

Credit strengths

- Highly rated shareholders
- Strong institutional setup providing de facto joint and several support, debt service priority and budget flexibility
- High liquidity buffers

Credit weaknesses

- Significant increase in debt
- Crisis-country exposure
- High shareholder concentration
- High guarantees to EIB operations

Ratings and outlook

Foreign currency

Long-term issuer rating AAA/Stable Senior unsecured debt AAA/Stable Short-term issuer rating S-1+/Stable

Lead analyst

Alvise Lennkh, CFA +49 69 6677389-85 a.lennkh@scoperatings.com

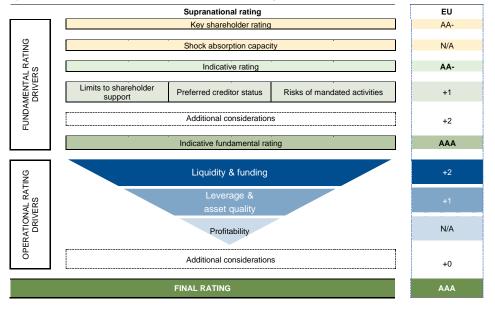
Team leader

Dr Giacomo Barisone +49 69 6677389-22 g.barisone@scoperatings.com

Rating rationale and Outlook:

The AAA ratings for the European Union (EU) and the European Atomic Energy Community (Euratom) reflect the supranationals' highly rated key shareholders, very strong institutional setup ensuring de facto joint and several support, legally enshrined debt service priority combined with significant budgetary flexibility, and conservative cash management resulting in high liquidity buffers. The EU's response to the Covid-19 shock will increase its outstanding liabilities almost twentyfold over the coming years and will make it the world's largest supranational issuer, resulting in higher debt repayments going forward. The EU is also exposed to the risk that its guarantees covering the external and riskier activities of the European Investment Bank (EIB), the European Fund for Sustainable Development (EFSD), and, going forward, the InvestEU programme will be drawn upon. Finally, following Brexit and negotiations on rebates, EU budget contributions based on the gross national income (GNI) of member states are now concentrated on fewer highly rated shareholders. The Stable Outlook reflects our assessment of the EU's high buffers for withstanding shocks.

Figure 1: Scope's assessment of the EU's rating drivers



Positive rating-change drivers

Not applicable

Negative rating-change drivers

- Downgrades of key shareholders
- Rebates to strong shareholders
- Change in institutional setup
- Reduction in liquidity buffers

Scope Ratings GmbH

Neue Mainzer Straße 66-68 60311 Frankfurt am Main

Phone +49 69 6677389 0

Headquarters

Lennéstraße 5 10785 Berlin

Phone +49 30 27891 0 Fax +49 30 27891 100

info@scoperatings.com www.scoperatings.com





in Bloomberg: SCOP

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Fundamental rating drivers

Given supranationals' policy-oriented mandates, our assessment places a significant weight on the supranational's shareholders. Highly rated shareholders signal to market participants that, so long as the institution operates on a going concern basis, the supranational's debt securities are likely to benefit from an institutional framework ensuring their liquidity and market acceptance. In addition, in case of financial distress, the supranational's ultimate recourse to honour its obligations is not its own balance sheet but rather the ability and willingness of its shareholders to provide additional resources. We determine an indicative rating by assessing quantitatively the supranational's key shareholder rating, which can then be adjusted by up to +2 notches or -1 notch, depending on the institution's shock absorption capacity.

Key shareholders

We define key shareholders as those that own and control the institution. Specifically, those whose cumulative capital share, starting with the largest shareholder, comprises at least 75% of the supranational's capital. The average capital-weighted rating of the key shareholders indicates the strength of the institution's shareholders.

EU budgetary contributions as proxy for ownership and control

We note that in the case of the EU and Euratom¹, which does not have paid-in or callable capital from its shareholders, the EU's borrowings are ultimately backed by the EU budget. The EU budget is financed by several sources of revenues: custom duties, VAT and, around 2/3 of EU budgetary revenues are provided via GNI-based transfers from EU member states. As the EU budget must not run a deficit, the GNI-based resource plays the budget-balancing role, financing the annual expenditure not covered by all other revenues.

