

Next Generation EU borrowing: a first assessment

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Executive summary

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- **THE NEXT GENERATION EU** (NGEU) programme is radically changing the way the European Union interacts with financial markets because of its ambitious and ground breaking new public debt programme. The European Commission has adopted a new, diversified borrowing strategy, similar to that of other major issuers, to raise money safely, reliably and in a cost-effective manner. EU debt therefore has to be attractive to financial markets and must maintain a strong credit rating.
- **THE EU PLANS** to build a full benchmark yield curve by issuing a diverse range of debt securities, with maturities ranging from three months to thirty years. The EU has also set up a primary dealer network of eligible banks to support the issuance programme, with issuance mainly through auctions and syndicated transactions. A well-functioning dealer network is crucial to help the EU sell debt smoothly, maintain liquidity and adjust borrowing plans to market conditions. So far, the EU's first issuances have shown strong investor interest, and the EU has achieved good ratings and strong relative pricing compared to its sovereign and supranational peers.
- **NGEU BORROWING REPRESENTS** a unique opportunity to lay the groundwork for a European safe asset, which could help resolve some long-standing issues with the European macro and financial architecture. For it to succeed, EU debt will need to perform at least as strongly as other major euro-area issuers in terms of primary issuance and on secondary markets. The European Commission will need to monitor its dealer network to make sure it is well positioned to support market operations. It should also be careful that its selections of banks to work with in financial operations are considered fair, transparent and unbiased.
- **THE EU WILL BECOME** the largest green-bond issuer as part of NGEU's mandate to issue up to a third of its debt in this market segment. If successful, this could further serve to bolster the euro's international role. The EU will need to balance its commitment to new climate standards against current market conditions, to make sure that NGEU debt both supports new climate finance rules and attracts sufficient investor interest.
- **OVERALL, EU-LEVEL** debt should benefit EU capital markets and enhance the financial architecture of the euro area. However, to reap the benefits of EU borrowing fully, the programme would have to be made permanent and its volume larger so that it provides a benchmark yield curve and a long-term safe asset.



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1 Introduction

The European Commission issues debt on financial markets on behalf of the European Union and historically has lent it to provide assistance to countries experiencing difficulties. This has allowed recipient countries to benefit from the low rates available to the EU as a highly-rated borrower, particularly at times when the countries themselves had lost market access. The EU budget is used as a guarantee for this debt in two of the three lending programmes: balance-of-payments (BoP) assistance for non-euro EU member states and the European Financial Stability Mechanism (EFSM) for euro-area countries. The amounts are limited (at €110 billion in total capacity)¹ as the Commission had to be able to cover debt servicing with the available margins under the own-resources ceiling, the so-called ‘headroom’ in the EU budget, which also acted as a guarantee against default by debtors. The Commission also raised funds for a third programme, Macro-Financial Assistance (MFA) for non-EU countries. But MFA debt is backed separately by the EU budget, primarily via a Guarantee Fund for External Actions.

In 2020, amid the COVID-19 crisis, the EU began to ramp up its public borrowing. A first new instrument was created to provide loans of up to €100 billion to help countries finance short-term work schemes at lower cost: the temporary Support to mitigate Unemployment Risks in an Emergency (SURE). To accommodate the increased borrowing while protecting the EU’s strong rating, the debt is guaranteed by not only the existing headroom² in the EU budget (like the BoP and EFSM instruments) but also by an additional €25 billion in direct irrevocable and callable guarantees from member states. But even with SURE, the EU’s capacity to borrow remained limited. Volumes stayed small and these programmes also allowed only back-to-back financing – issuance of debt on a per-disbursement basis, and not bulk borrowing – thus preventing the EU from benefitting from market-access flexibility available to other major issuers.

The pandemic has required a stronger fiscal response. In July 2020, EU countries agreed to temporarily increase EU-level borrowing again, this time on a bigger scale and with an emphasis on investment in common priorities, such as boosting the green and digital transitions. With Next Generation EU (NGEU), member states empowered the Commission to borrow up to €750 billion in 2018 prices (ie around €806.9 billion at current prices) until 2026. This means that the EU will borrow up to around €150 billion per year in the next few years. To make this possible, EU member states agreed to increase the EU’s debt guarantees via an added 0.6 percent of EU gross national income (GNI) in callable headroom, and countries also agreed to consider introducing new own EU resources in the future. Possible future own resources include digital, climate and financial-transaction levies, although all of these proposals would require substantial further technical work and political cooperation.

What is new about NGEU is not just the significant increase in the EU’s borrowing power, but also the nature of the expenditures. NGEU borrowing will be used for loans but also, for the first time, grants. Indeed, NGEU will be used up to finance up to €386 billion in loans, and €421 billion in grants – these maximum amounts will only be disbursed if all countries request the full loans available to them and complete all the milestones.

In practice, this means that the European Commission is now, and for the next five years, entrusted to issue debt in much higher volumes than it used to, putting the EU in the company of major European sovereign issuers such as Germany, France and Italy. The EU quickly assembled a debt management team, adopted new practices and laid out its borrowing strategy. Issuance began in June 2021. The EU will have to ensure sound borrowing

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¹ Including €50 billion for the BoP and €60 billion for the EFSM (European Parliament, 2017).

² A similar mechanism was considered at the start of the euro crisis, but at the time was rejected as not being legally feasible. Under pandemic conditions, and with the lessons learned from the financial crisis, the method was now deemed in line with EU priorities (ESM, 2019).

and reimbursements, to be completed by 2058, in order to embrace the opportunities offered by this milestone financing programme. This in-depth analysis assesses the first decisions made by the European Commission in that regard, and will also outline the potential risks and opportunities linked to this upgrading of the EU borrowing.

2 What are the main features of a borrowing strategy?

A borrowing strategy is a comprehensive plan designed to help an issuer raise money to meet its funding needs. The plan thus governs how this entity interacts with investors. The features of the funding needs, such as the type of expenditure to be financed and the cash flow/budgetary resources that will ultimately be used to reimburse the debt, influence how the borrowing takes place and set out what kind of flexibility may be needed. To give some examples, sovereigns with strong automatic stabilisers – ie that have a budget balance that automatically fluctuates in a significant way with the economic cycle to tame it as much as possible – need flexibility to adjust their borrowing plans quickly in case of a crisis, while public development banks might follow a long-term strategy that prioritises consistent financing over the ability to make short-term changes.

There are various ways to tap markets, but they can broadly be split into two main strategies:

- Relatively low borrowing needs means issuers can tap financial markets only when they deem financing conditions to be most advantageous;
- Large issuers, such as major sovereigns, generally set up diversified funding strategies defined by regular and predictable issuances. The aim of such strategies is to make debt securities attractive to a diverse investor base. The main objectives are to get the lowest interest rate at a given time and to ensure that funding needs will be easily met in the future. Avenues for diversification are twofold: first, offering different types of debt contracts, and second, using different issuance methods.

Sovereign and supranational debt contracts take mainly the form of fixed-income securities that have fixed periodic interest payments and full repayment of the money borrowed – the principal – at the end of the contract, when the debt matures. When designing such securities, issuers must choose their key features, such as which currency to borrow in. For example the European Stability Mechanism (ESM) issues in both euros and in dollars, while the EU will issue only in euros. Issuers can further choose whether to pay a fixed interest rate, which is the standard, or use some other measure, such as an inflation-linked or floating rate. A few issuers, including France and the United States, issue inflation-linked bonds, but these alternatives make up a relatively small part of the market.

The maturity – ie the duration of the contract that sets out when the principal will be repaid – is another important characteristic³. If the maturity of a fixed-income security is over one year, the security is called a bond, and if it is equal to or below one year, it is called a bill. Finally, some reporting criteria allow bonds to qualify as ‘green’ or ‘social’ bonds.

³ The maturity is different from the ‘tenor’, which is the remaining time until the security reaches maturity and not its original maturity.

