BRIEFING

Requested by the BUDG Committee

European Parliament

Management of debt liabilities in the EU budget under the post-2027 MFF

KEY FINDINGS

The EU's debt stock reached EUR 547 billion by the end of September 2024 and is expected to increase by an additional EUR 448 billion under current commitments. Of this total, EUR 421 billion will ultimately finance grants, with the interest and principal repayments to be made jointly by EU countries through the EU budget. The remaining amount will finance loans to countries, which will be serviced as those countries repay their loans.

During the 2028-2034 Multiannual Financial Framework (MFF), interest payments and principal repayments on NGEU grant-related borrowing are projected to amount to between EUR 140 billion and 168 billion in total, depending on timing. In addition, we estimate that fully covering interest rate costs for existing loans to Ukraine would cost approximately EUR 11.5 billion in total over the next MFF.

The interest rate risk for the 2028-2034 MFF is low. Ukraine however may face challenges in servicing EU loans, representing credit risk. A risk to the EU's credit rating is the potential downgrades of individual EU countries' credit ratings.

The treatment of NGEU debt service is closely linked to decisions on the overall size of the next MFF. A political decision is required on whether NGEU represents a front-loading of future EU spending or a one-time response to the pandemic through additional EU resources. This would determine whether future debt service should crowd out other EU expenditures or remain outside the regular MFF ceilings.

Pandemic-related EU borrowing is backed by an extra annual contribution of up to 0.6% of GNI from EU countries, applicable until 2058. This extra resource is up to 9.5 times larger than NGEU grant-related liabilities between 2028 and 2058, but cannot be used for any other EU obligations.

Interest payments on NGEU grants-related borrowing during the 2021-2027 MFF are expected to total 28 EUR billion, significantly above the initially planned 15 EUR billion. A new instrument has been created to finance these costs outside the MFF ceilings if other sources, such as reallocations from other EU expenditures, are insufficient.

The EU's borrowing costs relative to Germany increased significantly between late 2021 and June 2022, and its current value, about 0.6 percentage points at the 10-year maturity, remains high. The EU's borrowing costs also increased slightly compared to those of the European Stability Mechanism (ESM) and the European Investment Bank (EIB) from 2023 onward.

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1. The likely exposures for the EU budget

Debt issued by the European Union reached EUR 547 billion by the end of September 2024 (Table 1). Of this, EUR 231.4 billion is for financing grants[1], which will be repaid jointly with interest by all EU countries. The remaining EUR 291.5 billion worth of EU bonds is financing loans to EU and non-EU countries, which are liable for repaying their loans with interest to the EU, while the EU uses these proceeds to service its associated debt liabilities[2]. Thus, in principle, EU borrowing for loans to countries does not constitute any cost to the EU as a whole, but the EU runs the risk of countries not servicing their loans to the EU. Existing commitments are expected to add an additional EUR 448 billion to the EU debt stock by 2027, including 190 EUR billion in grants.

Following the work of Claeys *et al* (2023)[3], we estimate the expected interest cost up to 2058 related to the EU borrowing used to finance NGEU grants, both already issued and expected before 2026. We assume that all NGEU grants will be used by the end of 2026[4]. For the repayment of the principal, which must occur in a *"steady and predictable"* manner[5], we assume two scenarios: equal annual amounts in euros from 2028 to 2058; and equal share of GNI from 2028 to 2058.

In our first scenario, the annual principal repayments will be around EUR 13.9 billion per year from 2028 to 2058, while interest payments would be reduced from EUR 10.4 billion in 2028 to EUR 0.5 billion in 2058 (Figure 2, Panel A). The combined cost of repayment and interest is expected to amount to 0.12% of GNI in 2028 and 0.03% of GNI in 2058. In our second scenario, the annual principal repayments will be 0.044% of projected GNI each year from 2028 to 2058, rising from EUR 8.7 billion in 2028 to EUR 20.9 billion in 2058. Interest payments will naturally be higher in this case, peaking at approximately EUR 10.7 billion in 2032 and 2033, before falling to approximately EUR 0.98 billion in 2058. The combined cost of repayment and interest is expected to amount to 0.096% of GNI in 2028 and 0.042% of GNI in 2058 (Figure 2, Panel B).

During the period of the 2028-2034 MFF, according to our calculations, debt service (interest plus principal repayment) will amount to EUR 168 billion in current prices if the same euro amount of repayments is made each year from 2028 to 2034 (Table 2, Panel A). However, if repayments are based on the same percentage of GNI each year, the total will amount to EUR 140 billion in current-prices (Table 2, Panel B). For the entire 2021-2058 period, we estimate that the combined interest and repayment costs (in current prices) would be approximately 649 EUR billion under the first scenario and 681 EUR billion under the second. However, adding expenditures in current-price euros across different years is not meaningful from an economic perspective, as one euro today is worth more than one euro thirty years from now. The proper economic concept for comparing the nominal value of payments across years is "present value," which adjusts future payments by discounting them by the interest rate. In present value terms, the two options are nearly identical, amounting to EUR 454 billion and 458 billion, respectively, in a calculation which applies the expected future path of 1-year German government bonds yields (the risk-free interest rate) as the discount factor.[6]

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1 This refers to the non-repayable support of NGEU, i.e., grants to countries through the Recovery and Resilience Facility and 'top-ups' to MFF programmes.