Highly rated key shareholders

Formally, the adoption of the EU budget requires a proposal from the European Commission, followed by a qualified majority approval from the member states (i.e. 15 of the 27 member states representing at least 65% of the EU population), and majority approval from the European Parliament. Budgetary contributions based on the member states' gross national incomes are thus a good proxy for the institution's ownership and control.

Figure 2: Key shareholders

Key shareholders	Rating	Budgetary contribution (%)				
Ney shareholders	- Nating	Original	Adjusted			
Germany	AAA/Stable	22.5	30.0			
France	AA/Stable	20.3	27.0			
Italy	BBB+/Negative	14.6	19.4			
Spain	A-/Negative	9.9	13.2			
Poland	A+/Stable	4.0	5.3			
Belgium	AA/Negative	3.7	5.0			
		75.0	100.0			
Key shareholder rating			AA-			

Source: European Commission, Scope Ratings GmbH

Thus, the EU's key shareholders consist of the four largest European economies as well as Poland and Belgium, with a weighted-average rating of AA-. This also takes into account i) that the United Kingdom will not provide budgetary contributions for liabilities and obligations taken after 2021, due to its exit from the EU on 30 January 2020; and ii) rebates

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¹ Euratom is a separate legal entity but its credit profile is identical to the EU's. The European Commission borrows on behalf of Euratom and any debt repayment obligations are backed by the EU's budgetary resources and the European Commission's right to call for additional resources from member states if needed. As a result, its rating is aligned with that of the EU.



for GNI-based contributions agreed at the European Council's 17-21 July meeting of EUR 377m for Denmark, EUR 3.671bn for Germany, EUR 1.921bn for the Netherlands, EUR 565m for Austria and EUR 1.069bn for Sweden. Notably, the budgetary rebates result in Poland replacing the Netherlands as a key shareholder as highlighted in Annex II.

Finally, we note that even if Italy, Spain and Belgium were to all be downgraded by one notch, as indicated by their Negative Outlooks, the key shareholder rating would not change.

Shock absorption capacity and indicative rating

Scope's shock absorption capacity measure calculates an institution's capitalisation level, assuming it operates at the maximum leverage as allowed by its statutes. For the numerator of the ratio, we add the supranational's equity, comprising paid-in capital and accumulated reserves, and account for the callable capital of shareholders that are rated AA- or above (ability to honour a capital call) and can, as per the mandate and statute of institution, directly benefit from its activities (willingness to honour a capital call). For supranational entities without meaningful paid-in capital relative to potential liabilities², we do not adjust the key shareholder rating.

Shock absorption capacity does not apply; indicative rating of AA- driven by the EU's highly rated key shareholders In the case of the EU, this ratio does not apply as the EU has no equity. Thus, the EU's indicative rating is equal to that of its key shareholders of AA-.

To determine the fundamental rating, we adjust this indicative rating by assessing i) the limits to shareholder support; ii) the degree to which the institution's asset quality is likely to be more (less) risky compared to that of peers, as indicated by its mandate to operate in countries with low (high) credit quality, and the extent to which it can directly invest in equity; and iii) the likelihood of the supranational benefiting from preferred creditor status. This combined assessment can result in a positive or negative adjustment of up to two notches.

Limits to shareholder support

To assess possible limits to shareholder support, we adjust negatively the indicative rating depending on our assessment of i) the shareholder concentration of those rated AA- or above; and ii) the institution's share of paid-in to callable capital. We deduct one notch from the indicative rating if at least one of the criteria is assessed as 'medium/high'.

Somewhat concentrated base of shareholders rated AA- or above...

