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The EU's Recovery and Resilience Facility: Experience and Lessons for the Next Multiannual Financial Framework

Matthias Busse, Francesca Caselli, and Alexandra Fotiou

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Prepared by Matthias Busse, Francesca Caselli, and Alexandra Fotiou

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Abstract

This paper takes stock of the Recovery and Resilience Facility (RRF)’s economic impact as implementation enters its final phase and draws lessons for the design of the next EU Multiannual Financial Framework (MFF). Using sectoral and cross-country data, the paper finds that the RRF provided a short-term demand boost, supporting employment and output growth—especially in countries with large allocations—while a substantial share of its growth impact is expected to materialize as absorption accelerates. Unprecedented joint EU-level borrowing is found to have contributed to stabilizing sovereign debt markets and improving prospects for EU bonds as safe assets. Finally, the RRF’s performance-based conditionality through improved national ownership has supported reform implementation in some member states. At the same time, challenges around the pace of funds absorption remain as implementation is still ramping up and the overall macroeconomic impact will ultimately depend on how effectively the RRF funds are utilized. Plan overambition and complexity, administrative capacity limits, and absorption bottlenecks have slowed disbursement in several member states, while the predominance of output-based milestones and targets has limited the framework’s focus on results.

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WORKING PAPERS

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Introduction	3
The RRF's Economic Impact.....	5
Short-term demand boost.....	6
Effect on EU sovereign debt markets.....	13
Supply-side impact and sequencing of reforms and investments	16
Design Lessons with a Focus on Conditionality and Implications for the Next MFF.....	18
A performance-based approach to EU-level fiscal support	18
Lessons for performance-based conditionality.....	22
RRF insights for the next MFF	24
Conclusion.....	26
References.....	29

Introduction

Agreed in mid-2020 at the height of the Covid-19 pandemic, the Recovery and Resilience Facility (RRF) represents an unprecedented step in the European Union's crisis-management response. As the central instrument of the NextGenerationEU (NGEU), the RRF combined large-scale borrowing with performance-based disbursements to finance reforms and investments across all member states. With a total envelope of around €650 billion at inception, the RRF was designed with a twofold objective: first, to provide a countercyclical demand boost when the EU economy was contracting sharply, prevent cuts in public investment, and support structural reforms to avoid subsequent scarring; second, to channel that stimulus into modernizing Europe's economies—advancing the green and digital transitions, strengthening resilience, and raising future productive capacity. Beyond its scale, the RRF marked a departure from previous EU instruments through its performance-based implementation model, under which disbursements are conditional on the fulfillment of pre-agreed milestones and targets, rather than on the reimbursement of eligible expenditure, as under the European Structural and Investment Funds (ESIFs).

This paper takes stock of the economic impact of the RRF as implementation enters its final phase and draws lessons for the design of the next EU Multiannual Financial Framework (MFF). While it remains too early for a full ex-post evaluation, this paper aims at assessing key channels through which the RRF has affected European economies and evaluates the strengths and limitations of its novel institutional framework. The analysis of the economic impact focuses on three dimensions: i) the short-term demand impact of RRF-financed spending, ii) the implications of EU-level borrowing for sovereign debt markets, and iii) the medium-to-long-term supply-side effects of the RRF's combined reform-and-investment approach. Finally, the paper draws design lessons for performance-based conditionality and explores how these insights can inform the architecture of the next MFF.

First, our findings indicate that the RRF acted as a countercyclical tool, providing a significant macroeconomic impulse, supporting demand, employment, and output during the post-pandemic recovery, particularly in countries with larger allocations. Sectoral evidence indicates that spending has been concentrated in areas with relatively high short-term multipliers, while the full impact is expected to strengthen as absorption progresses. At the same time, time-to-build constraints in infrastructure investment and

the gradual transmission of structural reforms imply that productivity and supply-side gains will materialize over the medium to long term. Ultimately, the overall macroeconomic impact will depend on the effective absorption of RRF funds. Second, we find that joint EU-level borrowing at scale helped stabilize sovereign debt markets at a critical juncture, improving prospects of EU bonds to become safe assets, through the likely combination of improved liquidity, market depth, and creditworthiness. Third, we document that the overambition and complexity of plans, administrative capacity limits, and bottlenecks have slowed disbursement in several member states. Furthermore, although the predominance of output-based milestones and targets facilitated monitoring and accountability, it raised concerns about “check-the-box” compliance and limited focus on results. Our analysis underscores that performance-based conditionality works best when grounded in strong national ownership and aligned with implementation capacity. Its effectiveness is enhanced by parsimonious and outcome-oriented indicators that focus on the direct outputs of spending—such as the number of individuals trained or kilometers of road constructed—alongside complementary technical assistance, and sufficient flexibility to adapt to evolving conditions.

The paper contributes to an emerging literature assessing the macroeconomic effect of the RRF and its institutional design. Very few studies have analyzed the macroeconomic impact of the RRF, mainly through modelling exercises using the European Commission’s and ECB’s general equilibrium models (Pfeiffer and others, 2023; Bańkowski and others, 2022), as well as other multi-country models (Watt and Watzka, 2020). These contributions find annual GDP effects in the range of 0.3–0.8 percent, conditional on implementation success, spillover effects, and underlying modelling assumptions. More recently, Rubén Domínguez-Díaz and others (2025) find that NGEU funds increase Spain’s annual GDP growth by 0.08-0.13 percentage point over the period of disbursement, mostly through the endogenous response of productivity to the fiscal stimulus.

In line with the focus of this paper, some recent studies have examined the sectoral dimension of the RRF. Michels and others (2025) develop a sectoral dataset classifying RRF reforms and investments. Applying the European Commission Joint Research Centre (JRC) general equilibrium model (FIDELIO)¹ they simulate that the RRF’s

¹ See [European Commission 2025](#).

investment component could significantly boost EU output through domestic and cross-border supply-chain linkages, yielding a cumulative multiplier of about 1.36 over ten years. While Italy and Spain benefit most directly, Germany also presents gains through spillovers—mainly through integrated manufacturing value chains. Fernandez Garcia and others (2025), using the same dynamic general equilibrium model, find a positive impact on the Dutch economy, operating through direct effects—primarily in the construction sector—and additional spillover effects from other EU countries. Basso and others (2025) also discuss the sectoral dimension of RRF funding focusing on the labor market. They find that the employment expansion generated by the RRF is largest in construction but is also significant in technologically intensive sectors related to the digital transition and in professional services. Regarding performance-based implementation, Bucci and others (2025) studied around 1,600 investment projects implemented by Italian public entities and financed by Cassa Depositi e Prestiti. They find that projects receiving RRF co-financing were much less likely to be delayed compared to those without such funding.

The remainder of the paper is structured as follows. Section 2 analyzes the economic impact of the RRF. Section 3 assesses the design of the RRF's performance-based framework and draws lessons for the next MFF, with particular attention to conditionality. Section 4 concludes.

