NGEU Tracker.

refinancing conditions – an analysis by Loi and Magnus shows that particularly governments with higher national refinancing rates for their debt compared to the RRF debt yields decided to request loans.[24]

The amount of funding expected for each member state as a share of GDP, however, does not give the full story, as government spending differs considerably across member states. Government expenditures as a share of GDP vary widely between low values of 22% in Ireland, 34% in Lithuania and 35% in Estonia, up to 52% in Austria and Belgium and 54% in France, with an EU average of 42% in 2021. The additional RRF funds thus have different budgetary implications and weights among member states.

These differences in the importance of RRF funding for national budgets are very large. I calculate the annual grant and total RRF funding expected for each member state as a share of government expenditure in 2021.[25] Figure 7 reports the average annual RRF funding available as a share of 2021 government expenditure. RRF funding as a share of annual government spending is negligible for some countries – less than 0.2% of total government expenditure in Luxembourg, Denmark and Ireland, and less than

Figure 7. Average annual RRF funding available as a share of 2021 government expenditures.



Source: NGEU Tracker, European Central Bank.

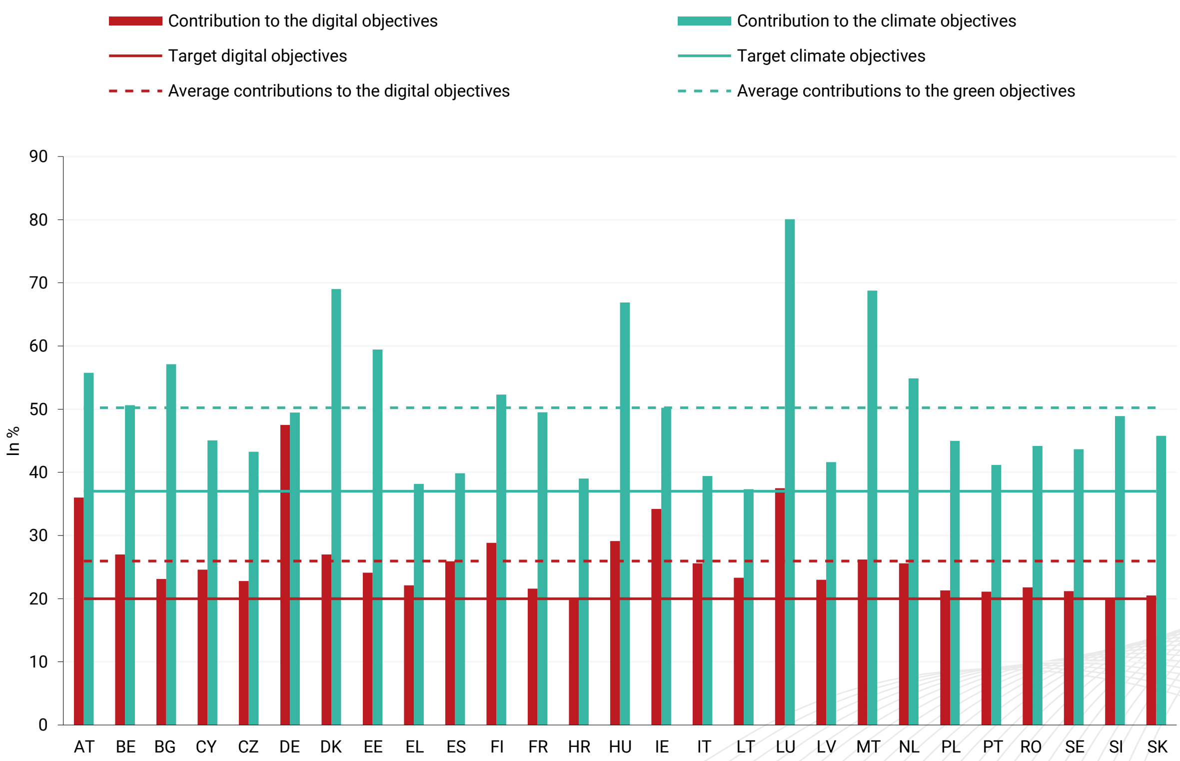
0.4% in Sweden, the Netherlands, Finland, Austria and Belgium. On the other end, in countries where the RRF allocation is significant and the country has low government expenditures in relation to GDP, the expected funding is quite significant – when also taking into account RRF loans, the shares for some member states are considerable, reaching about 5.9% for Spain, 6.6% for Romania, 7.7% for Greece and 8.1% for Croatia (Figure 7). This also has implications for the political debate in member states – in some countries, the expected sums are insignificant in relation to annual government budgets, while in others they make a relevant part of the overall budget and the failure to receive funding is much more important.

2.3 Twin-transition support

The RRF also places significant emphasis on the green and digital transitions as a shared EU priority for the first term of President von der Leyen. A general conditionality has been embedded in RRF regulations – NRRPs were required to commit at least 37% of funding to climate objectives and 20% to the digital transition to be approved by the Commission. Investment projects are assessed by their contribution to the two objectives and are given a digital and green tag to evaluate the overall green and digital expenditures of each NRRP. Most of the plans overdelivered on both accounts, as depicted in Figure 8. As of 2024, member states have, on average, committed 50.2% of their projects to contribute to the climate objective, well above the 37% objective, and reaching high levels at around 60-80% in member states such as Austria, Bulgaria, Denmark, Estonia, Hungary, Luxembourg, Malta and the Netherlands. Regarding the digital objective, member states reached an average level of 26.0% of their NRRPs for digital investments, with Germany, Luxembourg and Austria planning for more than 35% of their investments to fulfil digital objectives.