To sell debt securities to investors, issuers have different options⁴:

- In a private placement of bonds, the issuer sells bonds directly to investors without resorting to mandated banks. Another option is credit lines from banks⁵. The EU used these methods in the past, particularly when it needed to raise specific sums in very short time periods (ESM, 2019).
- In syndicated transactions, the issuer announces the upcoming issuance of bonds to a group of banks, which receive fees to put together a so-called 'order book' of investor interest. The banks sometimes underwrite or guarantee the issuance, in case not enough investors want to take part, for example. The main advantage of syndication is that it gives the issuer some clarity about investors' interests and possible bond prices before the issuance. This is one of the main ways the EU historically sold debt.
- Auctions are used mainly by large sovereign issuers. The issuer advertises in advance the dates of auctions. Investors have a limited time to bid and when the auction closes, securities are delivered to buyers. Securities can be allocated using a single price method, such as in the US, where all buyers pay the same amount for securities at the designated yield, or a multiple-price method, preferred in Europe, which allocates securities first to investors willing to pay the highest prices, then the next-highest and so on until the entire offering has been handed out. Bond dealers can then sell the securities quickly into the secondary market, giving them a chance to make money and offering the EU a chance to quickly establish trading flows and assess liquidity.

Auctions are typically cheaper for issuers than syndications because they do not involve fees paid to the coordinating banks and allow many investors to participate. However, auctions can be risky, particularly if they are not regularly used, because they do not involve price guarantees or pre-determined investor interest. Only extremely well-established issuers such as the United States rely solely on auctions. Other large issuers, including Germany and France, use both auctions and syndication (see Table 1).

- Re-openings are opportunities for issuers to raise money and bolster market liquidity by offering additional amounts of securities already in circulation. This option is sometimes called 'tapping' an existing bond, meaning that a security with an original maturity of five years could be sold again six months later, with 4.5 years remaining to maturity and the same yield. For issuers that sell debt using multiple methods, a new security might typically be sold through syndication, while the re-opening would take place using an auction, since there would already be an established reference market price.

Market credibility

To ensure that securities attract the interest of investors and can be sold at low interest rates in the primary market, issuers have to ensure that their debt is well-rated, will be repaid as promised and is liquid in secondary markets, so investors are confident they can resell the securities quickly and easily if desired.

One way to facilitate smooth market operations is to set up a primary dealer network. This is a group of financial institutions under contract with the issuer to assist in public financing operations. Their obligations in primary markets are typically to participate in auctions, to be part of the syndication selection pool for choosing which banks coordinate syndicated

⁴ The initial exchange of a debt contract between an issuer and investors is called the primary market. Once a security is bought, the buyer is free to resell it to other investors. The trading of securities between investors is called secondary market.

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issuances, and to serve as ‘market-makers’ in secondary markets, meaning they have to buy and sell securities on a regular basis. In practice this means that they have to bid (offer to buy) and ask (offer to sell) bonds on the secondary market, thus ensuring the liquidity of the bonds on a daily basis. Lastly, primary dealers typically have obligations to report to the issuer: they provide insights on market conditions to help the issuer conduct its borrowing operations.

Primary dealers are the main links between sovereign, and similar issuers, and the markets, and it is thus important to have enough participants interested in the role. The first incentive for financial institutions to become a primary dealer is reputational gain (Preunkert, 2020): being part of a dealer network is perceived by financial institutions as a way to gain publicity and increase their own credibility. Dealers also generally receive preferential or exclusive auction access, giving them a leg up in secondary-market trading. However, managing the primary dealer networks and their incentives can be a political exercise for a supranational issuer such as the EU, which chooses banks from multiple countries and must consider geographical balance and national sensitivities.

Major issuers also gain market credibility if they are seen as a benchmark, which is to say a reference point against which other debt can be priced and weighed. This requires issuing securities in all common maturities to establish a yield curve of interest rates⁶. In normal conditions, securities with shorter maturities offer lower yields, while longer-term bonds offer higher returns. Different market segments attract different kinds of investors. Asset managers generally prefer to invest in the short-term part of the curve, while three- and five-year bonds tend to attract the interest of central banks, insurance companies tend to prefer fifteen-year bonds, and pension funds opt for the long-term bonds of between twenty and thirty years.

To sell all these bonds on a regular basis and avoid excessive price swings, large sovereign issuers usually do not follow opportunistic short-term strategies. Instead they aim to be reliable, predictable and transparent. This allows investors to anticipate that the issuer will provide a reliable source of benchmark and potentially risk-free assets for the years to come, and it helps the issuer minimise its overall borrowing costs.

3 What are the main elements of the NGEU borrowing strategy presented so far?

The European Commission aims to cover its funding needs by securing sustainable sources of funding at minimum costs. Funding needs are to cover the NGEU recovery plan. The plan is to borrow €750 billion in 2018 prices from mid-2021 to 2026⁷. Amounts could change pending the submission and approval of all national recovery and resilience (RRF) plans (European Commission, 2019a), and will also depend on the appetite of countries for NGEU loans. The Commission has said it will raise €80 billion between June 2021 and the end of 2021 and, from then onwards, around €150 billion per year until 2026. According to the current legislation, all net issuances are to cease after 2026.

When a security reaches maturity, investors need to be paid back in full. The issuer then has two financing options: it can pay down that amount fully using its cash flows (eg tax

⁶ The yield curve is a representation of the relationship between market remuneration rates and the remaining time to maturity of debt securities. From a graphic perspective, the x-axis shows the different maturities and the y-axis shows the yield.

⁷ To forecast amounts in current prices during the programme, the EU applies a 2% annual inflation rate. The 2018 price amounts are thus hypothetical because in EU budgetary practice, a 2% annual rate of inflation is used to translate 2018 prices in euros to actual prices in euros, irrespective of actual inflation. The European Commission has communicated that NGEU amounts to €806.9 billion in current prices; see https://ec.europa.eu/info/strategy/recovery-plan-europe_en.

revenues for sovereigns), or it can refinance it by issuing new securities, a process known as rolling over the debt. Net issuance – gross debt issuance minus rolled-over debt – corresponds to ‘new debt.’ Under current legislation, there will be no new debt after 2026. Instead, the EU will start gradually paying down its total debt, a process of repayment that will have to start no later than 2028 and be completed by the end of 2058 (Council, 2020). To “ensure the steady and predictable reduction of liabilities” the own resources decision (Council Decision 2020/2053) outlines that “the amounts due by the Union in a given year for the repayment of the principal should not exceed 7,5 % [sic] of the maximum amount of € 390 000 million for expenditure” (Art 5.2).

Accountability, transparency and predictability are necessary for the borrowing strategy to be successful over time. The Commission publishes an annual borrowing decision that sets a ceiling on the volume of borrowing over that given year, and sets criteria for its profile (maturity and ceiling for the amounts per issuance). This broad scope for annual funding is complemented by funding plans published twice a year, which go into more detail in terms of the mapping of upcoming issuances and certify that funding needs over the given semester will be met. Funding plans offer predictability on target auction dates, target amounts to be financed by bonds, and expectations of the number and volume of syndicated transactions.