The RRF's Economic Impact

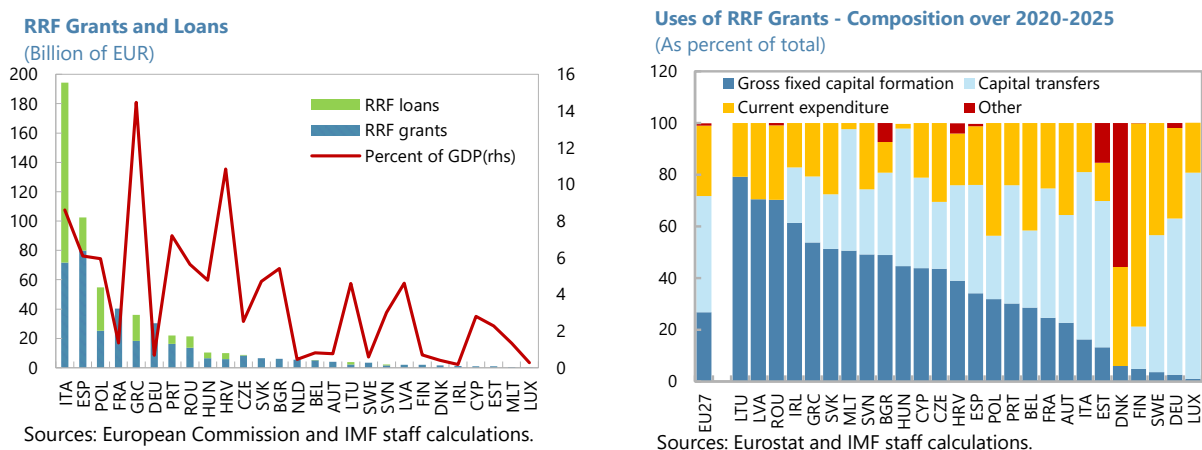
The primary objective of the RRF was to stabilize EU member states' economies at the time of the Covid-19 pandemic recession. Funds were allocated according to a combination of criteria: 70 percent of RRF grants were allocated to member states based on population and the inverse of the GDP per capita in 2019 and the average unemployment rate from 2015-2019.² The remaining 30 percent were based on the same factors, but the unemployment rate was substituted with a measure of the severity of the economic impact by the pandemic.³ RRF loans were demand driven and initially capped at 6.8 percent of gross national income (GNI), but loan portions not requested by entitled member states could be reallocated to others (even if above the cap).

² The formula has several specificities, but in essence uses a composite allocation key where population had a weight at 50 percent, while the other two factors each had a weight of 25 percent.

³ Proxied by the real GDP loss in 2020 and the projected cumulative change in GDP in 2020-2021. The weighting was the same as for the initial 70 percent of grants. The 30 percent allocation was adjusted in June 2022 to reflect the outturn data from 2020-2021.

Twelve member states made use of RRF loans, though some eventually reduced the requested amounts.⁴ For some countries, total RRF allocations reached more than 10 percent of GDP (Figure 1 – panel A).

Figure 1. RRF distribution across countries and composition



This section discusses three channels through which the RRF is expected to impact European economies: i) a short-term demand stimulus, ii) an effect on sovereign debt markets, iii) and potential longer-term supply-side effects arising from the unique combination of reforms and investments embedded in the facility.

Short-term demand boost

By boosting public expenditure, mainly on gross fixed capital formation and capital transfers (Figure 1 – panel B), RRF funding can stimulate demand. Estimating the demand effects of the RRF at this stage is challenging, as funds are still being disbursed and absorbed by member countries, implying that their full macroeconomic impact has yet to materialize. Moreover, by design, the RRF aims not only to support demand but also to transform European economies through the unique combination of reforms and investment. The benefits of such measures—particularly for productivity and potential growth—typically emerge with a long lag, implying that their effects may become more evident over the medium-term rather than in the near-term.

This section presents a set of stylized facts to assess the channels through which RRF funds affect European economies, with a particular focus on sectoral impacts. The

⁴ A recent example is Spain, which requested that €60 billion in loans will no longer be needed, largely due to the changed interest rate environment.

analysis relies primarily on European Commission data on RRF disbursements by sector.⁵

Stylized fact 1. Disbursement composition skewed toward construction and manufacturing.

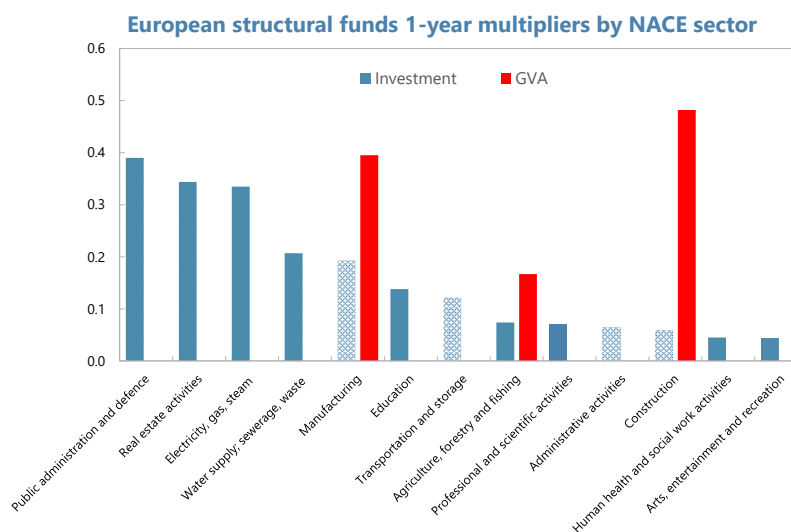
In 2024, about half of RRF disbursements (i.e., funds disbursed from the European Commission after the completion of milestones and targets) went to the construction sector (Figure 2 – panel A). Manufacturing is the second-to-largest sector in terms of disbursements, accounting for about 20 percent. Italy and Spain show the highest disbursements in construction and manufacturing, with notable amounts also found for construction in Poland and France (Figure 2 – panel B).⁶ Information and communication, and professional and scientific activities also exhibit large disbursements in Spain and Italy. This is consistent with the evidence provided by Basso and others (2025), who find that in Italy RRF resources are allocated to sectors such as construction, digital transition, and professional services.

The literature suggests that public spending on construction or support to manufacturing can have large multipliers in the short-run. For example, studies on the effect of European Structural Funds at the sectoral level suggest that construction spending and manufacturing tend to generate high short-term gross value added (GVA)—mainly through wages (Text Figure)—but have a more limited impact on long-term productive capacity (e.g., Espinoza and Durand, 2021). Spending on construction may have strong immediate output linkages because it activates a broad network of industries—upstream and downstream—and is labor-intensive and locally sourced. Evidence based on input-output links shows that sectors with dense upstream and downstream linkages and high labor intensity (such as construction) generate large short-run output effects, particularly during downturns (Acemoglu and others, 2012; Basso and Rachedi, 2021). These features typically make construction a good target for short-term demand stimulus, and funds in this area tend to be front-loaded to allow for quick disbursement.

⁵ [RRF Sectoral database - Economy and Finance - European Commission](#). The disbursements used in this exercise are not the actual annual costs or financed expenditures, but rather the ex-ante estimated costs per measure and their planned instalments, referred to in the database as the “Annual indicative rate of implementation.” Sectors are aggregated into broader categories compared to those in the raw data to be able to merge them with other data.

⁶ In the case of Italy, construction spending is linked to the *Superbonus*, a component of Italy’s Recovery and Resilience Plan (M2C3), which provides tax deductions for energy-efficiency and seismic-safety renovations of residential buildings, has led to an increased gross fixed capital formation in recent years (IMF Italy Article IV 2024), but output multipliers are considered small (IMF Italy Article IV 2025).

The effectiveness of RRF on the macroeconomy therefore hinges not only on project composition, but also on the degree to which public investment crowds-in complementary private investment. For instance, Ramey (2021), in the context of US infrastructure spending, finds that short-run stimulus multipliers are generally smaller than those associated with government consumption, due to a higher degree of crowding-out of private spending with respect to government consumption. The evidence on the degree of crowding-out when considering European structural funds



Source: Durand and Espinoza (2021).

Note: the shaded bars are statistically insignificant coefficients.