2 These loans were issued back-to-back, meaning that the EU borrowed, and then passed on the loan to the respective recipients. This did not apply to some of the loans to Ukraine, for which the EU agreed to pay the interest rate costs (see Table 3).

3 Claeys, Gregory, Conor McCaffrey and Lennard Welslau (2023) 'An estimate of the European Union's long-term borrowing cost bill', Briefing Paper, Policy Department for Budgetary Affairs, PE 754.286. European Parliament, https://www.europarl.europa.eu/RegData/etudes/BRIE/2023/754286/IPOL_BRI(2023)754286_EN.pdf .

4 For countries that received little or no Recovery and Resilience Facility (RRF) disbursements so far, it might be challenging to meet all milestones and targets by the 2026 end of the RRF. Thus, unless the 2026 deadline is extended, not all NGEU grants might be used.

5 See EU (2020) 'Council Decision (EU, Euratom) 2020/2053 of 14 December 2020 on the system of own resources of the European Union and repealing Decision 2014/335/EU, Euratom', available at: https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020D2053

6 Present value calculations typically use risk-free interest rates. When using the EU's expected future interest rates instead of the German ones, the gap between the two options reduces further to EUR 1.44 billion.

An alternative scenario could involve rolling over some or all of the EU debt, potentially extending beyond the 2058 deadline stipulated in the Own Resources Decision (footnote 5), as is reportedly being discussed[7]. This option would alleviate the principal repayment burden during the 2028-2034 MFF, thus deferring repayment of the principal to future MFFs. It would relieve EU countries of additional contributions of 0.07%-0.043% of GDP to the EU budget, or it would avoid the need to cut other types of EU spending by this amount (see section 2 on the options to include debt-related payments in the MFF). It would slightly increase interest payments in 2028-2034.

Whether the rollover would reduce or increase the relative burden of principal repayment (as a share of GDP) depends on whether the interest rate paid by the EU is lower or higher than its future growth rate. The EU's Ageing Working Group projects an average real GDP growth rate of 1.3 percent from 2028 to 2058. Combined with an assumed 2 percent inflation rate, this implies an average nominal GDP growth rate of 3.3 percent. The EU's expected future borrowing cost is close to this value, meaning that, *ex ante*, no economic gain or loss can be anticipated in the event of rolling over EU debt[8]. Rolling-over EU debt would require political consensus and a unanimous decision of EU countries to amend the Own Resources Decision.

Irrespective of the principal repayment schedule adopted, active debt management could help to smooth or even reduce the interest burden. For example, the EU could issue long-maturity bonds and buy back higher-yielding short-maturity bonds if there is an unexpected decline in long-term interest rates or increase its liquidity buffer with bills if short-term interest rates fall unexpectedly.

2. The 2028-2034 MFF: risks and options in accounting for debt service

Deciding how NGEU grant-related debt service is accounted for in the next MFF is inseparable from decisions on the size of the MFF itself, and requires a political decision. There are two main options.

- If NGEU is considered a temporary front-loading of future EU budget spending (which we believe was not the intention when the European Council first approved NGEU in July 2020, nor when the Council and the European Parliament agreed to launch it in December 2020), then NGEU grant-related debt service should crowd out other EU spending. In this case, the overall MFF commitment and payment ceilings should remain unchanged, with interest payments and principal repayments incorporated under a specific budget heading, such as Heading 2b in the current MFF (see Annex 3), or any other (potentially new) heading. This model aligns with the political preferences of countries seeking to cap EU spending but would divert substantial resources from regular EU expenditures.
- If the intention of NGEU was a joint EU action in response to the pandemic, including a demonstration of solidarity with the hardest-hit countries (which we believe was the case), then NGEU grant-related debt service should be kept outside the regular MFF ceilings. This could be achieved in one of two models. First, a specific instrument could be created outside the MFF, leaving the MFF ceilings unchanged. Alternatively, the size of the MFF could be increased to accommodate the expected debt service costs and interest payments and principal repayments should be included in a budget heading, like Heading 2b, or any other heading, with the resources to this heading increased by the full expected amount of interest and principal payments. In terms of financing, both models imply the same contributions from EU Member States: unless new own resources are introduced[9], Member States would need to jointly contribute the same amount (based on their respective GNIs), either to a new instrument outside the MFF (first model) or directly to the MFF (second model), in line with their commitment to provide 0.6 percent of their GNI only for the purpose of servicing pandemic-related debts (Annex 2).

[7] See, for example Tamma, Paola and Henry Foy (2024) 'Brussels explores Draghi option of extending up to €350bn in EU debt', *The Financial Times*, 12 September, available at: https://www.ft.com/content/5c1929d5-33e0-4ccb-83e3-cc5a678e1a23).

[8] An unexpectedly higher than 2 percent inflation in 2028-2058 would reduce the real burden of EU debt repayment in the case of a roll-over, while an unexpectedly lower than 2 percent inflation would increase it.