We note that 11 of the EU's 27 shareholders are rated AA- or above, constituting an estimated 61% of the EU's GNI-based budgetary contributions from 2021. As the UK will not provide budgetary contributions for liabilities and obligations taken after 2021, the EU will rely on fewer shareholders rated AA- or above for a large share of its budgetary contributions, most notably Germany with 22.5% and France with 20.3%. This is also reflected in our calculation of the shareholder concentration, which signals some concentration of member states rated AA- or above.

...which leads to a one-notch negative adjustment

Specifically, our calculation of the Herfindahl-Hirschman index, a commonly used concentration measure, results in a value of 2,600 – above the 2,000 threshold at which we apply a negative one-notch adjustment. We also acknowledge that our calculation is conservative, given the EU's record of receiving budgetary contributions from all member states, not just those rated AA- or above.

No paid-in capital; therefore, no adjustment

As the EU does not have paid-in capital, we did not assess its share of paid-in to callable capital and therefore no adjustment has been made.

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² Defined as having at least 1% paid-in capital of the subscribed capital.



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Mandated activities

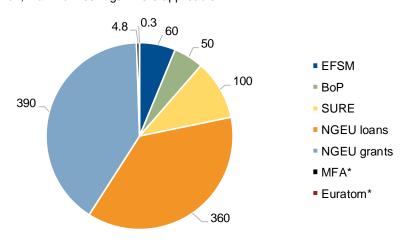
Mandates of supranationals are very diverse and can lead to inherently risky and weak asset qualities. Still, risks from mandated activities can vary by geography, sector and instrument. To assess the likely asset quality of the supranational, we calculate the risk of the country exposure by using the credit ratings of the sovereigns comprising the top 10 country exposures. In addition, we also assess whether and to what extent equity investments are allowed by the institution's mandate, to reflect that investing directly in equity carries greater risks than providing loans. The combined assessment can result in a one-notch adjustment, which is further refined in our analysis of the operational rating drivers.

Mandate is to lend to crisis-hit countries and support EU member states' economic recovery from the Covid-19 shock The EU budget guarantees the borrowings of the European Commission that finance i) lending to member and non-member states in back-to-back transactions; and ii) non-repayable support (i.e. grants) to EU member states in response to the Covid-19 shock.

Specifically, the EU's borrowing is permitted to finance i) loans to its members states, via the European Financial Stabilisation Mechanism (EFSM)³, the Balance-of-Payments (BoP)⁴ financial assistance programmes, the Support to mitigate Unemployment Risks in an Emergency (SURE)⁵, and the Next Generation EU (NGEU)⁶ instruments; ii) grants to its member states via NGEU instruments; iii) loans to non-EU countries benefiting from an IMF programme through the Macro-Financial Assistance (MFA)⁷ programme; and finally; iv) loans for Euratom, which lends to EU member states and non-member states and their entities to finance projects relating to energy installations⁸.

Figure 3: EU's financing programmes

EUR bn, maximum ceilings where applicable



Source: European Commission, Scope Ratings GmbH *No official ceiling; latest outstanding amount. NGEU in 2018 prices.

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³ EFSM enables financial assistance to be granted to a member state in difficulty. This may take the form of a loan or a credit line. While the facility is limited at EUR 60bn, it is not foreseen that the EFSM will engage in new financing programmes or enter into new loan facility agreements.

The BoP facility, a policy-based financial instrument, provides medium-term financial assistance to EU member states that have not adopted the euro. The maximum outstanding amount of loans granted under the instrument is EUR 50bn.

⁵ The SURE instrument has a limit of up to EUR 100bn and is temporary, to be concluded by the end of 2022.

⁶ The NGEU instrument has a limit of up to EUR 750bn (in 2018 prices) and is temporary, with net borrowing to be concluded by the end of 2026.

MFA is a policy-based financial instrument of untied and undesignated balance-of-payment and/or budgetary support to partner countries currently under an IMF programme. These loans are guaranteed by the Guarantee Fund for External Actions and have no official ceiling.