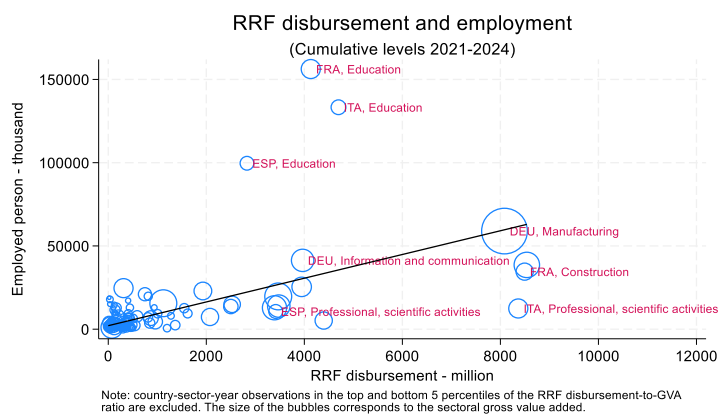
is mixed.⁷ Espinoza and Durand (2021) find limited effects on total investment (Text Figure), while De Santis and Vinci (2025) find both short- and long-term crowding-in effects, with stronger effects for richer regions, likely reflecting better institutional capacity and complementary private sector responses. These findings suggest that institutional quality and absorptive capacity may influence whether RRF-related investment translates into sustained capital accumulation.⁸

⁷ Crowding-out of private investment can arise through several channels that do not depend on governments directly substituting for private projects. In the short-run, public investment may raise demand for scarce inputs—such as skilled labor, construction services, or capital goods—thereby increasing costs faced by private firms and delaying or displacing their investment plans. Financing conditions may also tighten if public spending leads to higher interest rates or risk premia, particularly when monetary accommodation is limited (Ramey, 2021). In addition, uncertainty about future taxation associated with large public programs may cause firms to postpone investment. Over longer horizons, these effects can be offset or reversed if public investment raises the productivity of private capital, which helps explain why empirical evidence often finds weak or mixed crowding-out effects.

⁸ Antal et al. (2024) simulate that Loan Facility financed under the RRF in Greece could have a sizeable impact on private investment, which in turn depends on the degree of productivity gains and improvements in the capital stock,

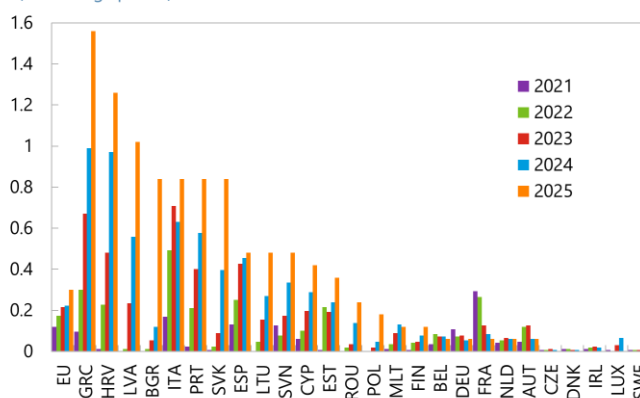
Stylized fact 2. RRF disbursements are associated with higher employment and output growth.

A correlation analysis suggests that sectors that have received RRF disbursements tend to be associated with higher employment (Text Figure) (see Basso and others, 2025, for a discussion of the RRF-driven increase in labor demand in Italy). When unpacking the sectoral heterogeneity, we find that both industry and services sectors benefited, with, for example, the education sector in Italy and Spain showing particularly strong employment gains.⁹ In Germany, employment in manufacturing and in the information and communication sectors also increased alongside high RRF disbursements.



Our back-of-the-envelope calculations using multipliers of 0.6—consistent with the recently revised assumption used in the European Commission’s debt sustainability framework—suggest that the RRF is estimated to have lifted EU annual GDP growth by 0.3 percentage point in 2025. For some member states, the impact exceeded 0.5 percentage point, with effects surpassing 1 percentage point in a few cases—notably Greece, Croatia, and Latvia.¹⁰ Assuming a uniform fiscal multiplier of 0.6 is a strong simplification, as multipliers can vary with the composition of spending, the degree of economic openness, and broader country-specific macroeconomic conditions, including the degree of slack and of monetary policy

Growth Impact of RRF Expenditure by Country
(Percentage points)



Sources: Eurostat; and IMF staff calculations.

⁹ In the case of Italy, the strong increase in employment also reflects the public sector recruitment of teachers. Specifically, Decrees M4C1-14 and M4C1-14bis (including the ‘14-ter’ decrees) approved rankings for at least 70,000 candidates who passed the public competition, including around 40,000 teachers hired under the national RRP targets.

¹⁰ The calculation is based on Eurostat RRF expenditure data ([Statistics related to the Recovery and Resilience Facility - Statistics Explained - Eurostat](#)) and assumes a homogenous multiplier of 0.6, which is also applied by the European Commission in its fiscal analyses (see for example [Debt Sustainability Monitor 2025](#)).

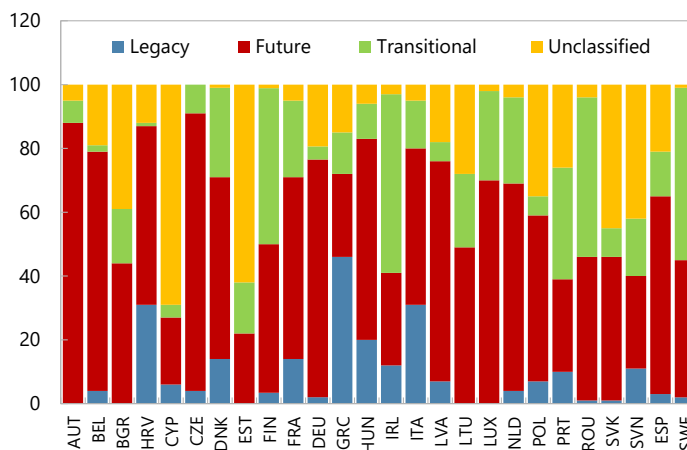
accommodation. Ultimately, the magnitude of the macroeconomic impact hinges on the effective absorption of RRF funds, as discussed later in the paper.

Stylized fact 3. Measures are concentrated in “future-oriented” sectors.

The RRF was explicitly designed to strengthen economic sustainability and resilience, for example by facilitating green and digital transitions. Approximately half of total RRF allocations are directed toward measures under the green transition pillar, either as a primary or secondary objective, while around one quarter of funding is assigned to the digital transition pillar.¹¹ To evaluate the extent to which the RRF supports structural transformation,

we conduct an AI-based textual analysis of descriptions of the measures associated with the top 100 fund recipients in each country.¹² The analysis indicates a strong concentration of funding in future-oriented sectors—such as research and development, infrastructure, and innovation hubs—suggesting that RRF-supported investments are largely aligned with long-term growth and transformation objectives.

100 Top Projects Classified by Type of Sectors



Sources: European Commission and IMF staff calculations.

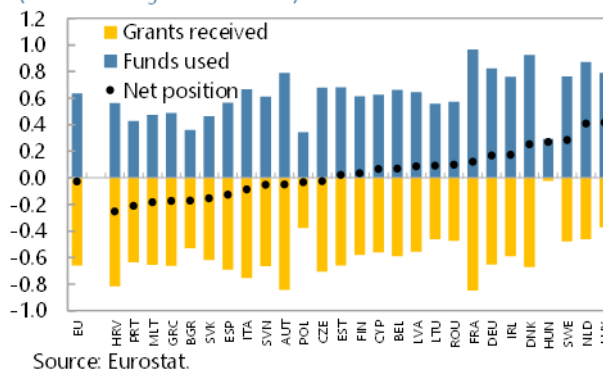
¹¹ This approach is driven by the design of the instruments, which include a 37 percent climate target and a 20 percent digital target.