[9] Some new own resources would be paid by EU countries, or entities in EU countries, such as companies. However, an EU tax on companies would mean that the revenues from such a tax would not accrue to national budgets, implying lower national budget revenues.

In terms of risks to the budget, the uncertainty around interest payment calculations for 2028-2034 is modest for two reasons. First, most EU bonds have long maturities, so we know with certainty the interest they will carry until maturity. After 2027, by when the numbers for the next MFF will be finalised, no net new borrowing will be needed, just perhaps a small amount of additional borrowing that might be done to smooth principal repayments in later years. Only this small amount of borrowing will be subject to interest rate risk. Second, interest rate uncertainty after 2027 will likely be more balanced than it was in 2020, when interest payments for the current MFF were planned. In 2020-2021, the ECB's deposit rate, as well as German government bond yields for most maturities, were below zero, leaving limited scope for further rate declines. The primary risk then was of rate increases. Current interest rates are closer to historical averages, and the ECB has begun a phase of rate cuts. While it is impossible to predict the exact extent of ECB rate cuts, the interest rate risk in the future will likely be more symmetric (i.e., a more equal chance of increases and decreases) than in 2020.

Consequently, we see a low risk for increased EU-debt-related contributions from EU countries to the EU budget. This risk is minimal compared to the risk EU countries face in servicing their national debts. The additional EUR 190 billion in borrowing related to NGEU grants until 2026 amounts to just 1% of EU GNI. In contrast, national governments typically borrow 5%-15% of their GNI each year, which is also subject to interest rate risk. As such, we view the risks to the EU budget in terms of debt sustainability and credit rating downgrades to be limited because of interest rate risk.

A more significant risk to the EU's credit rating lies in the potential downgrade of individual EU countries' credit ratings. The performance of EU bonds in financial markets appears to be associated with the performance of national bonds (see Annex 4). Consequently, a downgrade of the rating of an EU country, especially a large one, could unsurprisingly have a negative impact on the credit rating of EU bonds.

Additionally, we see a risk to the EU budget to cover the interest costs of EU loans to Ukraine, which is what we discuss next. This risk is mostly related to EU budget's payment obligations, and less so the credit rating of EU bonds.

3. Borrowing for Ukraine

Since Russia's full-scale invasion of Ukraine in early 2022, the EU has borrowed on numerous occasions to issue loans to Ukraine (see Table 3). The MFA, MFA+ and Ukraine Facility loans together amount to about EUR 58 billion, to be supplemented by a new EUR 35 billion loan agreed with G7 partners in October 2024. While this new loan is supposed to be collateralised using the returns from frozen Russian assets, the size of the revenue stream from the Russian assets still needs to be seen. In any case, Ukraine's ability to service the interest and repay the principal of EU loans may be compromised because of the ongoing conflict and the subsequent reconstruction process.

Regarding principal repayments, the option to roll over EU loans to Ukraine for flexibility is explicitly recognised, in which case the EU would roll over its corresponding debt[10]. This implies that, even if Ukraine were unable to repay the principal in the coming years, it would be unlikely to affect the 2028-2034 MFF. Regarding interest payments, it remains unclear what exactly is meant by the "*highly concessional*" terms under which the EU is providing these loans to Ukraine. At the very least, the EU might cover part or all the interest costs for some years, as each Regulation establishing a loan facility (except for the first Emergency MFA) includes the option: "*It should be possible for Ukraine to request the interest rate subsidy and the waiver of administrative costs each year.*" If we assume that Ukraine pays zero interest to the EU on the total of EUR 57 billion worth of loans throughout the next MFF period, our estimates suggest this could add approximately EUR 1.65 billion annually, or EUR 11.5 billion in total, to the EU budget between 2028 and 2034. A political decision is required on how to account for this cost in the EU budget: whether member states should increase their GNI-based contributions, or regular EU budget expenditures should be reduced to accommodate it. We recommend treating this cost as an additional expenditure and using the headroom in the next MFF to cover it.

[10] See for example Point 17 and Article 5 of the July 2022 Regulation establishing the exceptional MFA programme.

Annexes

Annex 1: Tables and Figures

Table 1: The European Union's outstanding bonds and the instruments financed, EUR billions

	September 2024	Additional commitments
SURE	98.4	0
NGEU grants	231.4	189.7
NGEU loans	94.6	196.4
ESFM	40.8	0
MFA+ (Ukraine)	18.0	0
MFA (eleven countries)	15.3	?
Ukraine Facility	10.2	22.8
Exceptional MFA for Ukraine (under the Ukraine Loan Cooperation Mechanism, ULCM)	0.0	35
Growth plan for the Western Balkans	0.0	4.0
Liquidity reserve	38.3	n.a.
Total	547.0	447.9