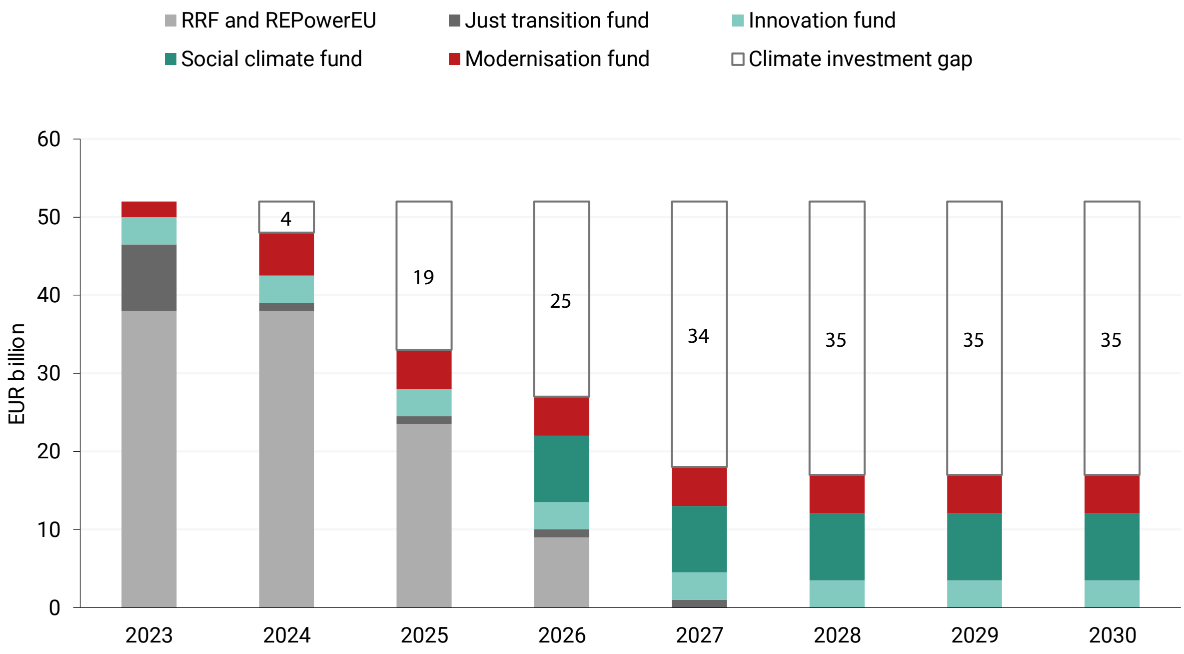
The importance of the RRF for ensuring spending on climate investments becomes apparent when we compare the total annual available EU funding for such projects during and after the end of the RRF. Several studies estimate the funding necessary to achieve the European Green Deal goals. In 2021, the European Commission calculated that additional investments of €520 billion per year (3.7% of 2019 GDP) were required in this decade compared to the previous one: €390 billion for decarbonisation and €130 billion for other environmental objectives of the green transition.[26] Since then, these estimates have mostly been re-estimated upwards. Delgado-Téllez et al. estimate that, on average, green investments between 1% and 1.8% of EU GDP are required annually to achieve the Green Deal goals.[27] These extra expenditure needs can then be split between the public and private sectors. Darvas and Wolff recommend a public-private ratio of 1:4 to 1:5,[28] resulting in a required annual green public investment averaging between 0.5% and 1% of EU GDP over the current decade.

Figure 8. Country-specific green and digital tags and average of all NRRPs.



Source: European Commission.

Figure 9. EU climate grants, showing the sharp post-RRF decline.



Source: Pisani-Ferry et al. (2023).

Since its inception, the RRF has provided a major part of green financing at the EU level. The total grant funding dedicated to the green transition from all combined EU programmes in the current EU budget – the RRF, the Innovation Fund, the Modernisation Fund and the Just Transition Fund – amounts to around €50 billion per year.[29] Pisany-Ferry et al. estimate that around €30 billion comes from the RRF.[30] Figure 9 shows that, with the end of the RRF, a serious gap in this funding will open up with no clear alternatives yet for what can substitute for green RRF spending.

2.4 Structural reforms

The RRF also aims to act as a catalyst for long-needed structural reforms, aligning national policies with the European Semester's country-specific recommendations (CSRs). On top of the general conditions to dedicate at least 37% of funding to climate objectives and 20% to digital objectives, the RRF includes a strict conditionality mechanism, according to which funding is only disbursed to member states if they deliver on a set of reforms previously agreed upon with the Commission. The reforms should deliver on the CSRs received in 2019 and 2020, but they can additionally embed important reform undertakings initiated by the respective governments. Embedding important political priorities of national governments in the NRRPs has been seen as a way to increase national ownership of the plans by political parties, but it can also lead to increased political cleavages around difficult reforms.

The RRF implementation operates on a performance-based payment system based on the sufficient fulfilment of the reforms and investment projects, bundled in payment tranches and legally embedded in a set of

milestones and targets for each payment request. This makes the RRF distinct from traditional Cohesion Policy funds. This approach introduces new complexities:

- **Negotiations with the European Commission**: Member states must engage in extensive bilateral talks both for their initial NRRPs to be approved and for subsequent amendments to their NRRPs (e.g., when extending their NRRPs with the additional RePowerEU chapter or when specific previously agreed upon reforms and investment become impossible or unfeasible).

- **Performance-based disbursements:** Payments are contingent on achieving predefined milestones and targets. This means that governments face uncertainty about their future cash inflows if they fail to implement the set of reforms and investments sufficiently. The evaluation of sufficient fulfilment, similarly to the initial approval of the NRRPs, results in new and enhanced special powers to the Commission in bilateral negotiations with member states.

The new performance-based mechanism for the implementation of the RRF has emerged from a long-standing discussion on whether EU-related funds should be conditional on the accomplishment of specific EU objectives and common policies, unlike the Cohesion Policy funds, the main aim of which is to spur economic convergence between EU regions.[31] The performance-based approach has introduced significant complexity and has deepened the coordination between member states and the European Commission in most sectors of governance. It has led to the successful implementation of some long-delayed reforms in member states, but it has also contributed to delays in the disbursement of funds, as discussed at length in Section 3.

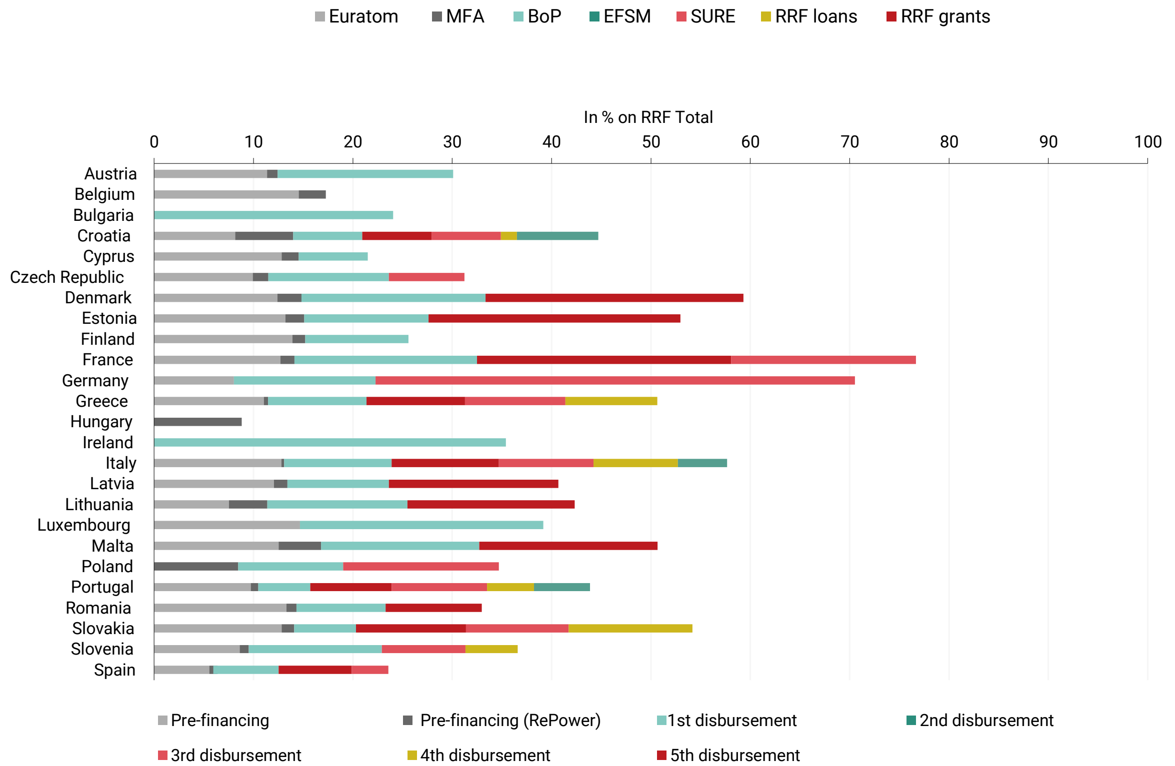
3. Challenges and implementation dynamics