¹² This analysis is based on a taxonomy of transformative sectors and an associated word dictionary and is therefore subject to the caveat that alternative taxonomies may lead to different results.

Stylized fact 4. The peak impact likely lies ahead.

The full growth effects of investment funded by the RRF are expected to materialize only gradually, with larger effects likely emerging in the later years of the program and, in many cases, after its formal conclusion. This reflects both delayed disbursement and gradual absorption of funds (Text Figure). Investment-related milestones and targets under the RRF are predominantly backloaded toward the end of the implementation period (see next section), postponing the associated spending and, consequently, its macroeconomic impact. Moreover, as discussed in the previous section, infrastructure projects face time-to-build constraints from planning, procurement, and construction, which further delay their impact on economic activity. To maximize the transformative impact and safeguard long-term objectives, it is crucial that investments are maintained beyond 2026. In this respect, it will be important to ensure adequate management and upkeep of investments.

Recovery and Resilience Facility Grants Received and Used, and Net Receivable Against the EU over 2020-2025
(In % of total grant allocation)



In addition, the growth effects of structural reforms supported by the RRF are likely to be delayed due to reforms' long implementation period. The RRF's allocation pattern is consistent with the empirical literature linking "mission-oriented" public investment (for example, targeting green and transformative technologies) to medium-term productivity gains, provided governance and implementation capacity are sufficiently strong (Dosi and others, 2023). Moreover, reform-driven gains tend to operate through gradual adjustments in labor markets, productivity, and the crowding-in of private investment (see Aiyar and others, 2019 and Budina and others, 2025 for a discussion of structural reforms in Europe). As a result, the peak impact of the RRF on output is expected to occur well after the initial phase of implementation.

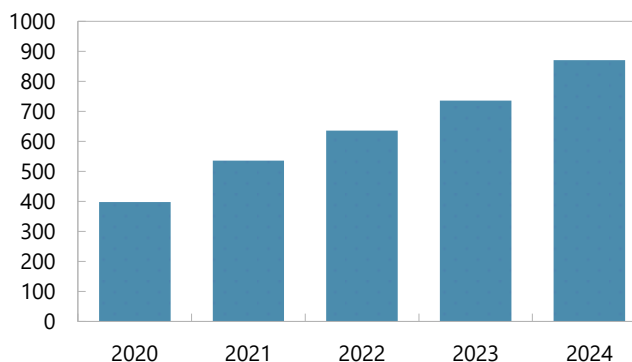
More broadly, the timing of macroeconomic effects does not necessarily align with EU-level disbursements, reflecting both implementation modalities and features of the EU framework. For instance, RRF resources are often implemented through financial instruments intermediated by national development or promotional banks that allow spending to be advanced or postponed relative to the receipt of funds ([EC, 2025](#)).

Similarly, when a measure envisages investment grants to private firms, while contractual commitment and disbursement to the member state must occur by 2026, the associated private investment may materialize in 2027 ([EC, 2025](#)). Member states also have the possibility to transfer RRF funds to the InvestEU Member State compartment if they face difficulties in delivering certain measures within the required timeframe ([Commission Notice – Guidance on recovery and resilience plans](#)). In addition, RRF resources can be channeled into EU-level mechanisms, including Joint Undertakings, which can subsequently support the development of strategic projects, such as gigafactories.¹³

Effect on EU sovereign debt markets

The announcement of a large, coordinated EU-level fiscal response under NGEU helped stabilize market expectations at a critical juncture of the pandemic.¹⁴ By signaling a credible commitment to countercyclical policy support, it reduced concerns about a fragmented recovery and renewed stress in sovereign bond markets, particularly in more vulnerable member states. This announcement was especially powerful given the unprecedented scale of joint borrowing and the explicit link between EU-level issuance and national fiscal support.

Debt of EU institutions
(Debt securities, millions of EUR)



Source: Eurostat.

Under NGEU, the European Commission is authorized to raise up to €806.9 billion between 2021 and 2026 through the issuance of EU-level debt. EU institutions' debt more than doubled between 2020 and 2024 (Text Figure). By late 2025, the EU had already issued more than €400 billion in bonds under NGEU. However, take-up of the

¹³ “Upon the signature of an RRF administrative agreement and the full and irrevocable transfer of the designated RRF funds to the Joint Undertaking no later than 31 August 2026, the Member State will be considered as having met the deadline set in Regulation (EU) 2021/241.” (Council Regulation (EU) 2026/150 of 16 January 2026 amending Regulation (EU) 2021/1173 on establishing the European High Performance Computing Joint Undertaking).

¹⁴ While sovereign spreads declined in the weeks following the NGEU announcement, this period also coincided with a sequence of ECB policy actions introduced during the COVID-19 crisis. These measures—announced at different points in time—were aimed at stabilizing financial markets and compressing spreads. Accordingly, the observed market response should be interpreted as the outcome of interacting fiscal and monetary policy announcements rather than as a causal effect of NGEU alone.

loan component has been lower than initially envisaged. Some member states have not used their entire loan allocations, and about €83 billion—including €60 billion from Spain—has been de-committed at governments' request.¹⁵ As a result, total expected disbursements of grants and loans are now around €575 billion, including about €20 billion financed through revenues from the EU Emissions Trading System.

Beyond providing direct macroeconomic support, the RRF appears to have contributed to an improvement in market perceptions of euro-denominated assets. By placing a floor under economic activity and reducing downside growth risks, the program improved expectations for medium term growth and sovereign creditworthiness. In parallel, the prospect of large, regular EU-level issuance may have supported market liquidity and depth. While the evidence is not definitive, both channels—lower perceived credit risk and a reduced liquidity premium—likely played a role. This interpretation is consistent with the literature that highlights how fiscal backstops and joint issuance help mitigate sovereign risk during crises (Corsetti and others, 2018; Farhi and Werning, 2017). Sovereign spreads in several southern European countries declined by around 15–40 basis points in the weeks following the initial announcement, signaling increased confidence in the EU's risk-sharing and crisis-response capacity (Figure 3 – panel A). By December 2020, when NGEU was formally adopted, spreads had broadly returned to pre-pandemic levels.

Greater EU-level bond issuance also appears to have improved market liquidity. While the KfW–Bund spread—a commonly used indicator of liquidity premia in the euro area—rose over the period, the EU–Bund spread declined (Figure 3 – panel B, yellow bar). Prior to NGEU issuance, EU–Bund and KfW–Bund spreads largely overlapped (Figure 3 – panel B, blue bar), suggesting similar liquidity premia. Because Kreditanstalt für Wiederaufbau (KfW) bonds carry an explicit German government guarantee and a de facto AAA rating, yield spreads relative to Bunds primarily reflect liquidity differences rather than credit risk. Their post-NGEU divergence therefore indicates an improvement in the liquidity of EU bonds (Bletzinger and others, 2022).

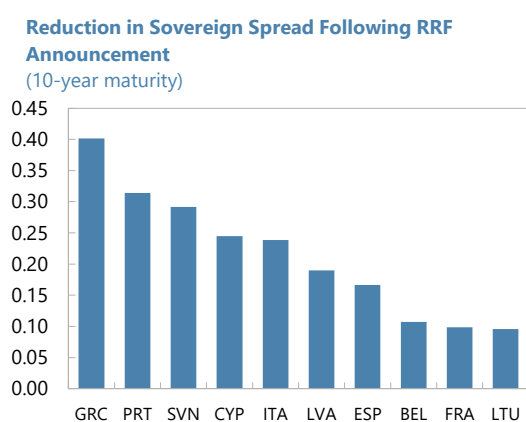
Taken together, improved growth expectations, enhanced perceptions of risk-sharing and asset safety, greater liquidity, and increased market depth contributed to a reduction in overall financing costs. This allowed member states to access funding at

¹⁵ The uptake of RRF loans largely depended on the relative sovereign funding costs of member states compared to the borrowing costs under NGEU.