Several legal commitments have been put in place to ensure the EU’s ability to service its payment obligations, and to convince investors that the EU will service its debt in a timely manner until 2058:

- On the guarantee of NGEU debt: of the total budget of NGEU, €390 billion is earmarked for grants and guarantees, and €360 billion is earmarked for loans (in 2018 prices). Payment obligations for the grant elements of NGEU are to be covered by EU own resources, while loans will be repaid ultimately by their member-state beneficiaries. Although both the amount of borrowing that will ultimately take place and the value of EU countries’ GNIs in the future remain uncertain, the increase in the ‘headroom’ by 0.6 percent of GNI is considered enough to convince markets that member states will provide enough to repay EU borrowing. The exact methodology for deciding this number has not been made public, but since it is acceptable to the EU and to the credit-rating companies, it appears to be sufficient.
- On the timely reimbursement of payment obligations: in answer to a European Parliament question (European Parliament, 2020), the Commission has estimated the interest rate costs for the period 2021-2027 at €12.9 billion over the seven years. Although this amount is shouldered by the EU budget and factored into the Multiannual Financing Framework (MFF) 2021-2027, in practice its exact value remains uncertain. The debt – repayment of interest and principal – will be serviced by the EU budget, ie with funds from existing and possible new own resources. The Commission has also provided guidelines on safeguarding the sustainability of the borrowing position over time and the profile of outstanding debt. A ceiling amount of debt per issuance was set at €20 billion, as a compromise between the imperative to issue in large volumes to ensure liquidity in secondary markets and to limit the potentially destabilising effect of an excessive number of bonds coming to maturity at the same time (either for future EU finances or because it would increase roll-over risk) (European Commission, 2021a). For 2021, upper limits of €125 billion in long-term funding, and €60 billion in short-term funding plans are in place (European Commission, 2021a). So far, the June 2021 funding plan has announced long-term borrowing equivalent to €80 billion for the rest of 2021, complemented with tens of billions in short-term borrowing to the extent needed to meet financing requirements (European Commission, 2021b).

Before NGEU, the EU had to time its borrowing operations alongside its disbursements. The Commission issued debt and loaned the proceeds directly to beneficiaries on the same terms they were borrowed at; debt and loans had the same duration and interest rates, thus,

the Commission neither subsidised the loans nor risked having to meet payment commitments before loans were reimbursed. Given the simplicity and small volume of its operations, the EU's presence in financial markets was small and it didn't need to build a predictable and reliable strategy, nor could it adjust the timing of its borrowing operations even if market conditions would otherwise have warranted an adjustment.

For NGEU, the EU now uses a borrowing strategy that is diversified in terms of types of securities and ways to tap the markets. Borrowing is not directly connected to specific pay-outs. Indeed, given the large number of beneficiaries (27 countries plus the EU itself) and projects financed by NGEU, the mobilisation of funds on a per-disbursement basis would have been unnecessarily burdensome from an administrative point of view. Moreover, the specific structure of NGEU, with a pre-agreed volume of funding and a more or less pre-agreed allocation to beneficiaries, provides visibility over funding needs. No matter what happens in coming years, the Commission should issue NGEU debt between €100 billion and €150 billion annually in the five coming years, depending on how many countries request loans. These large amounts require large debt issuances on a regular basis.

How does the Commission diversify the types of securities issued to finance NGEU?

- The Commission has no choice of borrowing currency. It is legally specified that borrowing operations should be in euro (Council, 2020).
- The borrowing decision for 2021 forecasts issuances of all common long-term maturities up to 30 years: namely 3Y, 5Y, 7Y, 10Y, 15Y, 20Y, 25Y and 30Y bonds.
- The EU will be able to diversify its issuance because of its commitment to issue about 30 percent (roughly €250 billion) of its total NGEU issuance as 'green' bonds, in line with sustainable finance market practices. All SURE bonds were issued as 'social' bonds. Those qualify respectively under the Green Bond Principles and Social Bond Principles established by the International Capital Market Association (ICMA) in terms of the transparency and disclosure criteria needed to meet those standards.
- The EU will use short-term bills to manage cash flow or handle temporary liquidity shocks. Markets like to provide financing in shorter installments while the EU uses the money over the long term, and also the EU needs a way to make sure it has enough cash on hand for payments or to wait out temporary market conditions, such as a sudden and temporary spike in long-term bond yields. Short-term bills are generally considered to be risk-free and highly-liquid assets – the short maturity securities of well-rated sovereigns, such as the United States, can be compared to cash holdings – so being a regular presence in the bill market *also* strengthens the euro.

As is common for European sovereign issuers, the EU attracts buy-and-hold investors. Buy-and-hold means that investors buy a security as a long-term investment to be kept until maturity, while others (sometimes called 'fast-money' investors, market makers or short-term investors) buy to trade and profit from the sales through price variations. The advantage of buy-and-hold investors is that they allow for a relative anchoring of bond prices, which is considered important for a new issuer selling bonds through syndication. There could be a trade-off between this stability and liquidity which is generally provided by short-term and market-making investors. However, given the large volume of EU securities, selling to buy-and-hold investors at first might not interfere with the liquidity imperative as long as there are enough securities trading regularly to show liquid markets and pricing that is not unduly volatile. Directing EU securities to a chosen class of investors can only be done through syndicated transactions, in which mandated banks are charged by the Commission to assign allocations to investors, and not through auctions, in which bonds and bills go to the highest bidders.

The Commission uses the TELSAT auction system, administrated by the Banque de France but separate from its central-banking operations. This system uses a 'multi-price auction', in which securities are supplied at the bid price with the highest bids served first and then going

down until the volume is exhausted. The Commission began using auctions when it started selling bills, which, because they have shorter maturities, are perceived as very low risk and are likely to attract a lot of investors looking for cash-like assets. So far, the EU has only auctioned bonds as reopenings of maturities already issued through syndication, which already have relatively anchored pricing in secondary market trading. In the future, the EU may also sell new bonds at auction.

For EU bill auctions, dates are communicated in the funding plan – auctions typically take place every first and third Wednesday of the month. Three business days ahead of the auction, there is an announcement of the maturities and target volume of securities to be sold. Bond auctions will take place on the fourth Monday of the month. Five business days before the auction, the Commission requests opinions from primary dealers on what the terms and volumes of the sale should be. These are then announced three business days before the auction.

The EU's primary dealer network

The EU relies on its primary dealer network (PDN) to participate in auctions and manage its syndications. To become a primary dealer, a credit institution has to apply to the European Commission. The eligibility criteria include having a head office in the EU or in the European Economic Area (EEA) and being already a primary dealer for another European sovereign issuer. A further constraint is that any institutions that have been found in breach of EU antitrust laws are ineligible to take part in operations until and unless they are found to have taken sufficient remedial action⁸.

Currently, the European PDN comprises 41 institutions, but applications remain open on an ongoing basis. The list includes institutions from 12 countries, including 12 with headquarters outside the EU (Table 2). In this selection process, the Commission chose to rely on a large network, which means obligations are less important than in countries with smaller PDNs. Primary dealers, which are the only firms allowed to participate, are required to buy at least 0.05 percent of the bonds sold at auctions over a semester⁹. There is no set quantitative market-making obligation at this stage (Table 1). Lastly, dealers have monthly reporting obligations to the Commission on their take of financial market conditions to help them take decisions on when and how it best to issue. In terms of incentives for dealers, the main financial incentive are the fees paid to dealers that lead or co-lead syndicated transactions.

These fees are lower than those paid by major EU issuers¹⁰, but there is also prestige associated with participation in the European PDN (Preunkert, 2020).

8 See details: <https://www.ft.com/content/130cf192-8fe0-4edb-a962-2625107eae2f>

9 For comparison, in the US primary dealers have the duty to bid (but not to buy) for the equivalent of 5% of the volumes auctioned.

10 Fees for syndications are calculated as a share of the volume of securities sold. The share changes with the maturity of the bonds sold – the higher the maturity the higher the share, ranging from 0.05% for bonds with 1-4Y maturities to 0.170% for maturities above 28Y (European Commission, 2021), see https://ec.europa.eu/info/sites/default/files/about_the_european_commission/eu_budget/general_terms_and_conditions.pdf.