After the entry into force of the RRF regulation at the end of 2020, member states started developing and negotiating their NRRPs with the European Commission. While most member states submitted and got their plans approved by the European Commission in the course of 2021, some plans were only adopted in 2022. The late adoption already pointed to difficult negotiations between some member states and the European Commission to agree on feasible plans that sufficiently reflected the CSRs from 2019 and 2020. Those member states whose NRRPs were adopted in 2021 received advance payments. By 2023, all 27 NRRPs had been assessed positively by the Commission and adopted by the Council via a Council Implementing Decision (CID).

By April 2025, member states had received around €308 billion from the RRF (€199.35 billion grants, €108.69 billion loans). In 2021, the European Commission disbursed 25 payment tranches for a total of €64.3 billion, with almost all of them representing pre-financing and one being the first payment tranche to Spain. In 2022, 20 disbursements were made for an overall amount of €74.3 billion; in 2023, 46 payment disbursements for a total of €82.1 billion and, in 2024, 53 disbursements for a total of €85.3 billion. Figure 10 summarises these disbursements.

The disbursements to member states were expected to follow a pre-determined schedule. With official approval of their respective NRRPs, member states set a so-called payment profile with the European Commission, which included up to two planned payment requests per year

Figure 10. RRF progress for disbursements until the end of 2024 in % of total RRF amount.



Source: NGEU Tracker.

until 2026. The CID is the official legal document setting the exact lists of milestones and targets that member states need to sufficiently fulfil to formally submit each payment request. Milestones relate to the achievement of a specific stated goal of a qualitative nature (e.g., the adoption of a new law or amendments to existing laws, the adoption of a national strategy and the action plan implementing it). Targets relate to the achievement of some quantitative results driven by the investments and reforms in the NRRP. Examples of targets can be a reduction of emissions from specific polluting sources (e.g., limiting the functioning of coal-fired power plants, achieving a reduction in CO2 emissions), an improvement in some specific sector (e.g., energy efficiency improved by 30% in buildings through a renovation programme) or the purchase of a specific amount of goods or services (e.g., zero-emission vehicles).

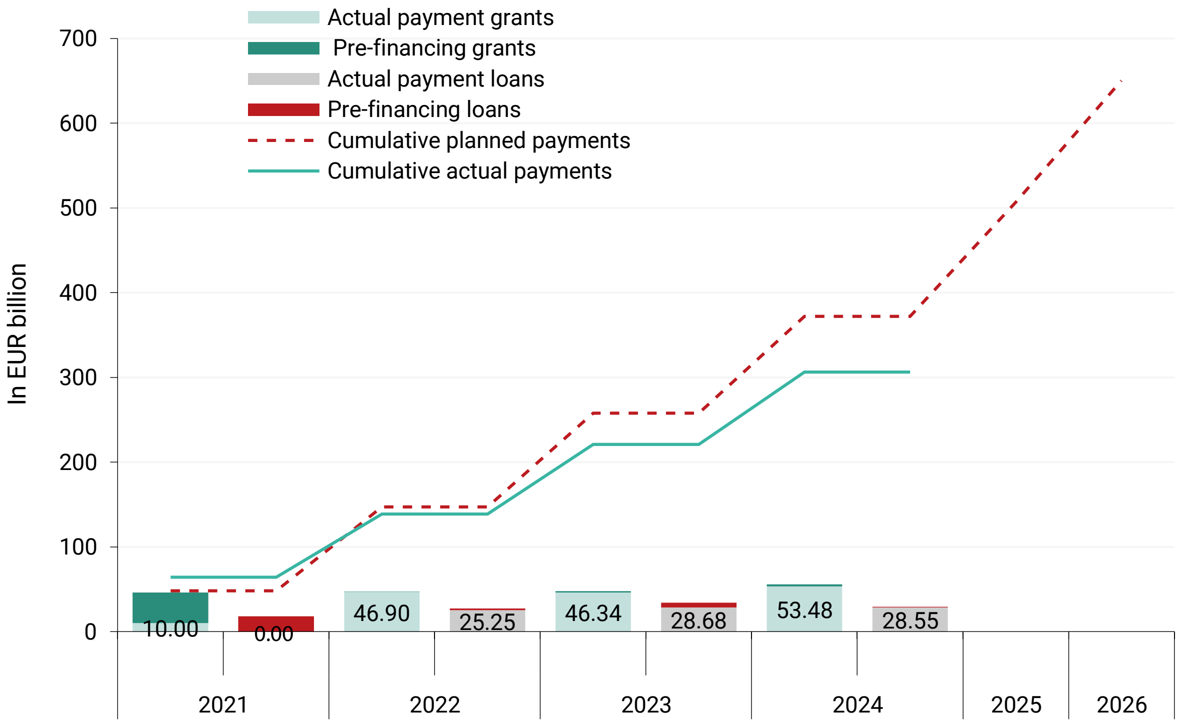
After having fulfilled the list of milestones and targets, member states submit a payment request with a detailed justification to prove sufficient fulfilment. The European Commission then initially has two months to evaluate the fulfilment. If this has been achieved, the Commission publishes a preliminary positive assessment on the request and proposes that the European Council disburses the funds. Otherwise, the payment-request evaluation period is extended for clarification of the status of fulfilment of the remaining milestones and targets. If even after this period the fulfilment is insufficient, the European Commission can decide on a partial payment of the funding for the respective payment tranche.[32]

This new approach, where funding is not necessarily linked to costs, contemporaneously raises some repercussions for proper budget management at the national level. It means that member states can incur significant upfront expenditures by implementing the first phases of RRF investment projects, yet the national budget may not receive reimbursement of these funds in the same year (or in fact at all) if the necessary reforms forming part of a payment request are not adopted and implemented. The lack of political, and therefore parliamentary, support for reforms can become a burden for national budgets, which may need to pre-finance investment projects, despite the uncertainty around whether the full RRF-related payments will be disbursed. At the same time, the opposite case is also possible – in the first year of implementation (or in any fiscal year), member states can receive considerable funds from the RRF before implementation has started and expenditures have been incurred.