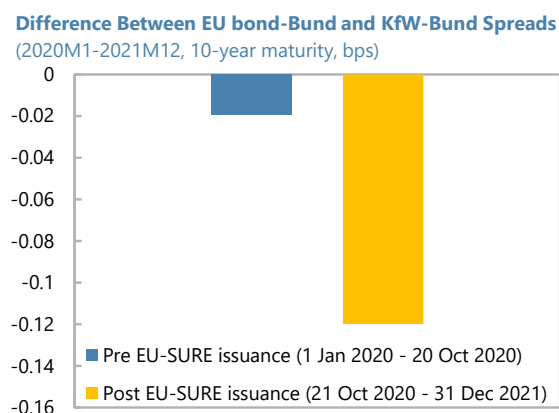
lower interest rates than would have been possible through national issuance alone at that time (Figure 3 – panel C). These effects are likely to have been particularly valuable for smaller and more vulnerable economies, where limited issuance volumes typically make sovereign spreads more sensitive to liquidity premia. More broadly, the RRF experience suggests that joint EU-level issuance can generate positive spillovers for national sovereign financing conditions, beyond the direct fiscal transfers embedded in the program.

The evidence on the short-term demand boost and the sovereign debt markets suggests that the RRF's effectiveness as a countercyclical tool operates through different channels and time horizons. While approval, implementation, and time-to-build constraints imply long lags before spending translates into demand, the announcement of a large, jointly financed EU-level program appears to have delivered a more immediate macro-financial impact by stabilizing sovereign debt markets and compressing risk premia. This early confidence effect may have helped support economic activity indirectly by easing financing conditions. However, financial-market effects alone are unlikely to fully offset delays in actual spending.

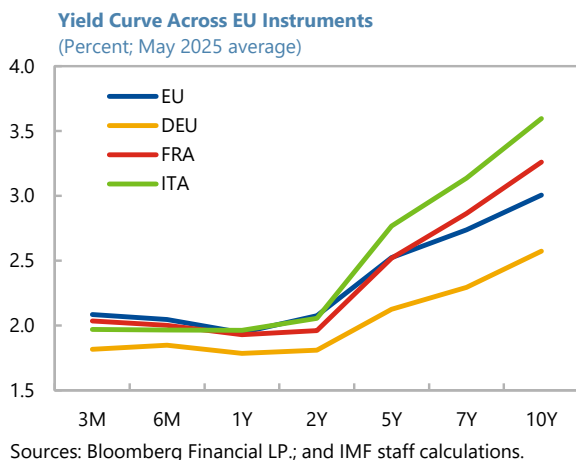
Figure 3. RRF and sovereign debt markets



Sources: Bloomberg, Bletzinger et. al 2022; IMF staff calculations.



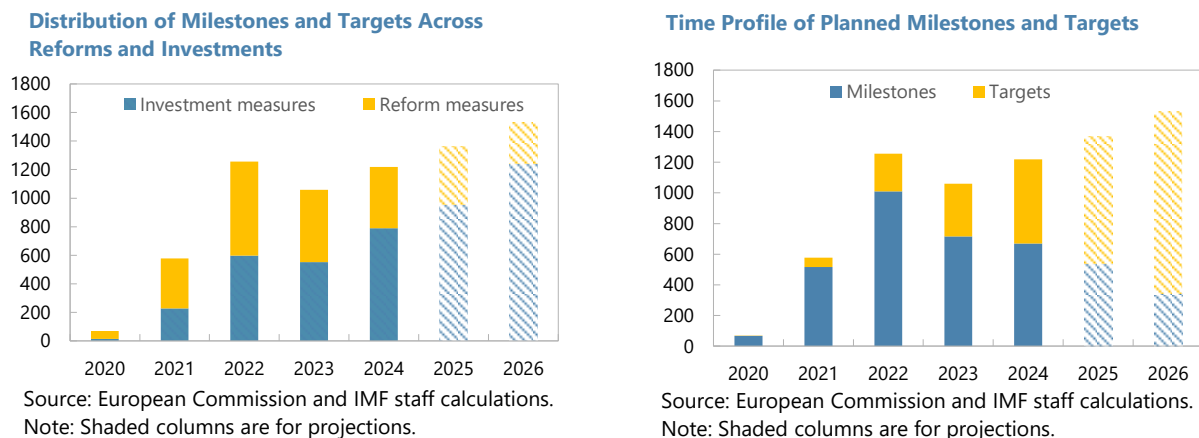
Sources: Bloomberg, Bletzinger et. al 2022; IMF staff calculation



Supply-side impact and sequencing of reforms and investments

The RRF is anchored in a conditionality framework that combines milestones and targets. Reform measures were largely front-loaded, while investment execution initially accelerated in 2022 and was projected to scale up more decisively from 2024 onward (Figure 4 – panel A). This sequencing helped establish the institutional and regulatory conditions for more efficient and productive investment. Consistent with this design, milestones dominated the initial phase of implementation, with projects and measures gradually transitioning toward completion and the delivery of final targets. Progress in target fulfillment is expected to accelerate over 2024–26, pointing to a strengthening impact on economic activity (Figure 4 – panel B).

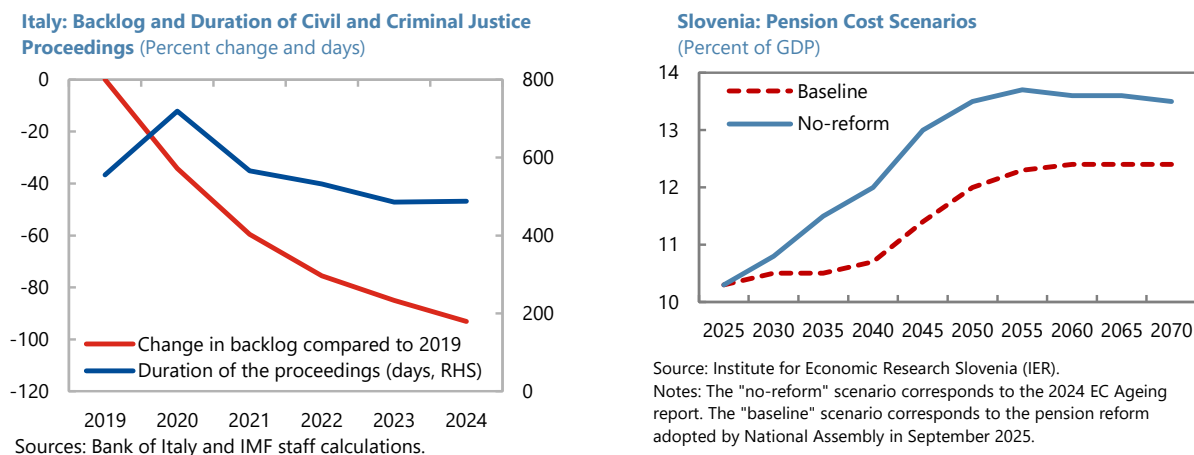
Figure 4. Milestones and targets



Countries succeeded in implementing long-standing, often contentious reforms, facilitated by the RRF's enabling framework.¹⁶

- Examples of important reforms implemented or being implemented include:
 - The *2021 judicial reforms in Italy* aimed at reducing court backlogs (Figure 5 – panel A). They target all levels of the court system, from the lower courts to the Supreme Court of Cassation, and all types of courts, from civil to criminal to administrative. These reforms correspond to three RRF milestones. Alongside these reforms, the RRF supports the investment in document digitalization and an increase in human resources (IMF, 2025; Giavazzi and Goretti, 2023). Other reforms include the reduction of procurement stations which has been discussed since the early 1990s. Empirical evidence suggests that improving judicial efficiency can significantly boost investment and output (Potincelli and Alencar, 2016), although these benefits typically materialize gradually.
 - The *2021 labor market reform in Spain* aimed at enhancing market efficiency and reducing duality. The reform simplifies contracts, modernizes subcontracting regulations, and changes collective bargaining by restoring the priority of sectoral agreements over firm-level agreements on wages and reinstating the indefinite extension of expired collective agreements. It also expands firms' internal flexibility mechanisms by enhancing the existing short-time work scheme and introducing a new scheme to improve employment stability (IMF, 2024).
 - The *2025 pension reform in Slovenia*. The reform aims at increasing the retirement age, increasing the weight of inflation in pension indexation, and extending the contribution years for pension calculations (IMF, 2026). Such reforms generally generate supply-side benefits primarily through higher labor force participation and help stabilize long-term pension costs.