Table 1: Comparing the EU's borrowing strategy to that of major sovereign issuers

	France	Germany	Italy	Spain	United States	European Union
Auction type	Multi price	Multi price	Multi price for short-term bills and single price for bonds.	Mixture of single-price and multiple-price auctions.	Single price	Multi price
Syndication	For less liquid or new securities.	For less liquid or new securities.	For less liquid or new securities.	For less liquid or new securities.	No	So far for all new bond issuances.
Primary dealer networks	Composition: 15 Duties Participate in auctions (at least 2%); in all syndicated transactions; Market making on secondary markets (2% min). Advice on the issuance policy. Incentive Fees for syndications. Access to a repo facility at the Treasury. Reputational gain.	Composition: 33 Duties Participate in auctions (at least 0.05%). Reporting obligations. Incentives Fees for syndications. Reputational gain.	Composition: 16 Duties Participate in auctions (at least 3%). Market making on secondary markets. Incentives Exclusive participation in part of auctions. Fees for syndications. Reputational gain.	Composition: 20 for bills; 19 for bonds. Duties Participate in auctions (at least 3%); Market making in secondary markets. Provide market insights. Incentives Exclusive participation in part of auctions. Fees for syndications. Reputational gain.	Composition: 24 Duties Participate in auctions (at least 5%). Secondary market activities (0.025%). Reporting obligations. Incentives Reputational gain. Access to specific monetary facilities of the Fed restricted to primary dealers	Composition: 41 Duties Participate in auctions (at least 0.05%). Secondary market activities. Reporting obligations. Incentives Fees for syndications. Reputational gain.
Green bond	First issuance on 24/01/2017.	First issuance on 02/09/2020.	First issuance on 3/3/2021.	First issuance on 7/9/2021	No	First issuance 12/10/2021

Source: Bruegel based on national sources.

Dealer performance is assessed on an ongoing basis, and is used when choosing leading banks for syndicated transactions. A dealer that does not perform well in its support of EU bonds performance in primary and secondary market roles probably will not be chosen to lead syndicated transactions. Because of the importance of the role played by dealers in ensuring market performance and reporting, the Commission can also readjust their incentives. Primary dealers are important partners for the Commission, hence relationships with them have to be managed. For instance, the Commission has to ensure that it is transparent and fair in its choices of leading banks for syndications. Further, given the multi-country nature of the EU, there is also a challenge associated with maintaining a good balance in country representation in the PDN. Table 2 shows the list of dealers and leading banks in syndicated transactions by country and the share it represents and confronts it with a proxy in terms of size of each economy (for that we use the share of each country in the ECB's capital). It confirms that up to now there has been a bias towards banks from bigger economies such as Germany and France, both in the choice of primary dealers and in the choice of leading banks for syndicated transactions. We recommend that the EU monitor the mix of its dealer network and take care not to create bias or the appearance of bias.

Table 2: Members of the primary dealer network by country location of head offices

	Count of banks in the PDN	Share of banks in the PDN (%)	Count of total mandated banks in the four first syndications	Share of total mandated banks in the four first syndications (%)	Country share of ECB capital (%)
Austria	2	4.9	1	4.2	2.38
Belgium	1	2.4			2.96
Bulgaria					0.98
Croatia					0.66
Cyprus					0.18
Czech Republic					1.88
Denmark	1	2.4	1	4.2	1.76
Estonia					0.23
Finland	1	2.4			1.49
France	7	17.1	6	25.0	16.61
Germany	14	34.1	10	41.7	21.44
Greece	2	4.9			2.01
Hungary					1.55
Ireland	3	7.3	2	8.3	1.38
Italy	2	4.9	1	4.2	13.82
Latvia					0.32
Lithuania					0.47
Luxembourg					0.27
Malta					0.09
Netherlands	3	7.3	1	4.2	4.77
Poland					6.03
Portugal					1.90
Romania					2.83
Slovakia					0.93
Slovenia					0.39
Spain	3	7.3	2	8.3	9.70
Sweden	2	4.9			2.98

Source: Bruegel based on European Commission, European Central Bank. Note: If the share of banks from a given country in the primary dealer network (PDN) is above the country's capital key at the European Central Bank, the case is coloured in green. If the share is below, the case is orange and if the country is not represented in the PDN, the case is red.

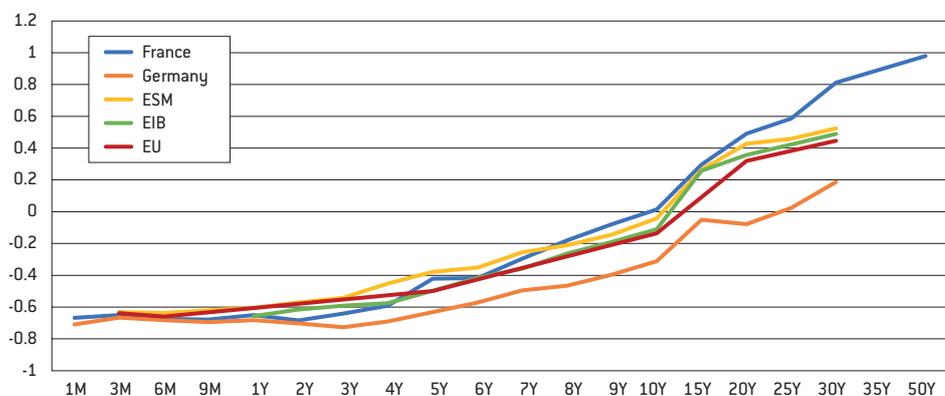
4 The EU as a ‘quasi-sovereign’ issuer?

This section reviews and assesses the main features on the EU borrowing strategy for NGEU. Considering the importance of market performance and investor perceptions in assessing a borrowing strategy, we conducted a number of interviews with market participants to perform this assessment.

The EU is not a sovereign issuer *per se*, but since its debt is guaranteed by sovereign countries, it is considered a ‘quasi-sovereign issuer’. The legal architecture set up to guarantee EU debt appears to be strong enough to compensate for the historical lack of substantial own fiscal resources. Most rating agencies consider that the guarantee for EU debt is equivalent to ‘joint and several liability’, meaning that each country is liable to repay the debt both individually and jointly, which underpins their high rankings. Currently, both Fitch and Moody’s rate EU debt AAA. Standard and Poor’s currently follows a different methodology and grades EU debt as the average of EU countries’ rankings, which yields an AA rating¹¹. In practice, EU securities trade on secondary markets between France (AA) and Germany (AAA), but closer to the former.

EU bonds are priced very closely to those issued by other EU supranationals, such as the European Stability Mechanism and the European Investment Bank (Figure 1). This is a success as it confirms the usefulness of EU-level borrowing as a way for most EU countries to have access to cheaper borrowing. In practice, the main differences compared to sovereign borrowing are the legal constraints on EU own resources and disbursements which strictly limit borrowing amounts and timing, while government funding needs can be adjusted from one year to the next (or even quicker, as the COVID-19 crisis has demonstrated) at the discretion of policymakers. However, given the novelty of EU borrowing on such a scale, its strong predictability could represent an advantage in terms of establishing confidence in EU debt at this stage.

Figure 1: Yield curves, France, Germany and the EU



Source: Bruegel based on Bloomberg. Data retrieved on 15/09/2021.

Most of the stakeholders we have interviewed appreciated that the Commission had managed in very little time to build infrastructure and practices that sovereign issuers built over decades. Short deadlines are a regular constraint in new steps for EU financial integration. The previous breakthrough creations of instruments for increased financial solidarity, which led to the creation of the European Stability Mechanism (ESM), were answers to critical moments of risk to the monetary union in the context of the sovereign debt

¹¹ Standard and Poor’s are currently in the process of re-evaluating their methodology, which could lead to changes in the EU’s grade.

The European Commission pays lower fees for handling syndicated bond sales compared to typical market practices

crisis (ESM, 2019). However, NGEU represents a steep upgrade in the borrowing capacity entrusted to the Commission, using methods that were considered not feasible during the euro crisis.

Overall, the Commission drew largely on common practices of EU issuers and has indeed benefitted from the help of seconded experts from debt management offices (DMOs) and ESM personnel¹². Setting up a PDN is a common practice for EU issuers. Out of 27 EU countries, 23 use a PDN. The countries that don't are generally small issuers (Preunkert, 2020). Further, choosing as an eligibility criterion that a bank has to be a member state or EU supra-national primary dealer is a way to both benefit from their selection processes and anchor NGEU on European practices.