While the relative shares of funding received so far – the absorption rates, discussed above (and illustrated in Figure 10) – might first point to a good and even increasing pace of implementation of the RRF, they should be compared with the planned implementation of the instrument. This comparison points to significant delays across many dimensions. Figure 11 compares the currently disbursed total payment to all member states with the initial planned total disbursement at a given stage, based on information by the European Parliament Research Service webpage. As reported by Loi et al.,[33] based on information provided by the European Commission RRF Scoreboard, as of February 2025, only 28% of all milestones and targets were considered to have been fulfilled, a mere year and a half before the envisaged end of the timeline for implementation. In terms of funding, the total disbursed grants so far amount to €199.4 billion (55% of all grants) and the total disbursed loans of €108.7 billion are 37% of all loans available. This points to a significant share of the funds yet to be disbursed in the next year and a half, with less than a quarter of the time left for the whole mechanism.

Loi et al. also reported that, between September 2024 and February 2025, the Commission received 21 payment requests, of which 17 were delayed, and ten preliminary assessments of payment requests were published, of which six were delayed.[34] Moreover, the authors identify a considerable delay in the submission of payment requests by member states, in comparison with the indicative timetable set in the operational arrangement of the NRRPs, which should serve as a timetable for the implementation of the plans. The analysis also identifies a lag in the publication of preliminary assessments by the European Commission, which should normally be published within two months of a request. Such delays in assessment and payments are often caused by ongoing bilateral negotiations between the member state and the Commission to verify that the given set of milestones and targets have indeed been realised to a sufficient extent. The definition of sufficient fulfilment of a milestone or target itself is subject to a discretionary assessment by the Commission, giving it the power to discuss with member states some necessary improvements to milestones and targets to reach a higher level of certainty on their successful completion. Until the end of 2024, only two countries had achieved more than 50% of their milestones and targets – France and Germany, with 72.9% and 52.1%, respectively.[35] A number of other countries, such as Denmark, Italy and Luxembourg, had achieved just below 50%, while a significant number of countries had a rate of fulfilment of milestones and targets below 20% (Cyprus 18.1%, Finland 14%, Romania 13.7%).

Figure 11. RRF progress for the total actual disbursement by the end of 2024 and total planned disbursement.



Source: European Parliament.

Disbursement, and therefore absorption rates, across member states, so far, is also very unevenly distributed due to various factors. The absorption rate is the share of total disbursements relative to the total available allocation, as reported in Figure 11. At the beginning of 2025, the highest absorption rates could be observed in France (76.6%), Germany (65.2%) and Italy (62.8%), which are some of the biggest recipients of funds in absolute amounts. High absorption was also achieved in countries that received a high share of funds in relation to their GDP – such as Greece and Croatia, which received four payment tranches and 47.9% of their allocation and five payment tranches and 44.7% of their allocation, respectively. Lower absorption rates can be documented in the Netherlands (24.5%),[36] Bulgaria (24.1%) and Luxembourg (13.4%). Among the most notable laggards is Hungary, which has received only 8.8% of its allocation due to a standstill between Hungary and the European Commission on progress regarding rule-of-law reforms. Other countries have also achieved very low levels of absorption, such as Sweden, which at the end of 2024 had not received any RRF funds at all; however, its very small total allocation may have led to a lack of interest in the country to implement the RRF at all.

3.1 Delays and adjustments

It becomes apparent when analysing the total performance, according to Figure 11, and diverging performance in some lagging member states that the implementation of the RRF both in the aggregate and in some member states is not in line with the initial timeline. Several factors have contributed to delays in the implementation of the NRRPs:

- **Political changes**: Shifts in governments or political priorities can lead to attempts at renegotiations of already adopted NRRPs or to deviations from initial commitments. Throughout the political cycle, given new elections or changing government constellations, this makes RRPs harder to implement. Anecdotally, the best-performing member states include those that have had stable governments since the start of the pandemic and throughout 2024 – France, Spain, Greece and Croatia.

- **Administrative capacity and economic pressures**: For some member states that were already benefitting considerably from Cohesion and other MFF-related funding, RRF funding more than doubled the usual EU funding amount they received. The implementation of such an extensive plan requires significant bureaucratic agility, which has been a challenge in some member states.

- **External crises and economic pressures**: The war in Ukraine and the energy crisis shifted priorities, impacting the timely execution of projects. Inflation and the energy crisis have escalated the costs of investment projects, especially in areas related to construction, infrastructure and imports. Schratzenstaller et al. provide a case study evaluation of the impact of inflation on the nominal value of investment projects included in the Bulgarian NRRP.[37] The case study calculates that the overall price of projects in the Bulgarian NRRP can be expected to increase by an accumulated 30.9% throughout the years, which amounts to average annual inflation between 2022 and 2026 of around 5.53%. This is much higher than the 2% annual inflation target embedded in the MFF and RRF automatic indexation component, which over the five years would amount to an accumulated inflation of 10.4%.[38] The biggest driver of these cost increases is projects with a high share of activities related to construction, and these projects also account for a high share of the overall RRP volume.

- **Lack of institutional flexibility**: Under specific circumstances, NRRPs can be adjusted to reflect changing economic environments, political changes and new priorities of the EU (as reflected, for example, in the introduction of the extra RePowerEU chapters). Even so, following the RRF regulation, the NRRPs should generally follow the CSRs from 2019 and 2020. This leaves limited flexibility to adjust the NRRPs to a widely changed environment after the geopolitical, inflationary and energy shocks of the last few years and makes it necessary for member states to follow the previously agreed sets of milestones and targets, even if some of them have become unfeasible or unrealistic to achieve. This brings us to the mechanism of conditionality, which presents a particular challenge for member states.

3.2 Conditionality and the performance-based approach

A cornerstone of the new approach introduced with the RRF is a strict performance-based disbursement of funds to member states under

a strict conditionality of a sufficient fulfilment of a pre-set number of milestones and targets. This funding model has been defined as a "financing not linked to costs" funding model.[39] The conditionality mechanism was adopted with the goal of boosting the delivery of the CSRs by member states. Member states have previously often neglected the annual recommendations by the Commission, and the Commission did not have a concrete instrument to encourage member states to deliver on these policies.