¹⁶ Zorell and Zwick (2026) find evidence that conditional, reform-linked financing instruments such as those in the RRF can improve institutional quality and long-term growth prospects.

Figure 5. Country specific reforms

Design Lessons with a Focus on Conditionality and Implications for the Next MFF

A performance-based approach to EU-level fiscal support

A key characteristic of the RRF is its performance-based implementation approach, under which disbursements are related to the successful completion of pre-agreed milestones and targets (M&Ts) covering both reforms and investments. This represents a major innovation relative to European structural funds, where disbursements are typically tied to costs incurred. Milestones and targets specify the concrete qualitative and quantitative actions that member states commit to delivering to access RRF funding. They are directly linked to the reform and investment measures outlined in national recovery and resilience plans (RRPs), thereby ensuring that disbursements are conditional on their effective implementation.

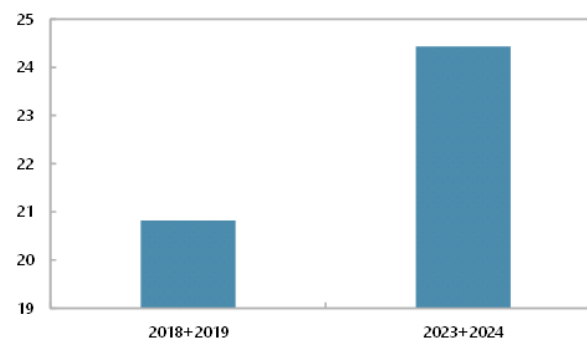
Performance-based implementation typically distinguishes between inputs, outputs, and results. Inputs are the financial resources allocated to programs. Outputs denote the direct products of expenditure, such as the number of individuals trained or kilometers of road built. Results assess the extent to which policies or programs meet their intended objectives—for example, employment gains attributable to training initiatives or reduced commuting times due to road expansion. This section describes key elements of the RRF performance-based approach, assessed through the lens of IMF experience

with conditionality and draws lessons for the next EU Budget, the 2028-2034 Multiannual Financial Framework (MFF).

Stylized Fact 1: Improved reform progress and country ownership.

The RRF's performance-based conditionality framework has proven effective in supporting the implementation of key structural reforms. A critical factor behind this success has been strong national ownership of reform agendas, since member states negotiated their RRFs directly with the European Commission. While the agreed reform package had to cover a substantial part of the country's reform priorities as laid out in

EU Country Specific Recommendation (CSR) Progress in the post-RRF period (Substantial Progress + Full Implementation)



Sources: CSR database and IMF staff calculations.

Note: Average shares of reforms marked as shares of "Substantial Progress+Full Implementation".

the Country-Specific Recommendations (CSRs),¹⁷ governments retained discretion to prioritize reforms along national preferences. This flexibility helped generate the necessary national buy-in, which often proved robust even against government change (see Bokhorst and Capati, 2026). Evidence suggests that progress in implementing CSRs improved noticeably during the RRF period relative to the pre-RRF experience, when uptake of CSRs had historically been limited (Text figure).

At the same time, a common criticism of country RRFs is that member states might have had incentives to choose M&Ts related to reforms and investments that have been already planned and have a high chance of being adopted (Corti and de la Ossa, 2023), limiting the additionality of RRF spending.¹⁸ The Commission noted in the mid-term evaluation of the RRF that in the case of Greece, Italy, Romania, and Spain some projects that had reached a more advanced stage of preparation and were initially intended for implementation under the EU budget's Connecting Europe Facility (CEF) or the Cohesion programs were subsequently moved to the RRFs given the tighter

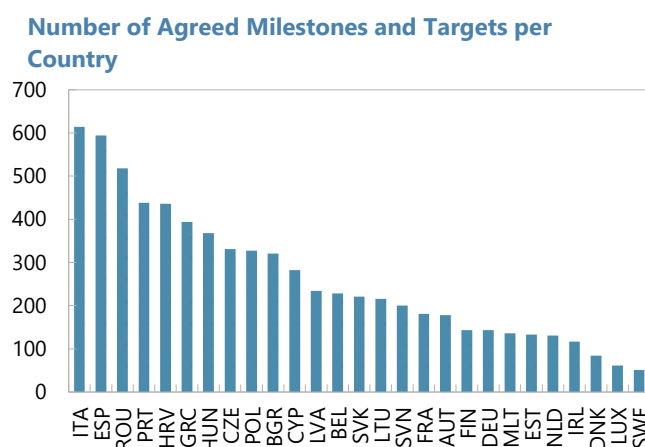
¹⁷ In the EU's European Semester, country-specific recommendations are policy guidance issued by the EU to member states identifying priority reforms and investment needs to address economic, fiscal, and social challenges. Under the RRF Regulation, member states were required to design their Recovery and Resilience Plans (RRFs) to address all or a significant subset of the CSRs issued to them (especially those from 2019–2020).

¹⁸ The European Commission mid-term review notes the following: "The additionality of the RRF in individual member states is correlated to the size of the financial support provided. For member states where the RRF represents an important share of GDP, the RRF provided additional fiscal space to implement investments that would otherwise have been unlikely... In Italy and Spain (where the RRF allocation account respectively for 11 percent and 6 percent of GDP), the RRF resources were reported to be additional...".

deadline and urgency ([European Commission, 2025a](#)).¹⁹ Corti, Liscai, and Ruiz (2022) show that, in the context of social investment, the RRF has accelerated such spending in countries with limited fiscal space, but spending has been allocated mostly to ongoing projects, whereas in others—such as Austria and Germany—it has largely substituted for already planned or budgeted investment (see also Gros, 2020 for a discussion of RRF fungibility).

Stylized fact 2: Complexity of performance indicators.