⁸ Guarantees from third parties are the first to cover outstanding Euratom loans. Should third parties not provide them, the Guarantee Fund for External Actions will cover the external lending amounts.



Direct loan exposures mostly to Portugal, Italy and Ireland

So far, the EU's main exposure for borrowings relate to financial assistance provided to Ireland (A+/Positive) and Portugal (BBB+/Stable) under the EFSM, with their combined share constituting around 90% of the EU's total exposure.

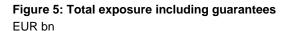
Looking ahead, and accounting for the EUR 87.8bn of financial support already approved for 17 member states under the SURE instrument, the EU's country exposures will be more diversified and include sovereigns with varying creditworthiness, ranging from the Czech Republic (AA/Stable) to Greece (BB/Positive). Overall, we estimate the weighted-average country risk at around A-, which corresponds to a 'low' risk. This estimate could change, however, depending on i) the loans to be provided under the NGEU instrument; and ii) Scope's sovereign ratings.

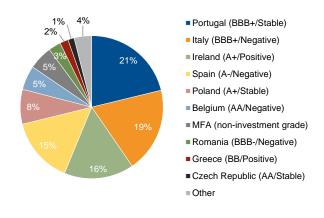
Indirect guarantee exposures to EIB's non-EU and riskier activities

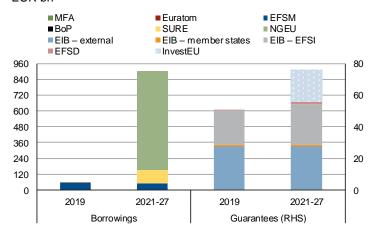
In addition, the EU's ultimate credit risk also includes guarantees provided to i) the EIB, in the context of its non-EU activities as well as those classified under the European Fund for Strategic Investments (EFSI); ii) the EFSD; and, iii) going forward, the InvestEU programme. Crucially, these contingent liabilities are not funded by the EU on the capital markets. Still, they are ultimately backed by the EU budget and thus an important and growing part of the EU's overall credit risk. We explain this in greater detail in the operational rating drivers section.

No risks from equity participations in European Investment Fund and European Bank for Reconstruction and Development Finally, the EU is not permitted to invest in equity aside from its holdings in the European Bank for Reconstruction and Development (capital subscription of 3%, paid-in capital of EUR 187m) and the European Investment Fund (capital subscription of 29.7%, paid-in capital of EUR 267.4m). We therefore assess equity participations as 'low' risk. This assessment, combined with our assessment of the 'low' risk country exposure, results in a one-notch positive adjustment to the risks from mandated activities.

Figure 4: Country exposure, borrowings %







Source: European Commission, Scope Ratings GmbH Note: Includes agreed SURE disbursements; Portugal figures include SURE and EFSM loans.

Source: European Commission, Scope Ratings GmbH Potential losses related to Euratom, MFA and the EIB's non-EU operations are first covered by the Guarantee Fund for External Actions. Potential losses related to the EIB's EFSI operations are first covered by the EFSI Guarantee Fund. Assumes full disbursements of SURE and NGEU. Assumes EFSD and InvestEU result in outstanding guarantees of EUR 1.5bn and EUR 20bn respectively over the coming years (the latter based on available provisions of EUR 8.4bn (in 2018 prices) and assuming a provisioning rate of 40-45%).

Preferred creditor status

While there is no legal basis for preferred creditor status (PCS), it constitutes a market practice attributable to the incentives faced by distressed sovereign borrowers. As sovereigns have generally granted supranationals PCS, we assess the likelihood of the institution benefitting from PCS, first and foremost on its track record. Absent a clear track

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record, we assess the institution's i) mandate and systemic importance; ii) exposure to its own shareholders; and iii) the degree of private sector engagement. This assessment can only positively affect the rating, by up to one notch.