What is notable is the choice to rely on a relatively large PDN (41 institutions currently), whereas, except for Germany (33 institutions currently), most EU countries rely on fewer than 25 institutions. This choice is significant for relationships with primary dealers. As the group is bigger, their duties may be reduced: for example, they may not have formal market-making obligations, and auction-participation requirements may be limited. The EU's required auction-participation rate is similar to that of Germany, but much lower than France and Italy, which have, respectively, 15 and 16 primary dealers, and for which the participation minimum is 2 percent and 3 percent (see details in Table 1).

The Commission pays significantly lower fees for handling syndicated bond sales compared to typical market practices¹³. This could be problematic because being a primary dealer already appears to be a function that may not be not very profitable for banks, even if they benefit from good publicity and market presence. In practice, the volume of EU issuances should generate enough revenue to compensate for lower fees. We recommend that the Commission monitor performance carefully and adjust its fees if need arises.

More generally, managing the dealer network should remain a major concern for the Commission to make sure securities trade well on primary and secondary markets and to keep track of market conditions. Depending on market conditions, the Commission may reconsider the incentives it offers primary dealers, or it could add market-making obligations in secondary markets.

All primary dealers are private institutions that compete on financial markets, so the Commission needs to be transparent and fair in how it manages the network. Some challenges stem from issuing as a supranational entity, with a dealer network that includes overrepresentation of specific countries and no participants from others. When looking at the current PDN and at past syndications, it is for instance clear that German institutions are overrepresented compared to those from other countries, even when taking into account the sizes of the countries (eg this can be proxied with the capital key of each EU country in the ECB's capital, which is based on GDP and population size; Table 2). By comparison, the US gave up long ago on syndicated auctions in part because choosing banks could be too political and could spark competition among US states. Instead, the US has a PDN, coordinated by the New York Federal Reserve Bank, made up of financial institutions that are required to participate in US Treasury auctions and that have benefited from various kinds of central-bank support in exchange for being transaction counterparties¹⁴.

Commission Decision 2021/625 (European Commission, 2021c) states that there should be competition in selecting banks for syndications and lists the activities against which there will be performance assessments, but there is a lack of binding quantitative metrics. The Decision also mentions that primary dealers should receive on a "regular basis, at least yearly" feedback on their performance. These elements should be further specified.

12 See for instance: <https://www.esm.europa.eu/press-releases/esm-seconds-siegfried-ruhl-european-commission-inter-institutional-cooperation-combat>.

13 See eg: <https://www.globalcapital.com/article/28wqcpy1y5daspdzf5qf4/ssa/supras-and-agencies/eu-cuts-fees-for-jumbo-next-gen-programme>.

14 See details here: <https://www.newyorkfed.org/markets/primarydealers>.

As we have seen, the Commission uses a multi-price bidding system. It further chose to retain some flexibility in terms of the volumes and types of securities to be sold up until a few days ahead of auctions, in order to take account of market conditions. The conclusions from auction theory and practice on the best auction method for sovereign issuers are not clear, but in practice auction rules have been fine-tuned to reduce financing costs and limit bidders' capacity for overly strategic bidding (Monostori, 2014). In the OECD, there is a balance between countries using single-price and multi-price auction systems while a third of OECD countries use both, depending on the type and maturity of the security sold (OECD, 2016). For instance, the United States chose to use single-price auctions considering that it yields lower financing costs, but the supporting empirical evidence is ambiguous on how generally this conclusion can be applied (Garbade, 2005).

EU debt issued so far

A notable novelty of the EU strategy is the willingness to issue green and social bonds at large scale. European sovereign issuers have taken up this practice only recently – as recently as 2017 for France, and only in 2020 for Germany and 2021 for Italy and Spain. Green and social bonds are new products in general, with first issuances in 2007 and 2017 respectively. Europe has an opportunity to become a major player in these fast-growing markets – the European Investment Bank (EIB) was the first-ever green bond issuer. The Commission's overarching Green Bond Framework, adopted in September 2021, demonstrates that the EU aims to go beyond International Capital Market Association principles, although how it will do so remains unclear (European Commission, 2021d). We further discuss green bonds financing stakes below.

As far as the choice of currency is concerned, issuing in euro is common practice among European sovereigns, although some issue in other currencies, mostly the dollar, to take advantage of market conditions. For NGEU, the EU can only borrow in euro, which does have some advantages: the Commission's political agenda for the euro as a global currency supports euro-only issuance, and euro-only issuance also avoids the extra workload of setting up foreign exchange operations when borrowing in currencies other than that used for disbursements.

How has the EU performed in its first issuances? At time of writing, there had been four syndicated transactions for NGEU, between mid-June and mid-September 2021. These proved there is strong market appetite for EU securities (Table 3). Although undersubscription would have been worrying, it is worth underlining that a high cover ratio is not a definitive metric of success as some investors follow a bidding strategy with under-priced bids without expecting to be successful at auctions, or request more bonds than they intend to buy through syndicated transactions. Instead, investor breakdown and bond prices may be of more use in assessing performance in primary markets:

- Buy-and-hold investors were well represented, as out of the total volume of bonds issued, more than 35 percent went to fund managers and nearly 25 percent to central banks and official institutions, while less than 10 percent went to banks and hedge funds combined (Table 3).
- The diversification of the investor base from a geographical point of view was also well-balanced, with a large majority of investors from the EU, but with also a good representation of investors from outside the EU. As might have been expected, the United Kingdom, as a major financial centre, was the biggest investor in all issuances (Table 3).
- Table 4 shows that all auctions were oversubscribed, which means that the total bids made exceeded the value of securities sold, by a share expressed in the cover ratio. As mentioned previously, oversubscription alone is not a mark of success, but it is encouraging that the Commission easily met its funding target. Indeed, the volume allotted was very close to the ceiling volume announced – as the Commission only provides a ceiling amount of the volume of securities to be sold ahead of the auction, it could moderate the

actual volume sold depending on the bids received.

- The small difference between the highest accepted yield and the weighted average yield shows that there was no winner's curse, meaning that no participant paid a substantially higher price than others.
- Lastly, another encouraging result is that the weighted average yield at issuance is slightly above that in secondary markets. This means that investors who bought EU securities at auctions were able to resell them on secondary markets with a small price increase, providing them with another incentive to buy EU bonds (even if this means that EU could have issued bonds at a slightly lower cost).

Table 3: Results of the first syndicated transactions

	First 15/06/2021	Second 29/06/2021	Third 13/07/2021	Fourth 14/09/2021
	10Y	5Y	30Y	20Y
Amounts	€ 20 billion	€ 9 billion	€ 6 billion	€ 10 billion
By type				
Fund managers	37%	33%	41%	37%
Central banks / Official institutions	23%	30%	15%	17%
Insurance and pension funds	12%	10%	18%	18%
Bank treasuries	25%	21%	19%	24%
Banks	2%	4%	5%	2%
Hedge funds	1%	2%	2%	2%
By geography				
Germany	13%	8%	27%	19%
France	10%	8%	10%	9%
UK	24%	30%	21%	24%
Benelux	15%	6%	13%	11%
Nordics	10%	12%	7%	12%
Italy	5%	6%	7%	7%
Other Europe	10%	11%	13%	15%
Asia	10%	18%	1%	7%
Other	3%	1%	1%	3%

Source: Bruegel based on European Commission.

Table 4: Results of the first auctions

	EU Bills	EU Bonds					
Maturity	3M	6M	3M	6M	3M	6M	5Y
Type	New	New	Tap	Tap	New	New	Tap
Date of auction	15/09/2021	15/09/2021	22/09/2021	22/09/2021	06/10/2021	06/10/2021	27/09/2021
Volume bids in million euros	10 181	11 507	5 238	5 437	4 983	3 656	5 812
Volume allotment in million euros	2 999	1 997	1 997	1 996	2 996	1 996	2 495
Weighted average yield	-0,726%	-0,733%	-0.74%	-0.74%	-0.79%	-0.75%	-0.49%
Weighted average price							102.35
Highest accepted yield	-0,700%	-0,715%	-0.71%	-0.72%	-0.75%	-0.72%	
Lowest accepted price							102.2
Percentage awarded at highest accepted yield	51%	76%	92.61%	43.63%	44.71%	82.44%	22.11%
Cover ratio	3.39	5.76	2.62	2.72	1.66	1.83	2.33
Volume announced	up to 3000	up to 2000	up to 2000	up to 2000	up to 3000	up to 2000	2000-2500

Source: Bruegel based on Bloomberg. Notes: Data retrieved on 15/09/2021. Mid-yields to maturity are displayed. The yield to maturity is the anticipated return of the bond if it is held until maturity. The mid yield to maturity is the average of prices asked by sellers and offered by buyers on the market.