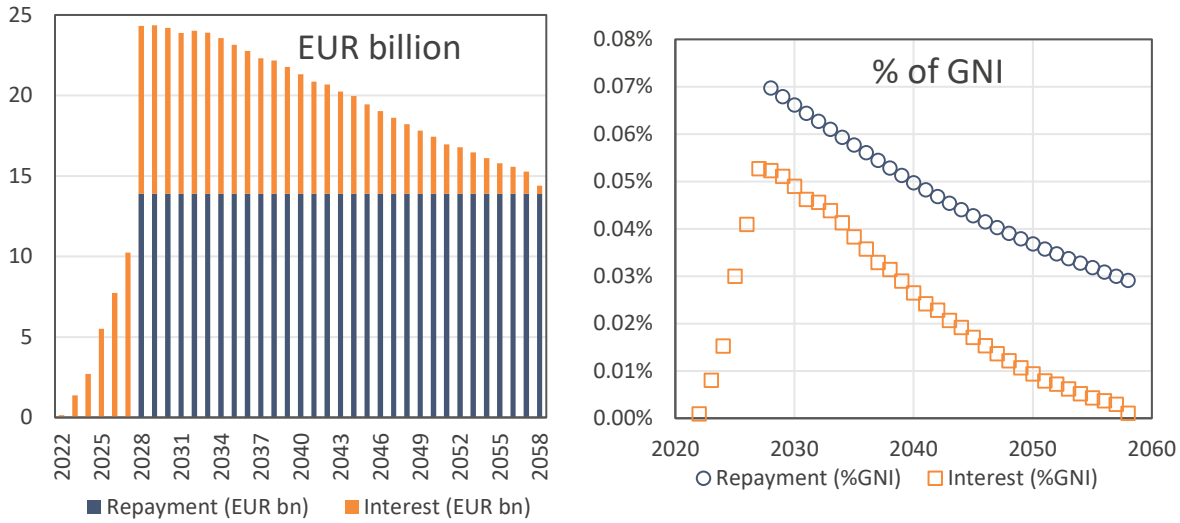
Sources: Bruegel calculations based on various European Commission data sources.[11].

Note: SURE= loans to 19 EU countries; NGEU= grants and loans to EU countries; ESFM=European Financial Stability Mechanism (loans to Greece); MFA+= Macro-Financial Assistance plus (loans to Ukraine); MFA= Macro-Financial Assistance (loans to 11 counties, including Ukraine); Ukraine Facility (loans to Ukraine); Exceptional MFA for Ukraine= EU loans as part of the G7 Ukraine Loan Cooperation Mechanism; Growth plan for the Western Balkans= loans to six countries; Liquidity reserve=residual (our calculation: total outstanding EU bonds minus the current stock of disbursements from the instruments listed in the table). The current liquidity reserve will be used to finance some of the additional commitments.

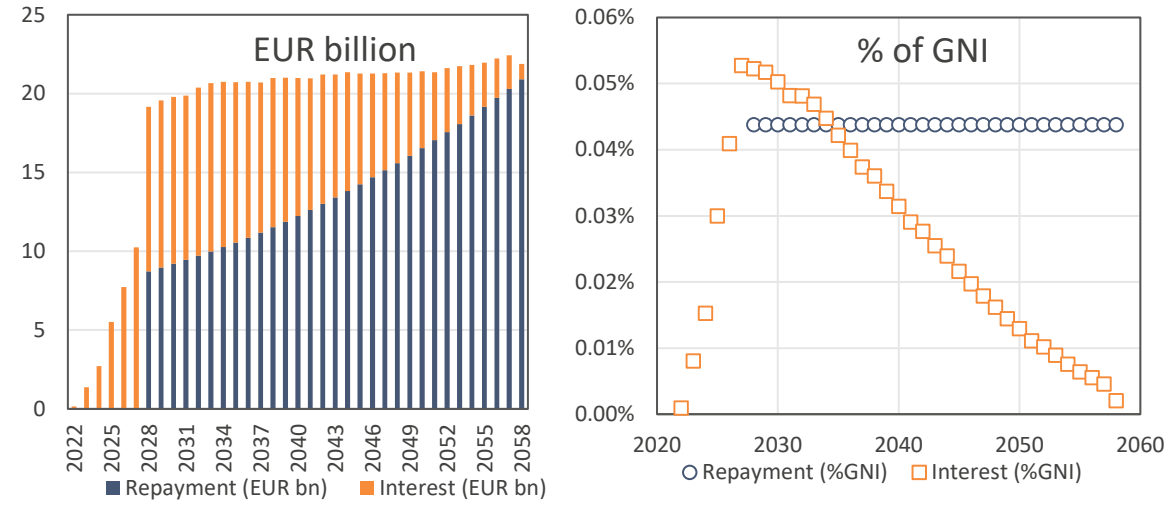
[11] Where these amounts were readily available (e.g. SURE, NGEU loans, MFA+), we used the relevant Commission reports or websites. For the remainder, our estimates were based on slide 27 of the European Commission's 'EU Investor Presentation', 30 September 2024, available at https://commission.europa.eu/document/download/6e4a4819-c5e8-45bc-a725-12a0c088c012_en?filename=EU%20Investor%20Presentation%2030September2024.pdf

Figure 1: Projected annual NGEU grants-related principal repayments and interest costs borne by the EU budget (in EUR billions and % of GNI)

- Principal repayment: the same euro amount each year



- Principal repayment: the same % of GNI each year



Source: Bruegel calculations. Note: for EU GNI, we use the May 2024 AMECO projections up to 2025; for later years, we use the real GDP growth rate projections from the EU's 2024 Ageing Report and assume 2% inflation.