One example of the conditionality mechanism as an engine for structural reforms are rule-of-law reforms in Bulgaria – the success of which has been mixed so far. Significant reforms have been embedded in the area of the rule of law and anti-corruption in the Bulgarian NRRP. These reforms reflect a number of CSRs Bulgaria has received from the European Commission throughout the years, which were also central components to the Cooperation and Verification Mechanism (CVM) for Bulgaria and Romania, aimed at monitoring the progress of both countries in the justice sector. The comprehensive reform package in the Bulgarian NRRP includes reforms to enhance the control and accountability of the prosecutor general, the introduction of compulsory court mediation in proceedings for civil and commercial matters, amendments to the legal framework related to the protection of whistleblowers (transposition of the Whistleblower Act – Directive (EU) 2019/1937), adoption of the Personal Bankruptcy Act, and strengthening of the anti-corruption framework by the introduction of a new Anti-Corruption Commission. Bulgaria has been facing criticism in the area of the rule of law for many years. Given popular support for steps to enhance and improve the justice system, the crucial reform on enhancing the control and accountability of the prosecutor general was adopted by parliament in May 2023. The reform has received considerable political attention due to its inclusion in the RRF, pointing towards the strength of the RRF as an engine for reforms, conditional on popular support for them. After the adoption of the reform in September 2023, the European Commission decided to formally close the CVM for Bulgaria and Romania. Further reforms, which are a condition for further payment disbursement, have however stalled since then.

The strict conditionality mechanism requires refinement, however, as it has contributed to implementation delays for the RRF. The design of RRF disbursement bundles together a large number of milestones and targets. This can mean that the disbursement of large sums for many national investment projects depends on a small set of reforms that may require legislative changes, which can face significant political hurdles in national parliaments. Additionally, the bundling of seemingly unrelated reforms can lead to mixed public perceptions of the RRF. It can mean that funds necessary for energy renovation measures, transport and infrastructure measures, healthcare, and education can be delayed due to a lack of progress in completely unrelated sectors. To use the case of Bulgaria as an example again, the Bulgarian NRRP includes a decarbonisation chapter with politically difficult and unpopular reforms, which have been requested by the European Commission. These include reforms towards a 40% reduction in greenhouse gas emissions by 2026, steps towards the liberalisation of the energy sector and a tripling of renewable energy capacity by 2026. These reforms have stalled significantly and have found low political acceptance so far, blocking the disbursements of funding from the plan.

The performance-based approach, therefore, can lead to uncertainty and opacity regarding the actual level of realisation of member states' NRRPs. While payment disbursements can be seen as one way to measure progress on the RRF, they do not directly reflect the actual implementation of investment projects – investment projects need to progress and be realised to achieve targets and milestones in later payment requests, even if previous payment requests are not yet sufficiently fulfilled. The responsible government bodies at the national level, therefore, need to ensure the timely implementation of investment projects, despite uncertainty regarding disbursements from the European Commission. Furthermore, the disbursement of funding from the European Commission to member states is also detached from the actual disbursement to final recipients of funding – line ministries, agencies and the private sector, which is then in the control of member states. This means that the actual economic effects can deviate from the progress on disbursements documented above in the payment tranches.

Furthermore, the payment requests vary in size and complexity, which means that the extent of fulfilment of milestones and targets and the share of total funding allocation disbursed do not always match. At the end of 2024, Greece and Portugal had, for example, received more than half of their total allocations, despite having achieved less than a third of their milestones and targets.[40] This is not necessarily a sign of an imbalanced implementation of the RRF – it is rather a result of the way in which the European Commission and member states have negotiated their respective payment plans, with some frontloading and others backloading specific milestones and targets, as well as differences in the number of planned payment tranches and their timelines.

To evaluate this imbalance, Loi et al. created and reported a progress ratio to relate the implementation in member states in terms of share of funds received to the share of milestones and targets completed.[41] A high ratio means a member state has received a high share of its funding but has implemented a lower share of its milestones and targets. Based on this measurement, Belgium, Bulgaria and Romania have so far received the biggest funding shares in relation to the amounts of milestones and targets completed. Specifically, Belgium received 30% of the funds and implemented only 8% of the milestones and targets, Bulgaria received 24% of its funds, but completed only 7% of the milestones and targets, while Romania received around 33% of funds and completed 14% of the milestones and targets. However, this approach to evaluating the progress of member states is also biased, as milestones and targets are not equal in difficulty and importance – some are easy and fast to implement, while others require significant efforts and may also include external hurdles for the executive power, such as parliamentary approval or the participation of the judiciary. On the other side, the annual report by the European Commission on the RRF gives a more positive picture and identifies an increased rate of implementation of CSRs after the start of the RRF pointing out that:

> *In the two years preceding the RRF, the share of 2016-2017 CSRs reaching at least some progress increased by only six percentage points from 53% in 2018 to 59% in 2020. In comparison, the share of 2019-2020 CSRs reaching at least some progress increased by 17 percentage points from 52% in 2021 before the RRF to almost 69% in 2023.* [42]

Loi et al. question, however, whether this is a correct assessment since many of the CSRs issued in 2020 were less demanding and already implemented by member states in response to the pandemic anyway.[43] The European Court of Auditors also points out that the satisfactory fulfilment of milestones and targets requires a strictly unambiguous definition of "satisfactory", which is not always given.

All of the above points to significant difficulties in evaluating progress in implementing the RRF. On one hand, this is a measurement issue – the purely quantitative number of milestones and targets achieved does not allow for a comparison between member states or in general, as some milestones and targets are much more difficult to implement than others. On the other hand, even if we could grade these milestones and targets and evaluate the disbursement to member states, as we do with the absorption rate, the final socio-economic effect of the NRRPs may be very different, as further implementation in the member states, the disbursement of funding to final recipients, and the finalisation of specific projects and reforms is not always related to the payment tranches paid from the Commission to member states. This makes the neutral and objective evaluation of the "success" of the RRF especially difficult.

4. Lessons learned and policy implications

In this section, I discuss some of the main implications of the above analysis. The initial RRF mechanism and regulation had their inception in the first months of the pandemic. An implementation design for the RRF was set up, but, however, has suffered from some shortcomings and requires refinements in the future. An increasingly volatile international environment, changing EU priorities, inflation and energy price shocks have meant that, across many dimensions, the NRRPs devised in 2021 were not always optimal or even feasible to implement in 2023 and beyond. This points to the fact that additional flexibility was needed to make the NRRPs more agile and suitable for changing circumstances. The RePowerEU mechanism was introduced to address the energy crisis and reduce Russian-related energy dependencies, but also provided a mechanism to renegotiate commitments and adjust plans in light of changing circumstances. As of the end of 2024, all member states, with the exception of Bulgaria, submitted a RePowerEU chapter to their NRRPs. Member states have also continuously amended their national NRRPs using different justifications, most notably requests to modify them due to a "better alternative to achieve the original ambition" of the measure or to "reduce the administrative burden".