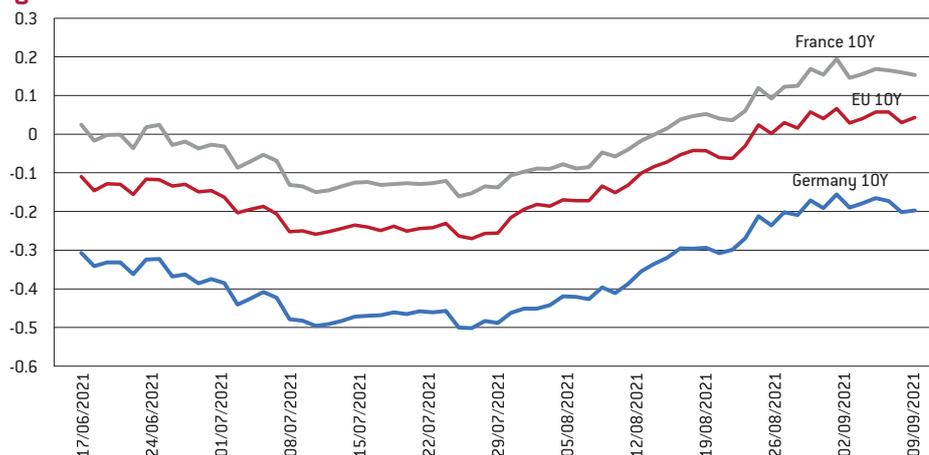
In terms of pricing, NGEU securities have so far been trading between France and Germany, although closer to France, and close to other EU supranational securities (Figure 1). We also note that so far, the price of EU debt securities is somewhat more volatile than the prices of French and German securities, which implies that liquidity is still lower than for major European sovereigns. This is confirmed by higher bid-ask spreads – ie the difference in the price investors offer for bonds and the price investors want in order to sell bonds, Figure 2 shows the mid price, which is the average of bid and ask prices (Table 5 and Figure 2). The Commission should monitor whether EU securities trade in a stable manner, which is signalled by low volatility, stable spreads to benchmark bonds, such as Germany's, and good liquidity in secondary market, as signalled by low bid-ask spreads.

Table 5: Bid-ask spreads of major bonds in the last three months

	Germany 10Y	France 10Y	SURE 10Y	NGEU 10y
Average bid-ask spreads	0.002	0.003	0.108	0.088

Source: Bruegel based on Bloomberg. Note: Data retrieved on 15/09/2021.

Figure 2: Yields 10Y bonds



Source: Bruegel based on Bloomberg. Notes: Data retrieved on 15/09/2021. Mid-yields to maturity are displayed. The yield to maturity is the anticipated return of the bond if it is held until maturity. The mid yield to maturity is the average of prices asked by sellers and offered by buyers on the market.

5 Opportunities and risks

The EU will have to monitor for risks common to all debt-management operations. For example, the cash flow mismatches between loan reimbursements or EU revenues and bond maturities should remain under scrutiny and be tackled by smoothing-out debt repayments by continuing to roll over shorter-term debt after net issuance stops in 2026. Interest-rate risks arising from evolving market conditions also require careful management.

Moreover, because the EU offers lower syndication fees to its primary dealers than other EU issuers, the Commission should take extra care to monitor liquidity and whether its primary dealers have the right incentives to support liquidity. It also appears that some countries' banks are currently overrepresented in the PDN and in past syndications (Table 2), so in choosing banks for syndications, the Commission may want to make a point of ensuring greater diversity or at least more transparency of the decision-making process.

Impact on member state borrowing strategies

In terms of the impact of NGEU bonds on member states' borrowing activities, there were initial fears that a large volume of EU debt issuances could have a crowding-out effect on demand for euro-area sovereign debt. So far, however, the risk appears low, because of market conditions, high investor demand and technical coordination among euro-area issuers. For the moment, anecdotal evidence points to an opposite effect: the new NGEU bonds seem to have caused a crowding-in effect, notably because of demand from non-EU investors¹⁵. This could be because the creation of NGEU has acted as a commitment device and a strong positive signal that EU countries want to stick together in the long run. During the euro crisis, the EU rejected the possibility of borrowing large amounts at the EU level when planning its market-access rescue programmes. For the EU now to turn to this mechanism to finance grants or to provide long-term borrowing to finance common priorities, even if it is for the moment temporary, shows that such joint borrowing is legally and politically possible, which enhances

¹⁵ See for instance the discussion involving major stakeholders (member-state debt management office representatives, European Commission, ESM, EIB, etc) in the following events: <https://www.bruegel.org/events/eu-debt-vs-national-debts-friends-or-foes> and <https://www.omfif.org/events/team-europe-borrowers-forum>.

NGEU debt represents a reliable and cheap AAA-rated source of financing; it is a welcome addition to the EU macroeconomic toolkit

the macroeconomic architecture of the euro area.

However, even if crowding-out conditions have not emerged so far, there should be careful monitoring because market conditions could change significantly in the coming years. This could happen if, for example, the ECB were to reduce significantly its role in euro-area bond markets. Thus, it is crucial that sovereign and EU issuance remains well coordinated within the Economic and Financial Committee's Sub-Committee on EU Sovereign Debt Markets (ESDM) which includes member state debt management offices, the ESM, the EIB, the Commission and the ECB¹⁶. The ESDM meets at least twice a year and is in charge of technical analysis and monitoring of sovereign debt markets for the Economic and Financial Committee. The ESDM also currently has the mandate to promote further integration and better functioning of European sovereign debt markets.

NGEU debt represents a reliable and cheap AAA-rated source of financing countries can draw from in case of market stress. This is a welcome addition to the EU macroeconomic toolkit. Compared to the ESM, there is less stigma involved for countries requesting loans through NGEU. At time of writing, seven countries have requested loans¹⁷. The deadline is August 2023, so more countries may come forward. An appealing feature is that loan interest payments are calculated according to the average effective costs over a semester, as opposed to total average costs for the ESM. This can make NGEU loans more in tune with market conditions and enable simpler comparison with interest rates offered to countries (European Commission, 2019e). However, in our view, NGEU's current characteristics, and in particular its temporary nature and relative inflexibility (given that the ceiling amount to be borrowed was pre-agreed in July 2020), do not allow it to fully play the role of "safe liability", as put by Coeuré (2016), meaning that member states will not be able to use the facility to access markets as much as necessary in times of market stress.

NGEU debt issued for grants will be serviced using EU own resources, ie either through new own resources at EU level, or through increased 'headroom' backed by member states. In this context, some institutions, such as the Bundesbank, have pointed out that NGEU ultimately creates off-balance sheet liabilities for EU countries (Bundesbank, 2021), meaning NGEU debt is ultimately guaranteed by EU countries, but does not appear in their public accounts. However, even if Moody's did value this liability at 3 percent of EU countries' GNI, the rating agency decided not to include it in its assessment models, which shows it is not concerned about the balance-sheet impact on EU members.

So far, Eurostat has said in a 'Draft Guidance Note on the statistical recording of the recovery and resilience facility' that loans taken out under NGEU will be considered as debt to the EU (2020). No provisions have been made for grants, but we consider that these should not be treated as national debt (as Darvas and Wolff, 2021). Based on the reaction of markets and rating agencies, it appears that NGEU has rather improved the attractiveness of EU countries' debt for the reasons described above and also possibly because the euro is perceived as a stronger global currency because of the presence of increased joint borrowing. That said, this perception could turn around if political support for borrowing wanes, or if doubts arise regarding how NGEU funds are used and governed.