Table 2: Projected interest payments and debt repayment by the EU budget related to NGEU grants, EUR billions

- Principal repayment: the same euro amount each year, EUR billions

	2028	2029	2030	2031	2032	2033	2034	Total
Principal	13.9	13.9	13.9	13.9	13.9	13.9	13.9	97.3
Interest	10.4	10.5	10.3	10.0	10.1	10.0	9.7	70.9
Total	24.3	24.4	24.2	23.9	24.0	23.9	23.6	168.3

- Principal repayment: the same % of GNI each year, EUR billions

	2028	2029	2030	2031	2032	2033	2034	Total
Principal	8.7	9.0	9.2	9.5	9.7	10.0	10.3	66.3
Interest	10.4	10.6	10.6	10.4	10.7	10.7	10.5	73.8
Total	19.2	19.6	19.8	19.9	20.4	20.7	20.7	140.2

Source: Bruegel calculations. Note: totals may not add up due to rounding errors.

Table 3: EU loan support to Ukraine since 2022

Programme Title	Issuance year	Amount (EUR bn)	Maximum maturity	Payment of interest rate costs
Emergency MFA	2022	1.2	15 years	Ukraine
Exceptional MFA	2022	1	25 years	To be decided; Ukraine may request subsidies annually[12]
Exceptional MFA	2022	5	25 years	To be decided; Ukraine may request subsidies annually
MFA+	2023	18	35 years, principal repayments not to start until 2033	To be decided; Ukraine may request subsidies annually[13]
Ukraine Facility	2024-2025	33	35 years, principal repayments not to start until 2034	To be decided; Ukraine may request subsidies annually[14]
MFA as part of a wider G7 loan (ULCM)	2024-2025	35	45 years	Future revenues of frozen Russian Central Bank assets[15]

[12] For the current MFF, the costs of both 2022 Exceptional MFAs are borne by the 'Neighbourhood' financial envelope of the Neighbourhood, Development and International Cooperation Instrument (Article 6(2), point (a), first indent, of Regulation (EU) 2021/947).

[13] To be financed by additional voluntary contributions by EU countries (see Point 17 of the MFA+ Regulation)

[14] Under Chapter 5 of the Ukraine Facility for the current MFF (see Article 23 of the Regulation establishing the Ukraine Facility)

[15] Future revenues from the Russian Central Bank assets frozen in the EU will be transferred to Ukraine through the Ukraine Loan Cooperation Mechanism to allow Ukraine to pay the borrowing costs associated with this EU MFA, as well as loans from other G7 partners.

Annex 2: The EU countries' repayment guarantee of NGEU borrowing

To guarantee the repayment of the EU's NGEU-related debt and its interest costs, and to ensure a high credit rating for EU bonds and, consequently, favourable market conditions, EU countries unanimously agreed to add an extra 0.6% of EU gross national income (GNI) to the so-called own resources ceiling of the EU budget for each year up to 2058[16]. This additional ceiling can only be used to cover liabilities related to NGEU debt and cannot be used for any other purpose. According to our calculations, this extra ceiling is still 9.5 times the amount required to pay the interest and repay the principal of the debt from 2028 to 2058.

In practice, the extra ceiling means that the European Commission can call on EU countries to contribute, at most, 0.6% of their GNI each year, solely for the purpose of servicing the interest on and repaying the EU's debt related to NGEU. However, to reduce the likelihood that this extra payment will need to be made by EU countries, the European Commission has proposed various new EU budget revenues (referred to as "own resources" in the jargon) to service the debt. At the time of writing, negotiations regarding these new own resources have not progressed significantly. Most likely, the Commission will make concrete proposals on new own resources (to be negotiated and decided unanimously by the 27 EU countries in the new Own Resources Decision) along with its proposal for the post-2027 MFF, to be submitted by 1 July 2025.

Annex 3: Interest payments in the 2021-2027 MFF

NGEU was launched in 2021, when interest rates were exceptionally low due to weak economic conditions and expansive monetary policies in Europe and elsewhere. When the Commission initially estimated the interest costs for the non-repayable NGEU components in 2020, they relied on the assumption that interest rates would gradually revert to their historical mean, rising from 0.55% in 2021 to 1.15% in 2027[17]. Based on this, the Commission proposed to include EUR 15 billion towards covering these costs over the course of the 2021-2027 MFF, which were included under Heading 2b (Recovery and Resilience) of the EU budget.

However, the unexpectedly high inflation since 2022, which peaked at around 10% in the euro area, the United States and the United Kingdom, triggered monetary tightening by central banks, which resulted in much higher interest rate increases than what was foreseen when the NGEU-related interest payments were projected. Over the same period, the EU's borrowing costs rose relative to those of sovereign issuers, and also relative to the EIB and the ESM, further exacerbating the impact of the monetary policy tightening on interest rate costs (see Annex 4 for a more detailed discussion). As a consequence, the associated borrowing costs have also risen significantly above what the Commission had estimated, and are predicted to remain well above these estimates over the duration of the current 2021-2027 MFF. For instance, our model estimates that total costs for this MFF will be in the region of EUR 28 billion, or almost double the EUR 15 billion commitment.