As discussed in Section 3.2, the performance-based approach and the strict conditionality mechanism have contributed to some of the delays in the disbursement of funds. While conditionality of some major reforms, as well as general conditions to invest in the green and digital transitions as shared priorities of the current Commission or rule-of-law commitments as a central principle, are a welcome component of the RRF, the European Commission needs to rethink any future similar instrument with regard to the approach of bundling large payment requests consisting of many investment projects and reforms. A better approach will seek more granular combinations of reforms and investments per sector, so that only reforms related to the given sector can lead to delays in disbursements for this sector. Yet, current discussions and initial guidelines by the European Commission for the next MFF have floated exactly the same ideas of over-encompassing national plans, binding all European funding together under strict conditionality, for the disbursement of any MFF funding. This idea is not only impractical but can be very risky and dangerous both for the political acceptance of structural and cohesion funding and the successful implementation of MFF funding for the coming years, if it materialises in this form.

The RRF implementation so far has also suffered from problems related to the administrative capacity. Some member states simply did not commit enough administrative resources and expertise to govern their NRRPs successfully and rapidly. This calls for increased administrative capacity provision and technical support at the EU level, but also points to the need to decrease the administrative burden in future programmes similar to the RRF. A common challenge for both member states and beneficiaries, which aim to participate in different tenders, is the widely recognised difficulty in monitoring and complying with all necessary requirements successfully to achieve the milestones and targets embedded in different investment projects or related to specific reforms. Simplification of the administrative burden is required both for the sake of final beneficiaries and for member states' successful implementation of any future programmes similar to NGEU.

Although simplification is necessary, one important element should be strengthened in any future common European fiscal tool – a stricter requirement on the inclusion of cross-border projects. Cross-border projects bring considerable EU added value since they can be done more efficiently at the EU level. They, however, also normally require higher administrative burden and better governance coordination, as they require a common agreement and regulative and legal consensus on a project by two or more member states. This often leads to governments neglecting them. In the initial RRF regulation, the inclusion of such cross-border projects in NRRPs was supported by the Commission, yet member states still did not include many of them. With the introduction of RePowerEU, the European Commission introduced a requirement for a specific share of cross-border projects to be part of the RePowerEU chapters, but the interpretation of what counts as a cross-border project is relatively broad. Such a requirement and a clear definition of cross-border projects in future EU funding programmes could be an important improvement to ensure more cooperation on public investments between member states and the provision of EU public goods.

The inflationary shock of 2022-2023 has also left its mark on the RRF, eroding the real value and feasibility of the implementation of some projects. In the face of this, member states had three options to address increased project costs due to inflation: to increase national funding for these projects (while facing significant budget restrictions); to drop specific projects that have become unrealistic in the NRRP timeline; or to reduce their commitments in terms of milestones and targets. Member states had to make a difficult choice between the three options, while continuing to achieve the general conditions to contribute to the green and digital transitions. In the case of Bulgaria, the proposed amendments to the Bulgarian NRRP included both the reduction and cancellation of specific investment projects that had become unfeasible. More generally, however, a better approach would be for member states to commit extra national funding in such cases. If the investment projects in the NRRP are beneficial for the member state, it should be able to withstand and sustain any inflationary shock to the costs of projects and adjust when necessary to achieve them. If national budget constraints are the limitation, the long-discussed idea of exempting national co-funding for MFF-related expenditures, which has been partly embedded in the new fiscal rules, should be considered further and pursued to a wider extent.

A final important lesson is that the issuance of NGEU debt seems to have been successful so far. The new Unified Funding Strategy has ensured funding at competitive costs. Yet, there are further steps to be made to enable a better positioning of such common EU debt in international markets. One practical and necessary step would be the inclusion of NGEU debt in different sovereign indices. Branding as "EU debt" rather than in individual programmes – such as NGEU debt, BOP programmes debt, MFA debt – should also boost the reputation and appetite for common EU debt.

This experience also points to the need to revive the debate on EU bonds. In a changing global environment, many of the EU new priorities risk being underfunded in the coming years, unless a significantly higher MFF envelope is agreed. Felbermayr and Pekanov identify three specific sectors that require increased spending at the EU level: infrastructure spending, including climate-related spending; R&D spending; and defence spending.[44] Recent months have been marked by further geopolitical challenges implying even higher defence-spending needs. Common EU debt seems like a logical answer to finance at least part of these funding needs.

Much analytical work has been invested over the past decade in designing and analysing different versions of a possible EU bond – ranging from standard common liability bonds to more complicated proposals, where through tranching the joint liability is limited, as in the proposed European Safe Bonds (ESBies) 2011.[45] Since the analytical proposal of ESBies was endorsed in a modified manner by the European Parliament, there has been almost no progress, as the European Council has never included it on its agenda. A common assumption is that there is still no consensus between member states to achieve progress on this matter, even though the experience of common EU debt taken up during the pandemic overall seems positive. The new German government took office in May 2025 with the promise of considerable increases in spending on infrastructure and defence amounting to €1 trillion over the next ten years. The governments of France, Spain and Italy may also be open to more EU-level spending, as they have been major beneficiaries from NGEU. Importantly, some of the traditionally frugal countries, such as Denmark and Finland, have also reconsidered their opposition, in light of the considerable spending needs for defence amidst growing geopolitical risk. All of this might mean the commonly assumed consensus against common EU bonds might be up for change.

The opposition towards common EU debt was often based on the wrong idea from the eurozone debt crisis that common debt will always finance spending flowing from the EU core to the EU periphery. While that might have been the case in the aftermath of the GFC and was true partly in the pandemic, the 2022 energy price shock and the current increased defence investment needs point out that it is not ex-ante clear where any new shock or crisis hits the EU. And if that is the case, common EU debt can play the role of a stabiliser and insurance mechanism, rather than a transfer from "rich" to "poor countries". It, therefore, becomes both more efficient and more desirable to have such a common debt mechanism.

5. Conclusion

The NGEU fund and its main component, the RRF, represent an unprecedented step in European fiscal integration, aimed at fostering economic recovery and resilience and enhancing long-term sustainability through public investments in the green and digital goals and structural reforms. This is an instrument that was ambitious in scope and scale and delivered during the pandemic in helping to shield the EU economy from financial market stress and bigger economic losses. Its broader success, however, depends on its effective implementation, robust governance framework and the willingness of member states to undertake meaningful reforms. Many challenges have crystallised throughout its implementation and point to the need for improvement and building upon this successful experience to ensure a real fiscal risk-sharing instrument at the EU level – a necessary part of the future development of our common EMU. The RRF experience has been marked by unique circumstances, but its performance, successes and challenges should serve as an important set of lessons for the future of the EMU and further discussion on possible EU integration, given the volatile and uncertain environment worldwide.