16 See details here: https://europa.eu/efc/efc-sub-committee-eu-sovereign-debt-markets_fr.

17 Greece, Italy and Romania have requested the full amount of loans available to them, while Cyprus, Poland, Portugal and Slovenia requested between 16 percent and 37 percent of the loans available to them (Darvas *et al*, 2021).

Impact on EU capital markets

Several benefits for EU capital markets are associated with the fact that NGEU bonds represent a large increase of the pool of risk-free assets in the EU.

- First, the euro area has a longstanding shortage of safe assets (Claeys and Wolff, 2020). A safe asset is a liquid asset that credibly stores value at all times, much like currency, and in particular during systemic crises. There is a high demand for this type of asset, from savers in need of a wealth-storage vehicle, domestic financial institutions seeking to satisfy coverage regulations and for use as collateral in financial operations, and from emerging market economies looking for ways to invest foreign-exchange reserves. Sovereign safe assets – ie assets rated AAA or AA – represent only 37 percent of GDP in the EU, compared to 89 percent in the United States (Banque de France, 2021). NGEU could represent about 5 percent of euro-area GDP. As EU debt is rated better than most member states' debt, issuing at the supranational level mechanically increases the volume of euro-denominated safe assets. This offers more options for portfolio risk management, thus increasing the attractiveness of euro-denominated assets, which in turn benefits all issuers and bolsters a bigger international role for the euro.
- Second, if the EU were to become a permanent large-scale issuer, the yield curve of EU-bonds could become a European benchmark for interest rates. Such a cross-border reference could reduce differences in financing conditions for companies across the EU and favour economic convergence.
- Finally, large-scale EU-level debt could further bolster the resilience of European capital markets, by reducing the potential magnitude of capital flight from countries with weaker financials in times of market distress. During the financial crisis, weaker confidence in the euro overall led to more capital flight, so a globally stronger euro should maintain investor confidence better. NGEU debt could also help to reduce the sovereign-bank doom loop in which national banks are over-exposed to their sovereign's debt, as EU bonds would provide banks with a true common safe asset to fill their regulatory coverage requirements. However, on this last point, we believe that for now, risk mitigation of the sovereign-bank doom loop will remain limited, for two main reasons:
 - First, the volume of EU debt needs to be much larger. In the euro area, all national debt held by banks in the issuing country represents 19 percent of GDP (Table 6), while NGEU debt represents only around 5 percent of euro-area GDP. The temporary and limited nature of NGEU makes it unsuitable to solve the sovereign-bank nexus issue, which would require permanent issuance at higher volumes.
 - Second, EU bonds remain less attractive than sovereign bonds for banks to hold because, in the current ECB collateral framework for refinancing operations, the ECB applies a higher haircut to institutional and agency debt than to central government debt for a same given credit quality rating and residual maturity (European Central Bank, 2014). As discussed by Claeys and Goncalves Raposo (2018), haircuts applied in these monetary operations are very relevant in shaping markets' perceptions of the safety of a debt security. These haircut levels determine whether financial institutions will be able to exchange these assets easily and almost at par against the ultimate safe asset: central bank reserves. In our case, banks will get less reserves with EU debt than with similarly-rated sovereign bonds, which has no justification in terms of risk management for the ECB and should be addressed by the ECB. We recommend that MEPs highlight this issue in the quarterly monetary dialogue with ECB President Christine Lagarde.

Table 6: Holding of national debt by banks at the end of 2020

	Gross government debt		Government debt securities
	Total	Held by domestic banks	Total
	% of GDP	% of GDP	% of GDP
Austria	83.9	9.7	71.0
Belgium	114.1	14.2	96.8
Cyprus	118.2	18.2	78.6
Estonia	18.2	4.0	7.6
Finland	69.2	9.8	53.6
France	115.7	17.5	101.5
Germany	69.7	15.3	52.7
Greece	205.6		40.5
Ireland	59.5		40.2
Italy	155.8	39.5	130.4
Latvia	43.5	3.5	35.4
Lithuania	47.1	3.5	38.8
Luxembourg	24.9		18.3
Malta	54.8	19.4	46.8
Netherlands	54.5	8.4	44.7
Portugal	133.6	18.7	83.6
Slovakia	60.3	10.9	51.0
Slovenia	80.8	9.4	71.7
Spain	120.0	26.9	104.1
Total EA	98.0	19.0	80.5

Source: Bruegel based on European Central Bank.

International role of the euro

To promote the international role of the euro, the Commission (2018) flagged as an opportunity the idea of positioning the EU as the global sustainable-finance hub. In the broader markets, the euro is unlikely to dislodge the primacy of the dollar but the euro already holds a strong place relative to the dollar in green finance: in 2019, almost half of global sustainable assets were denominated in euros.

With NGEU, the Commission will be the biggest green-bond issuer, while SURE made it a major social-bond issuer. But more work remains to be done. The EU's Sustainable Finance Disclosure Regulation (Regulation (EU) 2019/2088), which came into force in March 2021, and its taxonomy of sustainable activities are ambitious steps to prevent greenwashing. These new reporting obligations and criteria for an asset to be tagged as green are much stricter than current market practices but do not yet target sovereign bonds. The NGEU Green Bond Framework confirms that so far, EU green bonds will only comply with ICMA regulations (European Commission, 2021).

The European Parliament should assess whether EU-issued green bonds comply as much as possible with the taxonomy and with standards for European Green Bonds that have been proposed by the Commission (European Commission, 2021f; European Parliament and European Council, 2021a). Indeed, the current methodology for climate tracking of RRF investments through a coefficient of contribution to climate and environment objectives of either 0 percent, 40 percent or 100 percent, explained in Annex VI of the RRF regulation (Regulation

(EU) 2021/241), lacks scientific analysis and precision (European Parliament and European Council, 2021b). These markers could also be coupled with monitoring processes for effective impact. The EU is setting ambitious standards, and should aim to lead the way in showing their adoption for sovereign bonds.

On another note, the fragmentation risk associated with the issuance of differentiated types of bonds is low, according to market participants and rating agencies. On the contrary, differentiated issuance could be beneficial to the diversification of the investor base, with investors looking for green bonds in particular, and for lower borrowing costs thanks to a 'greenium' due to the high demand for green bonds. The results of the first green bond issuance by the EU on 12th October 2021 confirm these results. It was the biggest green bond issuance ever, with € 12 billion issued, and it attracted the biggest order book for green bonds ever, at € 135 billion, it was oversubscribed eleven times.

Overall, NGEU bonds could offer significant benefits to the development of EU capital markets, the enhancement of the international role of the euro and an increase in the European pool of safe assets, which could solve some of the main problems that have plagued the euro-area architecture since its creation. However, the major limitation to all the potential benefits listed so far is clearly the temporary nature of NGEU: these are long-term issues that need a permanent solution. They will not be solved by a temporary issuance of EU bonds. Although market participants currently appear to consider the 2058 time horizon long enough to consider EU bonds as somehow permanent in their investment strategies, there is evident appetite for large EU debt issuances to become permanent. If the benefits envisioned manifest themselves, EU members will naturally have reasons to prolong, reuse or even make NGEU debt permanent.

6 Concluding remarks and main recommendations

The European Commission successfully organised large-scale borrowing in a short time under the auspices of the NGEU programme, as confirmed by the creation of an institutional architecture similar to that of major established sovereign issuers, and by the issuances that have already taken place. Over time the borrowing strategy may undergo some modifications to adapt to market conditions and to learn from experience. Implementing common EU borrowing was a very important signal sent to financial markets during the COVID-19 crisis. It showed EU solidarity and has generated confidence in the resilience of the euro area. NGEU is also a useful tool to give an additional option to member states to borrow more cheaply (at least for most countries, in particular those most affected by the crisis), and to invest together in common priorities (such as the green and digital transitions) in order to support the recovery and sustainable growth.