This significant increase in interest costs would have stressed other payments under Heading 2b. This was partially addressed in the mid-term review of the 2021-2027 MFF[18] with the creation of a new instrument (the European Union Recovery Instrument, or EURI) above the ceilings of the MFF to cover interest costs that exceed the existing commitments for 2025-2027[19]. The Instrument is only to be mobilised once other means of financing have been exhausted, with a target of 50% of these excess costs to be covered through alternative means, such as reprioritisation. The regulation specifically states that this instrument should not serve as a precedent for how to address interest costs in future MFFs.

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16 Article (6) of Council Decision (EU, Euratom) 2020/2053 of 14 December 2020 on the system of own resources of the European Union, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020D2053

17 See https://commission.europa.eu/system/files/2023-06/SWD_2023_336_1_EN_autre_document_travail_service_part1_v4.pdf

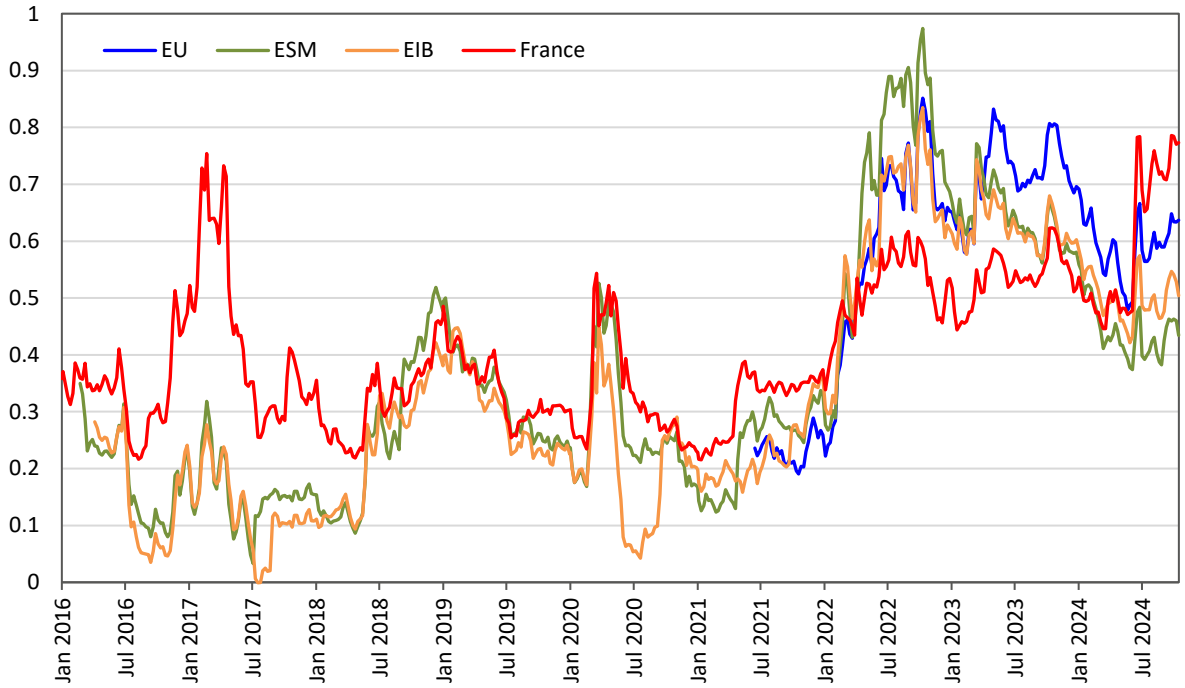
18 See https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AL_202400765

19 2.675, 3.738 and 4.884 EUR billion for 2025-2027 respectively. Our analysis suggests that these excess costs could come to approximately 2.84, 4 and 5.36 EUR billion in these years.

Annex 4: The relative increase in EU borrowing costs

Not only has the general level of interest rates increased due to expectations of monetary tightening in the first half of 2022 and actual tightening from July 2022, but the spread between the interest rates paid by the EU and Germany has also widened (see Figure 1). The interest rate on EU debt has also increased relative to the rates paid by the European Stability Mechanism (ESM) and the European Investment Bank (EIB), though by less than the spread with Germany.

Figure 2: 10-year interest rates spreads relative to German bunds, percentage points, January 2016 – October 2024



Source: Bloomberg. Note: weekly average values are reported. Data on benchmark EU yields is available from June 2021.

In 2021, Germany's 10-year borrowing cost was close to zero, while the EU's borrowing cost for the same 10-year maturity was around 0.2% to 0.3% per year. Thus, the EU's spread over Germany was approximately 0.2 to 0.3 percentage points. During that year, the EU's borrowing costs were broadly similar to those of the EIB and were lower than the ESM's borrowing costs. However, when expectations for ECB interest rate hikes emerged in early 2022, there was not only a general increase in interest rates but also a more rapid increase for the EU compared to Germany. By the end of June 2022, shortly before the ECB's first post-pandemic interest rate hike, the 10-year German government bond yield was 1.3%, while the yield on the corresponding 10-year EU bond was 2.0%, representing a spread of 0.7 percentage points. By this time, the EIB's interest rate was similar to the EU's, while the ESM faced higher interest rates than the EU by about 0.2 percentage point.