Bibliography

Alogoskoufis, S. and A. Langfield (2018) "Regulating the doom loop". Working Paper Series 74. European Systemic Risk Board.

Bénassy-Quéré, A., M. Brunnermeier, H. Enderlein et al. (2018) "Reconciling risk sharing with market discipline: A constructive approach to euro area reform". Policy insight 91. CEPR, 17 January.

Brunnermeier, M. K., L. Garicano, P. R. Lane et al. (2011) "ESBies: A realistic reform of Europe's financial architecture". VoxEU, 25 October.

Carrosio, G., G. Cicerone, A. Faggian et al. (2022) "How place-sensitive are the national recovery and resilience plans?" Policy study. Foundation for European Progressive Studies, December.

European Commission (2022) "Recovery and Resilience Facility annual report 2022". COM(2022) 75 final. European Commission, 1 March.

European Commission (2023) "Recovery and Resilience Facility annual report 2023". COM(2023) 545 final/2. European Commission, 19 September.

European Commission (2024a) "Mid-term evaluation of the Recovery and Resilience Facility". Commission Staff Working Document, SWD(2024) 70 final. European Commission, 21 February.

European Commission (2024b) "Recovery and Resilience Facility annual report 2024". COM(2024) 474 final. European Commission, 10 October.

European Commission (2024c) "Strengthening the EU through ambitious reforms and investments". COM(2024) 82 final. European Commission, 21 February.

"EU debt securities data—transactions data". European Commission.

European Fiscal Board (2019) "Assessment of EU fiscal rules – with a focus on the six and two-pack legislation". European Commission, 11 September.

OJ L 57/17, 18.2.2021.

Farhi, E. and J. Tirole (2012) "Collective moral hazard, maturity mismatch, and systemic bailouts". American Economic Review, 1(102): 60-93. DOI: 10.1257/aer.102.1.60

Farhi, E. and J. Tirole (2016) "Deadly embrace: Sovereign and financial balance sheets doom loops". NBER Working Papers, Article 21843.

Gökten, M., A. Pekanov, M. Scheiblecker et al. (2024) "Recent inflation developments and the EU budget. Country-specific impacts and policy options". European Parliament, November.

Leandro, Á. and J. Zettelmeyer (2019) "Creating a euro area safe asset without mutualizing risk (much)". Working Papers 19-14. Peterson Institute for International Economics, August.

Pekanov, A. (2019) "Past and present of EMU reform. Reforming the euro area – the road not (yet) taken". Policy Brief. Österreichisches Institut für Wirtschaftsforschung, June.

Temprano Arroyo, H. (2022) "The EU's response to the COVID-19 crisis: A game changer for the international role of the euro?" Discussion paper 164. European Commission, June.

Endnotes

1 The author of this paper has been part of academic discussions regarding the creation of a similar fiscal stabilisation instrument at the EU level. Subsequently, he served in four caretaker governments of the Republic of Bulgaria (12 May 2021-15 September 2021, 16 September 2021-14 December 2021, 2 August 2022-1 February 2023, 2 February 2023-6 June 2023) and was in charge first of the programming and negotiations of the Bulgarian RRP throughout 2021 and then of its implementation throughout 2022 and 2023.

2 In current prices.

3 Juncker, J.-C. (2015) "The five presidents' report: Completing Europe's Economic and Monetary Union". European Commission, 22 June; Constâncio, V. (2018) "Completing the Odyssean journey of the European Monetary Union", in *The Future of Central Banking. Festschrift in Honour of Vítor Constâncio. Colloquium held on 16-17 May 2018* (Frankfurt am Main: European Central Bank), pp. 191-213.

4 For a summary, see: Lane, P. R. (2022) "Monetary policy during the pandemic: The role of the PEPP". European Central Bank, 31 March.

5 Pekanov, A. (2020) „Antworten der internationalen Wirtschaftspolitik auf die COVID-19-Krise". *WIFO-Monatsberichte*, 4(93): 275-284.

6 €806.9 billion in current prices.

7 European Commission (2022) "EU budget policy brief: The EU as an issuer: the NextGenerationEU transformation". European Commission, July.

8 Total outstanding EU bonds at the end of 2024 stood at €578.2 billion when also including earlier back-to-back funding.

9 Merler, S. (2025) "More EU debt issuance would be the best response to Trump's tariffs". Bruegel, 11 April.

10 One problem that could be driving yields higher, however, is the limited supply of these bonds and their pre-determined repayment. This makes it difficult for investors to accept the bonds as liquid and long-term financial assets.

11 Joint borrowing before the pandemic was used to fund the macro-financial assistance programmes for non-EU partner countries; the balance of payments assistance for countries outside the eurozone, which face difficulties with their balance of payments; the European financial stabilisation mechanism for EU countries in cases of financial difficulties; and the programme of the European Atomic Energy Community/Euratom.

12 European Commission (2022) "EU budget policy brief: The EU as an issuer: the NextGenerationEU transformation".

13 Ibid.

14 European Commission based on Bloomberg data.

15 Farhi, E. and J. Tirole (2016) "Deadly embrace: Sovereign and financial balance sheets doom loops". NBER Working Papers, Article 21843.

16 Temprano Arroyo, H. (2022) "The EU's response to the COVID-19 crisis: A game changer for the international role of the euro?" Discussion Paper, 164. Directorate-General for Economic and Financial

Affairs. European Commission.

17 The European instrument for temporary support to mitigate unemployment risks in an emergency (SURE) provided financial assistance up to €100 billion in the form of loans granted on favourable terms from the EU to affected member states to address sudden increases in public expenditure for the preservation of employment.

18 This is even more so when monetary policy is already at its limit at the zero-lower bound. Farhi, E. and I. Werning (2017) "Fiscal unions". *American Economic Review*, 12(107): 3788-3834. DOI: 10.1257/aer.20130817; Nakamura, E. and J. Steinsson (2014) "Fiscal stimulus in a Monetary Union: Evidence from US regions". *American Economic Review,* 3(104): 753-792. DOI: 10.1257/aer.104.3.753; Chodorow-Reich, G. (2019) "Geographic cross-sectional fiscal spending multipliers: What have we learned?" *American Economic Journal: Economic Policy*, 2(11): 1-34. DOI: 10.1257/pol.20160465

19 Pfeiffer, P., J. Varga and J. in 't Veld (2021) "Quantifying spillovers of Next Generation EU investment". Discussion paper 144. European Commission, July.

20 Bańkowski, K., N. Benalal, O. Bouabdallah et al. (2024) "Four years into NextGenerationEU: What impact on the euro area economy?" European Central Bank.