EU has clear record of benefiting from preferred creditor status

In the case of the EU, which lends counter-cyclically during crises as a lender of last resort, we acknowledge the clear record of the institution's loans being exempt from any debt restructurings. Despite lending to crisis-hit countries, the EU's loans have always been exempted from debt restructuring operations; however, for completion, we note that the EU's loans have been extended in the past.

Looking ahead, we expect the loans the EU provides to its member states, via the SURE and NGEU programmes in the context of the policy response to the Covid-19 shock, to benefit from PCS should any of its member states face financial distress.

Additional considerations

We acknowledge the heterogeneity of supranationals and include idiosyncratic factors in our assessment that may affect the supranational's creditworthiness.

One notch for legal debt service priority and budgetary flexibility The EU's debt servicing ability benefits from multiple layers of protection: First, debt repayments are met using the proceeds of repayments from borrowing countries that received back-to-back financing of loans. However, in case a borrowing country fails to repay its loan to the EU on time, 'the European Parliament, the Council and the Commission shall ensure that the financial means are made available to allow the Union to fulfil its legal obligations in respect of third parties'9. We acknowledge this legal debt service priority to third parties with a one-notch positive adjustment, taking into account the actual budgetary flexibility of the European Commission to delay significant amounts of the EU's annual expenditure of about EUR 60bn to 40bn from the European structural and investment funds¹⁰.

One notch for de facto joint and several guarantee mechanism and three-day payment horizon

In addition, in case the EU's available cash resources were to be insufficient to cover debt service payments, the European Commission has the legal right to draw funds from all member states¹¹. In such an adverse event, the additionally required funds 'shall be divided among the Member States, as far as possible, in proportion to the estimated budget revenue from each of them"12. Specifically, member states are legally obliged to 'execute the Commission's payment orders following the Commission's instructions and within not more than three working days of receipt'13. We consider this to be an exceptionally strong and timely guarantee mechanism with a de facto joint and several support framework, warranting a one-notch upward adjustment.

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Treaty on the Functioning of the European Union. Article 323

¹⁰ The EU has five main funds to support economic development across all EU countries: European Regional Development Fund, European Social Fund, Cohesion Fund, European Agricultural Fund for Rural Development, and European Maritime and Fisheries Fund. For 2019, we determined budgetary flexibility accounting for expenditure under the budgetary headings 'economic, social and territorial cohesion' (EUR 47.4bn), the European Agricultural Fund for Rural Development (EUR 13.5bn) and the European Maritime and Fisheries Fund (EUR 0.7bn).

¹¹ Article 14 of the Council Regulation (EU, Euratom) No. 609/2014

Article 14 (4) of the Council Regulation (EU, Euratom) No. 609/2014
 Article 15 (1) of the Council Regulation (EU, Euratom) No. 609/2014



Operational rating drivers

In this part of the analysis, we assess the intrinsic strength of the institution¹⁴ along three categories that capture distinct operational aspects: i) liquidity and funding, which can increase (decrease) the assessment by seven (two) notches; ii) leverage and asset quality, which can increase (decrease) the assessment by four (two) notches; and iii) profitability, which can increase (decrease) the assessment by one notch.

Liquidity and funding

Liquidity and funding are the primary drivers of our operational assessment as supranationals need large pools of liquidity to fulfil their mandates without deposits or (usually) access to central bank facilities. Our analysis thus focuses on i) whether the supranational has enough liquid assets to meet financial obligations and expected disbursements over an extended period; and ii) the institution's funding operations.

Liquidity

Scope's liquid assets ratio assesses the supranational's survivability period, that is, the time period during which the supranational can honour debt repayments and maintain operations without access to financial markets. This assessment can result in a four-notch (one-notch) positive (negative) adjustment.

Very high cash balances throughout the year

In the case of the EU, we note its conservative liquidity management and budgetary practices, which take into account that most expenditures take place during the first quarter of each year while debt redemptions usually follow thereafter at the beginning of each month when cash balances are highest.