While data on EU benchmark yields only start in June 2021, ESM and EIB yields have been available since early 2016 (Figure 2). The spreads of ESM and EIB yields over German yields were much higher in summer 2022 than at any time since 2016. It is also notable that the spreads of World Bank and European Investment Bank (EIB) bonds are quite similar for both EUR- and USD-denominated issuances. As of mid-October 2024, both institutions paid only 0.1 percentage points above 10-year U.S. Treasuries and around 0.4 percentage points above 10-year German Bunds. These developments suggest that some unique factors pushed up the borrowing costs of European supranationals in the first half of 2022.

Subsequently, there were some fluctuations in the EU's spread over Germany; however, since spring 2023, the borrowing costs of both the ESM and the EIB have fallen below that of the EU. In October 2024, the EU's 10-year borrowing cost was 0.6 percentage points higher than Germany's, while the EIB's spread was 0.5 percentage points, and the ESM's spread was just slightly above 0.4 percentage points.

The widening and persistently high spread of the EU over the German Bunds is puzzling, especially in light of the relatively liquid secondary markets for EU bonds (Janse, 2023)[20] and the two financial market measures introduced in 2023 to enhance the functioning of the markets for EU bonds: the unified funding approach and quoting arrangements.

- Since January 2023, the unified funding approach involves the issuance of single-branded EU bonds and the allocation of the proceeds to a central funding pool from which the EU's various policy programs are funded. Previously, specific bonds were issued for specific instruments. By pooling these bonds into single-branded EU bonds, the outstanding volume and market liquidity are enhanced.
- Since November 2023, the quoting arrangements incentivise primary dealers to provide liquidity for EU bonds on recognized interdealer platforms.

There are no scientifically rigorous explanations for the puzzlingly high EU spreads versus the Bund. Additionally, it is difficult to understand why the EU's borrowing costs have deteriorated somewhat compared to those of the ESM and EIB since early 2023. In our view, three factors might be particularly relevant in explaining these phenomena:

- **Large increase in the supply of EU bonds:** EU bonds had a relatively low outstanding volume before the COVID-19 pandemic (EUR 52 billion at the end of 2019)[21]. However, EU bond issuances accelerated massively with the launches of SURE and NGEU, and the increased lending to Ukraine. About 94.5 percent of the outstanding EUR 547 billion EU bonds (Table 1) have been issued since the start of 2020. While this may have served to initially increase the liquidity of EU bonds, this rapid increase in supply may have lowered the price of EU bonds (in other words, increased their interest rate) relative to ESM and EIB bonds, as these institutions issued much less new debt than the EU[22].
- **Increased risk premia with monetary tightening:** The ECB maintained its negative deposit rate and carried out massive asset purchases in 2021. These measures might have compressed yields on various types of bonds, including the risk premia that riskier bonds pay over the German bunds, which are considered the safest assets in the euro area. As expectations for an interest rate hike intensified in the first half of 2022, not only did overall yield levels rise, but risk premia on various assets might have increased as well[23]. For example, the French, Italian and Spanish spreads to Germany increased in the first half of 2022. Consequently, investors might have demanded higher risk premia from European supranational bonds.
- **Rising national spreads:** Figure 2 suggests that the stress on national government bond markets might transmit to European supranational issuers. There was a substantial increase in the French spread to Germany in early 2017, when ESM and EIB spreads widened. In the first half of 2022, the French spread increased along with the spread increase of European supranationals. In mid-June 2024, after the European elections, the French spread widened suddenly, while the spread fell somewhat in July. There was another spike in the French spread in early August. The spreads of EU, ESM, and EIB bonds followed these French

[20] Janse, Kalin Anev (2023) 'Developing European Safe Assets', Intereconomics, 2023, 58(6), 315-319, https://doi.org/10.2478/ie-2023-0065

[21] Authors' calculations based on Bloomberg

[22] See for instance slide 7 of Janse, Kalin Anev (2023) 'DEVELOPING A SAFE ASSET', Presentation at CEPS, 13 November, available at: https://www.esm.europa.eu/system/files/document/2023-11/2023-11-13%20CEPS%20EU%20PPT.pdf

[23] For example, in the United States, the spread between the 20-year BAA corporate bond yield and the 20-year U.S. Treasury yield increased from 1.4 percentage points in the second half of 2021 to 2 percentage points by late 2022, as the Federal Reserve tightened its monetary policy. However, more recently, the spread fell to 1.3 percentage points, possibly reflecting the anticipation of Fed rate cuts and the actual cut that occurred in September 2024. Other drivers of this spread include sudden shocks: this spread spiked after the collapse of Lehman Brothers in September 2008 and again when the COVID-19 pandemic hit in spring 2020.

developments, though to a lesser extent. These developments suggest that movements in the French spread, and more generally, movements in the spreads of EU countries with vulnerable fiscal positions, had a sizeable impact on the spreads of European supranationals.