While the approach of linking disbursement to reforms has improved reform progress, the design and scale of national plans have introduced implementation challenges. In particular, member states with sizable RRF allocations adopted highly ambitious plans with large sets of reform and investment measures to be supported by RRF funds. However, in many instances, this ambition led to the inclusion of numerous milestones and targets for each reform and investment, with some countries listing over 500 M&Ts throughout their entire plan, adding to administrative burdens (see Text Figure).²⁰



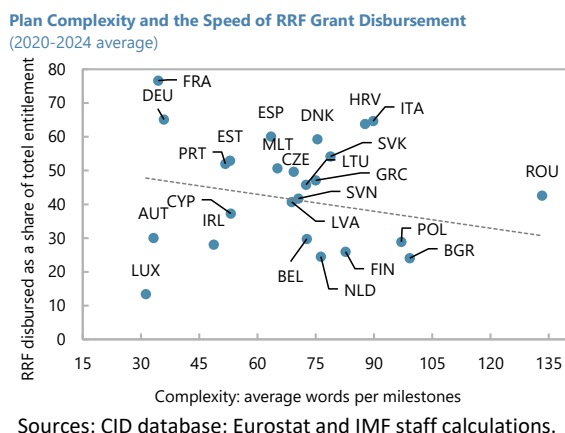
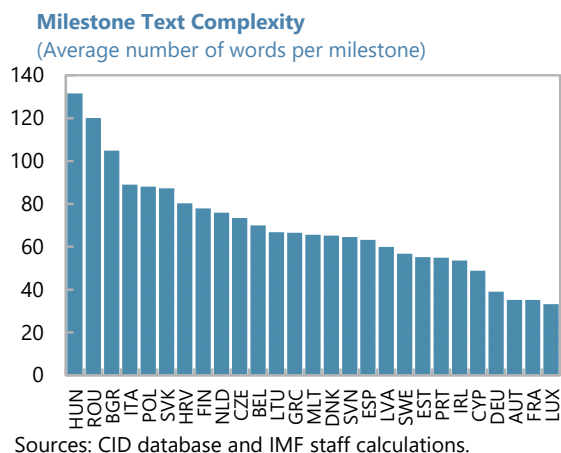
Source: European Commission.

The large number and complexity of milestones and targets have made the assessment of performance indicators more burdensome, difficult and open to legal challenges. To understand the impact of plan complexity on disbursements, we proxy complexity by the length of each country's milestones and targets, measured by the total number of words. Countries exhibit substantial variation along this dimension (Figure 6 – panel A), and more complex plans are systematically associated with slower RRF disbursements (Figure 6 – panel B). This association points to binding administrative and absorptive capacity constraints.

¹⁹ Substitution effects can be partly explained by the RRF being created as an emergency instrument, after the comprehensive set of funding instruments for the current MFF were already agreed.

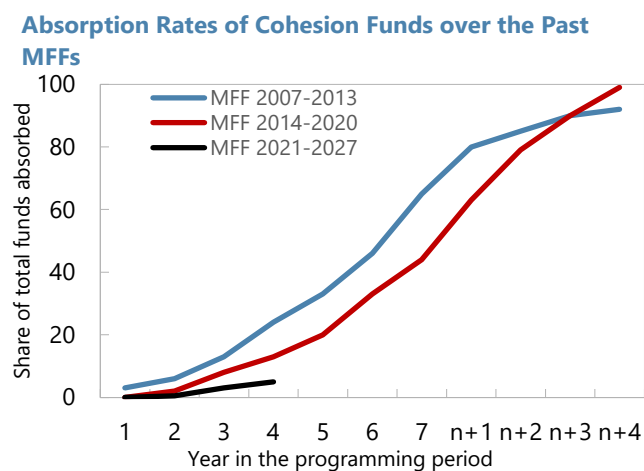
²⁰ Eihmanis (2025) analyzes RRF reforms ambition and find strong concentration toward governance, namely aiming at removing legal barriers and procedural constraints.

Figure 6. Plans complexity and disbursement delays



The European Commission, recognizing these challenges linked to the initial overambition in setting and meeting milestones and targets, published guidance encouraging member states to simplify their national plans. In response, twelve member states revised their RRP in spring 2025, streamlining nearly 600 measures and underpinning M&Ts. This was followed by further Council-endorsed amendments to 16 plans in autumn 2025.

Stylized Fact 3: Absorption capacity constraints. Beyond plan complexity, fund absorption remains a broader challenge. When investment is scaled up quickly, absorptive capacity constraints generated by supply bottlenecks or poor planning generate inefficiencies and limit the effectiveness of EU funds (Becker and others, 2012). Most member states have under-executed RRF spending relative to initial plans. By the end of 2025, the EU countries' accrual expenditure and other costs amounted to 63 percent of the total grant allocation (Eurostat). Over the same period, the European Commission had disbursed 66 percent of the grant envelope.



Absorption constraints and delays are a well-known structural challenge that has long been observed also under the Cohesion Policy funds. Halfway through the current MFF, only a small fraction of cohesion funds had been absorbed, underscoring long-standing structural implementation bottlenecks (Text Figure). The parallel rollout of RRF and Cohesion funds may have further strained national administrative capacities, contributing to observed delays (see [European Court of Auditors, 2024](#); [EPRS, 2024](#)).

Lessons for performance-based conditionality

The RRF experience assessed in the preceding discussion provides important lessons for the design of performance-based conditionality. Building on IMF experience with conditionality, this section assesses the RRF framework along five dimensions: 1) ownership and capacity; 2) reform prioritization; 3) output vs results-oriented indicators; 4) plan complexity and administrative burdens; and 5) flexibility.

1) Ownership and capacity. In the context of IMF-supported programs, successful implementation of structural reforms hinges on strong country ownership closely aligned with a realistic assessment of administrative and institutional and absorptive capacity constraints (IMF, 2024). The RRF experience has clearly underscored the importance of strong alignment of the facility with member states' national reform agendas. But the delays in disbursement associated with complexity of plans suggest that any future performance-based instrument—especially for ad-hoc large-scale programs—needs to

align ambitious reform agendas with administrative institutional capacity. Moreover, the instrument should be complemented with measures to strengthen absorption capacity (e.g. enhancing the EU budget's Technical Support Instrument).

2) Reform prioritization. As highlighted in the latest IMF review of conditionality, prioritization and sequencing of reforms are critical to ensure parsimony and sufficient depth of conditionality (IMF, 2019). Deep reforms—those that are sufficiently ambitious, well-aligned with country objectives, and likely to generate durable improvements in macroeconomic outcomes—are typically associated with better results. However, an exclusive focus on high-depth measures can overwhelm administrative capacity, highlighting the need for a calibrated balance between ambition and feasibility. Similarly, having a longer reform implementation horizon—easing administrative constraints by spreading workload—has to be balanced with the positive effects of front-loading reforms ahead of related investments. Having a longer program horizon can allow spreading the reform effort over a longer period.

3) Output vs results-based indicators. The RRF's reliance on output-based rather than results-based conditionality helps improve verifiability and simplify monitoring, but it also entails trade-offs. When conditionality emphasizes the delivery of observable outputs that are under the control of the government—such as the provision of training—rather than economic or institutional impact, it may encourage “check-the-box” reforms. This can weaken the transformative potential of the framework by shifting attention away from whether reforms deliver meaningful and lasting outcomes. Critiques have emerged regarding the limited capacity of the RRF linking funding to results. The [European Court of Auditors \(2025\)](#) found that the RRF's milestones and targets largely track steps in implementation (i.e. outputs) rather than tangible results. Begg and others (2024) note that the RRF relies predominantly on input and output indicators, with relatively limited use of result indicators. Darvas and others (2023) review national RRFs and highlight that inconsistent use of result indicators represents a missed opportunity to filter out projects with questionable utility. Careful calibration of the payoff–feasibility trade-off is therefore essential to avoid “roads to nowhere” (measures that are easy to complete but generate limited economic impact). Consistent with IMF (2019), conditionality should focus on reforms judged critical for achieving stated objectives, rather than maximizing the number of deliverables.

4) Plan complexity and administrative burdens. The evolution of national RRFs has underscored the need to keep national plans succinct and realistic. Fewer performance indicators with contained parameters would enhance transparency and ease assessment and reporting, while narrowing the focus to the most important deliverables and facilitating cross-country comparison. Moreover, relying more on result-based targets could be counterbalanced by fewer milestones. Auditing and control procedures should be streamlined (Corti and others, 2023) while avoiding unnecessary duplication of work. At the same time, effective data collection and sharing are essential to ensure transparency and accountability ([European Court of Auditors 2026](#)), as well as appropriate ex-post evaluation. Digitalization of monitoring and reporting systems offers additional scope for efficiency gains.