Looking at the EU's liquid assets, we note the cyclical nature of the EU's cash balance. During 2020, the average cash balance until October was EUR 19.6bn while the lowest was recorded in March at EUR 12.3bn. As of October 2020, the cash balance again increased to EUR 19.6bn. We note that over the past five years the cash balance has never dropped below EUR 10bn, and over the past 10 years, the lowest balance recorded was in June 2010 at EUR 6.2bn.

Significant additional liquidity buffer given budgetary margin

We also include the budgetary margin into the EU's liquid assets. Specifically, the EU's total own resources ceiling – the maximum resources the EU can draw on from its member states without the need for any subsequent decision by national authorities – will increase from 1.20% of the EU's estimated GNI to 1.40%, to account for Brexit, and for potential sudden drops of the economy, such as the one observed with the COVID-19 pandemic in 2020. In addition, member states agreed that further 0.6pp will be earmarked until 2058 specifically to cover repayment of all liabilities from NGEU borrowings. The total ceiling is thus 2.00% of the EU's GNI.

Conversely, regarding expenditures, we note that total payment appropriations, that is, actual authorised disbursements in a given year on the EU's seven policy areas¹⁵, may not exceed EUR 171m, on average, per year. Based on available economic forecasts this is equivalent to 1.22% of the EU's GNI for 2021. However, with the recovery and normal economic activity resuming, it is expected that the EU's GNI will grow in the next seven years. Scope assumes conservatively annual nominal growth of 1.5% of the EU's GNI for the 2022-27 period, which results in an estimated range for payment appropriations of around 1.15% to 1.20% of the EU's GNI.

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¹⁴ For institutions without a clear capital structure, the assessment is conducted only for the relevant elements of the analysis.

¹⁵ Single market, innovation and digital; cohesion, resilience and values; natural resources and environment; migration and border management; security and defence; neighborhood and the world; European public administration



Budgetary margin adjusted for pro-rata share of highly rated shareholders

While the own resources ceiling is legally binding, it has never been used. Thus, we estimate the EU's liquid assets using a conservative approach, by adjusting the budgetary margin for the pro-rata budgetary contributions of member states rated AA- or above¹⁶. Based on Scope's sovereign ratings and the 2019 GNI-based budgetary contributions, and taking into account Brexit and rebates from 2021, this share is currently at 60.8%.

On this basis, the margin between the potential maximum contribution from the EU's highly rated shareholders and the actual payments during 2021-27 is approximately 0.51% of the EU's GNI. For 2021, we estimate this value at around EUR 69.2bn, which, together with the estimated average cash balance of EUR 24.7bn¹⁷, results in liquid assets of around EUR 94bn for 2021. This estimate is conservative, since the EU budget also receives 'other revenues'¹⁸, which increases the budgetary margin. For 2021, the Commission's Draft Budget proposal foresees this revenue to amount to EUR 10bn.

Figure 6: Monthly cash balances EUR bn

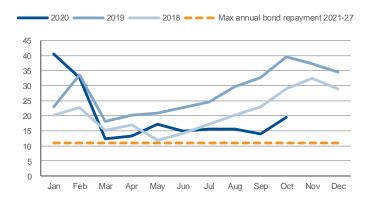
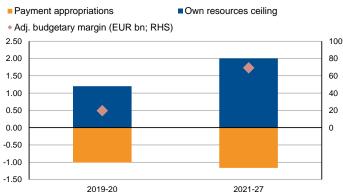


Figure 7: Budgetary margin

% EU gross national income; EUR bn (RHS)



Source: European Commission, Scope Ratings GmbH
The adjusted budgetary margin accounts for the share of sovereigns rated AA- or
above by Scope Ratings. The EUR 69.2n reflects the 2021 estimate which is set to
increase in line with the EU's GNI growth.

Modest liabilities due within next 12 months...