Several other possible explanations for the rising EU spread were also suggested in various discussions. However, in our view, these explanations suffer from weaknesses.

- **The temporary nature of NGEU and SURE:** Investors might be concerned that as NGEU and SURE bonds gradually mature, the secondary market liquidity of the remaining bonds could decrease, increasing the risk of price declines in the event of a sale. Investors may have initially expected additional EU borrowing programs to follow the expiration of NGEU, and the absence of such programs may have heightened concerns about the temporary nature of these initiatives. However, the EU spread to Germany increased in the first half of 2022. The temporary nature of NGEU and SURE was already known in 2021, when EU bonds enjoyed relatively small spreads compared to German bunds, and we cannot recall any specific decisions or discussions in the first half of 2022 that might have diminished the prospects for a follow-up to NGEU
- **Unclarity about the EU's repayment capacity:** While the EU's Own Resources Decision committed 0.6% of GDP annually until 2058 solely for repaying EU debt and servicing its interest costs—which is still 9.5 times more than the expected amount needed—some investors may question whether EU countries will honour their legal obligations. The failure to make progress on new own resources may have strengthened these doubts. However, this potential uncertainty was known when NGEU was launched and therefore cannot explain the EU's widening interest rate gap relative to Germany in the first half of 2022, nor the rising spread to the ESM and the EIB later.
- **Adverse impacts from the ECB's Transmission Protection Instrument (TPI):** The TPI aims to mitigate speculative market fluctuations for sovereign bonds but does not cover supranational issuers, which could disadvantage supranational bonds. However, the TPI was introduced in July 2022, well after the EU's spread had widened, and it is unlikely that the TPI reduced the yield on German bonds. Therefore, it is difficult to see how the introduction of the TPI (or expectations of such an instrument before July 2022) led to higher EU borrowing costs or why it has disadvantaged EU bonds more than ESM and EIB bonds. If the TPI had any impact on the EU spread, it likely reduced it, as it may have lowered national spreads and decreased the likelihood of fiscal crises in euro-area countries, thereby improving the credit quality of EU bonds.
- **The absence of bond futures for EU bonds:** Due to this absence, EU bonds, as well as ESM and EIB bonds, are priced relative to the euro-denominated interest rate swap curve. The spread between such swaps and German government yields can sometimes fluctuate sharply, which may contribute to the widening spread between EU bonds and German bonds. However, the EU's spread relative to the swap curve has also widened persistently. Since ESM and EIB bonds are also priced against the swap curve, this pricing mechanism cannot explain the deterioration of EU borrowing costs relative to the ESM and EIB. Moreover, regardless of how market makers price supranational bonds, ultimate investors are primarily concerned with the yield they receive. If the spread between the supranational bond and the German bund (the safest asset in Europe) is larger than the risk premium demanded for the supranational bond, demand increases, which in turn reduces the spread. Therefore, it is challenging to see how any pricing mechanism could cause the spread between the supranational bond and the German bund to deviate from what ultimate investors require.
- **The exclusion of European supranational issuers (EU, EIB, ESM) from global sovereign bond indices:** Some investors prefer bonds that are included in such indices. While this may adversely impact all European supranational issuers, it cannot explain the EU's widening interest rate gap relative to Germany, the ESM, and the EIB.

- **Lack of repo markets for European supranational issuers:** It was only on 30 September 2024 that the European Commission announced the launch of a repurchase agreement (repo) facility for EU bonds, with the first operation taking place on 7 October 2024[24]. Through this facility, EU primary dealers can request the European Commission to supply additional bonds to meet their commitments to counterparties if they cannot source the necessary amounts in the market. This may improve the liquidity of EU bonds. In the past, the absence of such a repo market may have disadvantaged EU bonds, but this cannot explain the widening interest rate gap relative to Germany, the ESM, and the EIB, because the repo market did not exist when spreads were low in 2021, nor in 2022 when spreads increased. It remains to be seen whether this new tool will help reduce the spread of EU bonds in the future.
- **Quantitative tightening (QT) by the ECB might have disadvantaged European supranational issuers (EU, EIB, ESM):** The ECB's total supranational holdings under both the Asset Purchase Programme (APP) and the Pandemic Emergency Purchase Programme (PEPP) declined by EUR 24 billion by September 2024, from EUR 435 billion in July 2022, representing a 5% decrease. Over the same period, the ECB's holdings of government bond of EU countries fell by 364 EUR billion, from EUR 3,974 billion, corresponding to a 9% decline. Since the percentage decline in supranational holdings was smaller than that of government bond holdings, QT may not have disproportionately disadvantaged European supranationals relative to government bonds[25]. Moreover, quantitative tightening started well after June 2022, by which point the spreads of EU bonds began to increase substantially.

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This document is available on the internet at: www.europarl.europa.eu/supporting-analyses

[24] https://ec.europa.eu/newsroom/budget/items/849939/en

[25] Unfortunately, the publicly available data provided on the ECB website does not discriminate between various supranational issuers, so we cannot check whether the decline in EU bond holdings was different from ESM and EIB bond holdings.