Three main recommendations emerge from this report. First, market performance of EU bonds needs to be monitored carefully, and the EU may need to change the way it manages its primary dealer network depending on how primary and secondary market liquidity evolves. In particular, the Commission should be careful in how it selects banks for syndications and should ensure fairness and transparency, otherwise it could damage its credibility with member states and relationships with banks. Second, NGEU makes the EU the world's biggest green-bond issuer. Capitalising on this position may help strengthen the international role of the euro and set ambitious standards for sovereign issuances in sustainable finance, which means the EU also should step up efforts to align the green bonds it issues with Commission regulations on sustainable finance for private bonds.

Last, the benefits of large issuances of EU-level debt are significant. However, the

temporary nature of NGEU prevents it from effectively solving any of the major challenges facing the euro area. If the programme is a success, it might bolster the political will to turn it into a permanent programme. This would, in turn, allow EU debt to become a true benchmark in international financial markets, and strengthen the role of the euro at home and worldwide.

References

- Banque de France (2021) 'A European safe asset: new perspectives', *Banque de France Bulletin* no. 234/6, available at <https://publications.banque-france.fr/en/european-safe-asset-new-perspectives>
- Bundesbank (2021) *Monthly Report May 2021*, Vol. 73, No. 5, Deutsche Bundesbank, available at <https://www.bundesbank.de/resource/blob/866764/408fd36e79e250a95019d02781442755/mL/2021-05-monatsbericht-data.pdf>
- Claeys, G. and G.B. Wolff (2020) 'Is the COVID-19 crisis an opportunity to boost the euro as a global currency?' *Policy Contribution* 11/2020, Bruegel, available at <https://www.bruegel.org/2020/06/is-the-covid-19-crisis-an-opportunity-to-boost-the-euro-as-a-global-currency>
- Claeys, G. (2020) 'The European Union's SURE plan to safeguard employment: a small step forward', *Bruegel Blog*, 20 May, available at <https://www.bruegel.org/2020/05/the-european-unions-sure-plan-to-safeguard-employment-a-small-step-forward>
- Claeys G. and I. Goncalves Raposo (2018) 'Is the ECB collateral framework compromising the safe-asset status of euro-area sovereign bonds?' *Bruegel Blog*, 8 June, available at <https://www.bruegel.org/2018/06/is-the-ecb-collateral-framework-compromising-the-safe-asset-status-of-euro-area-sovereign-bonds>
- Coeuré B. (2016) 'Sovereign debt in the euro area: too safe or too risky?' keynote address at Harvard University's Minda de Gunzburg Center for European Studies, 3 November, available at <https://www.ecb.europa.eu/press/key/date/2016/html/sp161103.en.html>
- Council of the European Union (2020) 'Council Decision 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://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020D2053>
- Darvas, Z. and G. Wolff (2021) 'The EU's fiscal stance, its recovery fund, and how they related to the fiscal rules', *Bruegel Blog*, March 4, available at <https://www.bruegel.org/2021/03/the-eus-fiscal-stance-its-recovery-fund-and-how-they-relate-to-the-fiscal-rules>
- Darvas, Z., M. Domínguez-Jiménez, A. Idé Devins, M. Grzegorzczak, L. Guetta-Jeanrenaud, S. Hendry ... Pauline Weil (2021) 'European Union countries' recovery and resilience plans', *Bruegel Datasets*, Last update: 28 September 2021, available at <https://www.bruegel.org/publications/datasets/european-union-countries-recovery-and-resilience-plans>
- European Central Bank (2014) *Collateral eligibility and availability*, available at <https://www.ecb.europa.eu/pub/pdf/other/cea201407en.pdf>
- European Commission (2018) 'Towards a stronger international role of the euro', COM(2018) 796/4, available at: https://ec.europa.eu/info/sites/default/files/communication_-_towards_a_stronger_international_role_of_the_euro.pdf
- European Commission (2021a) 'Commission Implementing Decision of 1.6.2021 establishing the framework for borrowing and debt management operations under NextGenerationEU', available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2021.236.01.0075.01.ENG

- European Commission (2021b) 'Next Generation EU – Funding Plan June-December 2021', factsheet, available at https://ec.europa.eu/info/sites/default/files/about_the_european_commission/eu_budget/factsheet_funding_plan_v5.pdf
- European Commission (2021c) 'Commission Decision 2021/625, of 14 April 2021 on the establishment of the primary dealer network and the definition of eligibility criteria for lead and co-lead mandates for syndicated transactions for the purposes of the borrowing activities by the Commission on behalf of the Union and of the European Atomic Energy Community', available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJL.L.2021.131.01.0170.01.ENG&toc=OJ%3AL%3A2021%3A131%3ATOC>
- European Commission (2021d) 'Next Generation EU – Green Bond Framework', SWD(2021) 242 final, available at https://ec.europa.eu/info/sites/default/files/about_the_european_commission/eu_budget/nextgenerationeu_green_bond_framework.pdf
- European Commission (2021e) 'Commission Implementing Decision (EU) 2021/1095 of 2 July 2021 establishing the methodology for allocating costs related to borrowing and debt management operations under NextGenerationEU', available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJL.L.2021.236.01.0075.01.ENG>
- European Commission (2021f) 'Proposal for a Regulation of the European Parliament and the Council on European green bonds', COM/2021/391 final, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0391>
- European Parliament (2020) 'Answer to a Parliamentary question by Mr Hahn', P-005232/2020, 6 November, available at https://www.europarl.europa.eu/doceo/document/P-9-2020-005232-ASW_EN.html
- European Parliament (2017) *The instruments providing financial support to EU Member States*, In-depth analysis for the BUDG committee, available at https://www.europarl.europa.eu/RegData/etudes/IDAN/2017/572709/IPOL_IDA%282017%29572709_EN.pdf
- European Parliament and European Council (2021a) 'Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088', available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0852>
- European Parliament and European Council (2021b) 'Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility', available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0241>
- European Stability Mechanism (2019) *Safeguarding the Euro in times of crisis*, available at <https://www.esm.europa.eu/publications/safeguarding-euro-times-crisis>
- Eurostat (2020) 'Draft guidance note on the statistical recording of the recovery and resilience facility', Methodological note, 17 November, available at https://ec.europa.eu/eurostat/documents/1015035/11337978/Draft_guidance_note_on_the_statistical_recording_of_the_recovery_and_resilience_facility.pdf
- Garbade, K.D. and J.I. Ingber (2005) 'The Treasury auction process: objectives, structure, and recent adaptations', *Current Issues in Economics and Finance* 11(2), Federal Reserve Bank of New York, available at: https://www.newyorkfed.org/medialibrary/media/research/current_issues/ci11-2.pdf
- Leandro A. and J. Zettelmeyer (2019) 'The Search for a Euro Area Safe Asset', *Working Paper* 18-3, Peterson Institute for International Economics, available at <https://www.piie.com/publications/working-papers/search-euro-area-safe-asset>
- Monostori Z. (2014) 'Discriminatory versus uniform-price auctions', *MNB Occasional Papers* No. 111, Magyar Nemzeti Bank, available at <https://www.econstor.eu/bitstream/10419/141995/1/796715769.pdf>
- OECD (2016) *Sovereign borrowing outlook 2016*, Organisation for Economic Co-operation and Development, available at https://www.oecd-ilibrary.org/sites/sov_b_outlk-2016-6-en/index.html?itemId=/content/component/sov_b_outlk-2016-6-en#back-note-e-000022

OMFIF (2021) 'Team Europe borrowers forum bringing together the NGEU, EIB and ESM', Virtual Panel, Official Monetary and Financial Institutions Forum, 21 September, available at <https://www.omfif.org/events/team-europe-borrowers-forum/>

Preunkert J. (2020) 'Primary dealer systems in the European Union', *Maxpo Discussion Paper 20/1*, Max Planck Sciences Po Center on Coping with Instability in Market Societies, available at http://www.maxpo.eu/pub/maxpo_dp/maxpodp20-1.pdf