5) Flexibility. Greater flexibility in implementation can enhance effectiveness. The RRF experience shows that plans inevitably need adjustment as economic conditions evolve. The revisions of RRFs in 2025—following the European Commission's call for simplification—demonstrated both the need and the political feasibility of mid-course corrections. While recognizing the differences between the RRF and IMF-supported programs, an open question for the RRF's future and for the next EU budget cycle is how far plans can be simplified and adapted while preserving credibility and trust. Striking the right balance between flexibility and commitment will be essential, particularly to assuage concerns that funds are indeed deployed effectively and in line with agreed priorities.

RRF insights for the next MFF

The experience with the RRF so far indicates that linking reforms and investments in a common package creates the necessary incentive structure to implement challenging reforms. The RRF acted as a catalyst for structural reforms by aligning investments with reform sequencing and unlocking politically difficult measures that had been discussed for years but not enacted. Moreover, its performance-based approach—linking disbursements to milestones and targets—strengthened accountability. This type of approach should be embedded in the next MFF (see also Busse and others, 2025). Carefully sequencing reforms and investments—based on an ex-ante assessment of their expected payoff—is essential to strengthen ownership, enhance effectiveness, and limit administrative burdens. This approach is in line with the IMF's own experience with conditionality (IMF, 2019).

The RRF experience also highlights potential benefits from common EU borrowing to support spending on shared EU priorities which should inform the 2028–2034 MFF. The unprecedented scale of EU-level borrowing under NGEU not only boosted market confidence in concomitance with the announcement of the facility but also enhanced the appeal of EU bonds as safe assets. Additionally, it changed how the EU capital markets function by demonstrating burden-sharing and contributing to greater liquidity and market depth.

The RRF experience provides a case for a central fiscal capacity in Europe (Arnold and others, 2018).²¹ The RRF provided both a countercyclical macroeconomic response during a large common shock and a mechanism for cross-country risk sharing—functions that the current MFF, centered on multi-annual public goods spending, was not designed to perform. In effect, the RRF has been a successful example of jointly funded discretionary support deployed when the EU faced a severe crisis.

The [European Commission's 2025b](#) proposal for the next MFF already draws on lessons from the RRF experience. Central to the proposal are the new National and Regional Partnership Plans (NRPPs), through which member states and regions will negotiate coherent plans with the Commission that link investments and reforms under a single strategy, echoing the RRF's model of combining structural reforms with targeted public investments. The proposal also introduces an emergency loan instrument backed by common EU borrowing, which would provide up to €150 billion of budget-supported loans under “Catalyst Europe”, reflecting the RRF's use of joint borrowing to provide timely financial support during crises and to enhance EU fiscal capacity. More broadly, the Commission's blueprint borrows from RRF lessons on performance frameworks—such as milestones and targets and delivery mechanisms that are not tied to costs but linked to achieving results.

In sum, a more ambitious, flexible, and performance-oriented MFF, potentially underpinned by common borrowing, would further strengthen the EU's ability to respond to shocks, support productivity and resilience, and deliver on strategic priorities.

²¹ Many proposals have discussed how to increase the size of the Eurobonds markets. See for instance Leandro and Zettelmeyer (2019) and Blanchard and Ubide (2025).

Conclusion

The RRF represents a significant innovation in the European Union's policy toolkit. Conceived in response to an unprecedented common shock, the RRF combined large-scale EU-level borrowing with a performance-based framework linking financial support to reforms and investments. As implementation enters its final phase, this paper discussed key channels through which the RRF has affected European economies and lessons for the future design of EU-level fiscal instruments.

The analysis highlights three main findings. First, the RRF has provided a meaningful macroeconomic impulse, supporting demand during the recovery from the pandemic and creating jobs and growth, particularly in countries with large allocations. While the full demand impact is still unfolding, sectoral evidence suggests that RRF-financed spending has been concentrated in areas with strong short-term multipliers, with further effects expected as absorption accelerates in 2026. At the same time, challenges around the pace of funds absorption remain as implementation is still ramping up and the overall macroeconomic impact will ultimately depend on how effectively RRF funds are utilized. Moreover, infrastructure projects subject to time-to-build constraints could further delay their economic impact, while reform-driven gains typically materialize over the medium to long run as labor markets and productivity adjust gradually. As additional data become available, an ex-post evaluation of the longer-term impact of the RRF will be warranted.

Second, coordinated EU-level borrowing under NGEU played an important role in stabilizing sovereign debt markets at a critical juncture. The announcement and subsequent issuance of EU bonds were associated with a compression of sovereign spreads in more vulnerable member states and with improvements in market liquidity and depth, reflecting enhanced confidence and expectations of policy coordination. While these effects should be interpreted with caution as other factors may have contributed, including an accommodative monetary policy in the first two years after the RRF adoption, the preliminary evidence discussed in the paper suggests that EU-level issuance can generate positive spillovers for national financing conditions.

Third, and most importantly for medium-term prospects, the RRF's combined reform-and-investment approach has the potential to raise productivity and resilience over time. By sequencing front-loaded reforms with back-loaded investments, the RRF sought to strengthen institutional frameworks and increase the returns to public and

private capital. However, these supply-side effects will materialize only gradually and depend critically on effective implementation and sustained reform momentum. Beyond 2026, sustaining and maintaining RRF investments is essential to avoid underutilization or obsolescence (Boeri and Perotti, 2023). Creating fiscal space, crowding in private investment to ensure continued funding, and designing exit strategies for programs with “unproductive” recurrent expenditure are all key dimensions that should be considered as the RRF window is closing.

At the same time, the experience with the facility has revealed important constraints. The overambition and complexity of plans, administrative capacity limits, and absorption bottlenecks have slowed disbursement in several member states. Furthermore, the predominance of output-based milestones and targets facilitated monitoring and accountability, but also raised concerns about “check-the-box” compliance and limited focus on results. Mid-course plan revisions in 2025 demonstrated both the need for flexibility and the importance of preserving credibility.

Taken together, these insights yield several lessons for the design of the next MFF and future EU-level instruments. Performance-based conditionality can be effective when anchored in strong national ownership, focused on macro-critical reforms, and calibrated to implementation capacity. Parsimony in the number and complexity of milestones and targets, greater emphasis on outcome-oriented indicators where feasible, complementary technical support, and built-in flexibility to adapt to changing conditions are all essential elements to maximize impact while limiting administrative burden.

More broadly, the RRF experience strengthens the case for equipping the EU budgetary framework with tools that can provide timely, coordinated, and credible support in the face of large shocks. While the RRF was temporary by design, its core features—linking reforms and investments, using performance-based delivery, and mobilizing common borrowing when warranted—offer valuable guidance for the future. Embedding these lessons in the next MFF would enhance the EU’s capacity to support convergence, resilience, and long-term growth, while preserving sound incentives and accountability.

With limited time remaining and a significant share of funds yet to be disbursed, further progress in implementation—while safeguarding adequate quality control—is crucial to maximizing impact. As the deadline for disbursements draws nearer, ensuring the sustainability of RRF-financed investments beyond 2026 also becomes increasingly

important. This will require continued funding and maintenance to prevent projects from losing momentum or deteriorating over time. The current MFF can provide some funds to sustain the impact, but its investment structure and focus differ. The next MFF with its proposed NRPPs could play a pivotal role in carrying forward RRF reforms and investments to ensure the impact on the European economies is truly maximized.

Ultimately, the RRF's most important contributions may lie not only in its immediate macroeconomic effects, but also in the institutional precedent it sets. Whether these gains endure will depend on the ability to sustain reforms, maintain investments, and translate the lessons learned into a more flexible and effective EU fiscal architecture.

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