21 Mundell, R. A. (1961) "A theory of optimum currency areas". *The American Economic Review*, 4(51): 657-665; Kenen, P. (1969) "The theory of optimum currency areas: An eclectic view", in R. A. Mundell and A. K. Swoboda (eds) *Monetary Problems of the International Economy* (Chicago: The University of Chicago Press).

22 Farhi and Werning discuss the conditions under which a monetary union requires common fiscal policy to react to large and idiosyncratic shocks and show that a certain redistribution element is a necessary feature of an optimal response to the shock. Farhi, E. and I. Werning (2017) "Fiscal unions".

23 Loi, G. and M. Magnus (2023) "Implementation of Recovery and Resilience Plans—latest European Commission's assessment of milestone and targets" Directorate-General for Internal Policies. European Parliament, May.

24 Ibid.

25 The average annual expected RRF funding is taken to be 20% of the whole sum, since member states have close to five years to spend the funds for the period between mid-2021 and mid-2026. This is an approximation to get a comparative statistic between member states, as member states have different payment profiles and in some countries the spending is frontloaded, while in others it is backloaded.

26 Pfeiffer, P., J. Varga and J. in 't Veld (2021) "Quantifying spillovers of Next Generation EU investment".

27 Delgado-Téllez, M., Ferdinandusse, M., & Nerlich, C. (2022). "Fiscal Policies to Mitigate Climate Change in the Euro Area". ECB Economic Bulletin Articles, 6.

https://www.ecb.europa.eu/press/economic-bulletin/articles/2022/html/ecb.ebart202206_01~8324008da7.en.html

28 Darvas, Z., and G. B. Wolff (2021) "A green fiscal pact: Climate investment in times of budget consolidation". Policy brief. Bruegel, 9 September.

29 Pisani-Ferry, J., S. Tagliapietra and G. Zachmann (2023) "A new governance framework to safeguard the European Green Deal". Policy brief. Bruegel, 6 September.

30 Ibid.

31 It is true that, in theory, Cohesion Policy funds are also dependent on a number of enabling conditions, but these are practically less binding, as they almost never include specific legislative changes or difficult reforms to be implemented by governments.

32 The first case occurred with Lithuania in February 2023.

33 Loi, G., B. Sangers, A. Schwarcz et al. (2025) "Recovery and resilience dialogue with the European Commission". BUDG-ECON Committee meeting. European Parliament, February.

34 Ibid.

35 Loi, G., B. Sangers, A. Schwarcz et al. (2025) "Recovery and resilience dialogue with the European Commission".

36 The disbursements to the Netherlands were only made at the end of 2024 and the beginning of 2025, which is why they do not appear in Figure 11.

37 Schratzenstaller, M., M. Scheiblecker, A. Pekanov et al. (2023) "The impacts of recent inflation developments on the EU finances". European Parliament, November.

38 Ibid.

39 The European Court of Auditors has criticised the RRF due to a lack of a guarantee that member states have effective internal audit and control systems in place for RRF spending, particularly with regard to compliance with state aid and public procurement rules, although it praises some progress made since its initial assessment. European Court of Auditors (2025) "Systems for ensuring compliance of RRF spending with public procurement and state aid rules: Improving but still insufficient". Special report 09, 2025. Publications Office of the European Union.

40 Loi, G., B. Sangers, A. Schwarcz et al. (2025) "Recovery and resilience dialogue with the European Commission".

41 Ibid.

42 Ibid.

43 Loi, G., B. Sangers, A. Schwarcz et al. (2025) "Recovery and resilience dialogue with the European Commission".

44 Felbermayr, G. and A. Pekanov (2024) "Pan-European public goods: Rationale, financing and governance". EGOV Economic Governance. European Parliament, June.

45 Brunnermeier et al 2011; OJ C 158, 30.4.2021; Giudice, G., M. de Manuel Aramendía, Z. Kontolemis et al. (2019) "A European safe asset to complement national government bonds". MPRA Paper 95748. University Library of Munich.

About the author

ATANAS PEKANOV

Atanas Pekanov is an economist at the Austrian Institute of Economic Research (WIFO) in Vienna with a focus on monetary and fiscal policy and European Monetary Union architecture. He acquired his PhD from Vienna University of Economics and Business (WU Vienna) with a thesis on household heterogeneity and monetary policy. Throughout 2021 and 2022-2023, he served as Deputy Prime Minister of Bulgaria in charge of EU Funding and the Bulgarian National Recovery and Resilience Plan. He is also a Lecturer at the WU Vienna on monetary policy and a Senior Advisor to Rud Pedersen PA.

ABOUT THE FOUNDATION FOR EUROPEAN STUDIES (FEPS)

The Foundation for European Progressive Studies (FEPS) is the think tank of the progressive political family at EU level. Its mission is to develop innovative research, policy advice, training and debates to inspire and inform progressive politics and policies across Europe.

FEPS works in close partnership with its 76 members and other partners – including renowned universities, scholars, policymakers and activists – forging connections among stakeholders from the world of politics, academia and civil society at local, regional, national, European and global levels.

European Political Foundation - Nº 4 BE 896.230.213
Avenue des Arts 46 1000 Brussels (Belgium)
www.feps-europe.eu
@FEPS_Europe

ABOUT THE FRIEDRICH-EBERT-STIFTUNG (FES) EUROPEAN UNION & GLOBAL DIALOGUE | BRUSSELS OFFICE

The EU Office of the Friedrich-Ebert-Stiftung (FES), with its headquarters in Brussels and activities in Brussels and Strasbourg, was opened in 1973. It participates in the European integration process, backs and accompanies the interests of the Federal Republic of Germany in Europe and contributes to shaping the external relations of the European Union.

As an agency of dialogue, education and consultancy, the Friedrich-Ebert-Stiftung thereby fulfils its special role as a 'political network organisation' for and with the various European institutions. The Friedrich-Ebert-Stiftung's European and worldwide network facilitates political, economic, social and environmental dialogue between Germany and Europe, within Europe and between Europe and the rest of the world and also at global level.

Friedrich-Ebert-Stiftung (FES)
European Union & Global Dialogue | Brussels Office
Rue du Taciturne 38, 1000 Brussels (Belgium)
https://brussels.fes.de/
@FES_Europa

ABOUT THE AUSTRIAN INSTITUTE OF ECONOMIC RESEARCH (WIFO)

The Austrian Institute of Economic Research (WIFO) is a non-profit, independent, non-university research institute and has been Austria's leading institute for applied empirical economic research for almost 100 years.

As a bridge between academic research and practical policy advice, WIFO offers in-depth economic analysis and forecasts in the five research groups of macroeconomics, labour market economics, industrial and innovation economics, regional economics and environmental economics with around 120 employees.

Austrian Institute of Economic Research (WIFO)
Arsenal, Objekt 20, 1030, Vienna (Austria)
www.wifo.ac.at
@WIFOat

ON SIMILAR TOPICS