...but significant disbursements in the years to come given SURE and NGEU

Conversely, based on 2017-19 data, we estimate that the EU's liabilities maturing within 12 months, excluding annual bond repayments, amount to around EUR 33bn in total (2019: EUR 27.4bn). In addition, we estimate that over the coming years the EU's disbursements will increase substantially on account of the SURE and NGEU instruments, to well above EUR 150bn for each year during 2021-24, from less than EUR 5bn over the past few years. While precise disbursements are currently unknown and subject to member state recovery plans and loan requests, we assume, conservatively, that the full envelope for NGEU funding of around EUR 811bn will be used over 2021-26.

On this basis, we estimate the liquid assets ratio to drop to around 48% for 2021-24 from around 100% in previous years. Critically, once these large disbursements are made, the liquidity ratio will again gradually increase to around 100% by 2027, assuming no additional significant disbursements are made for other programmes such as MFA/BoP. Looking further ahead, from 2028 onwards, the EU will have to gradually repay its outstanding liabilities. We estimate that the maximum annual liabilities due within one year from bond repayments are likely to hover around EUR 42bn. This assumes, conservatively, that the EU repays each year the maximum amounts of EUR 10bn under SURE and EUR 29.25bn under NGEU. Actual figures are likely to be lower, however.

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¹⁶ This adjustment is in line with Scope's methodology of only using assets rated AA- or above for the calculation of liquid assets.

¹⁷ Based on full-year cash balances for the 2017-19 years

¹⁸ Includes taxes paid by EU staff, contributions from non-EU countries to certain EU programmes, fines paid by companies, and budget balance from previous year.



Still, on this basis, and assuming i) the other liabilities (mostly payables) remain at around EUR 33bn; and ii) no significant disbursements are made from 2028 onwards, liabilities due within the next 12 months are likely to amount to around EUR 78bn. This amount would be fully covered by the EU's liquid assets given its high cash balance and, particularly, the fact that the own resources ceiling will remain elevated until all bond repayments are made.

In addition, we note that the possible liquidity risk arising from borrowings is offset by equivalent loan repayments made by member states under the EFSM, BoP and SURE back-to-back operations. For MFA and Euratom loans, the Guarantee Fund for External Actions serves as a first liquidity reserve in case of a payment missed by its borrowers. As of December 2019, the net assets in the fund stood at EUR 2.8bn.

Figure 8: Expected disbursements 2021-28

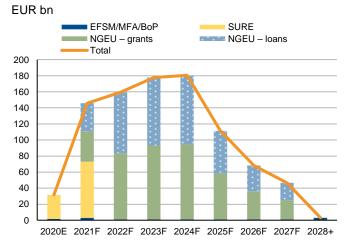


Figure 9: Liquid assets ratio 2021-28



Source: European Commission, Scope Ratings GmbH

We also note that repayment of NGEU borrowings may benefit from new own resources. Specifically, the EU will likely obtain revenues from plastic packaging waste from January 2021 (estimated at around EUR 6bn) and, from January 2023, potentially from a carbon border adjustment mechanism and a digital levy. Finally, revenues may also come from revised proposals on the Emissions Trading Scheme and the Financial Transaction Tax over the coming years.

In our view, the high liquidity buffer (comprising cash and potential resources the EU can draw from member states without requiring additional decision-making processes) is essential as it allows the EU to increase issuances and disbursements in line with its mandate, which is to provide loans and grants to member states during the most financially distressed times. See Annex III for detailed calculations.

Funding

In our view, a benchmark issuer with an ability to issue at long maturities and to a highly diversified investor base across currencies, markets¹⁹ and investors²⁰ is more likely to sustain regular capital market access, thus enabling the institution to honour its financial obligations and continue disbursing funds during stressed economic and financial times. This assessment can result in a three-notch (one-notch) positive (negative) adjustment.

Traditional funding activities depend on financial assistance

For the EU's traditional funding operations, i.e. the BoP, MFA and EFSM programmes, funding volumes are subject to requested financial assistance programmes. As such, the funding activities are infrequent compared to those of other supranationals. Since 2013,

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¹⁹ The split between or dependence on geographies: Europe/EMEA, the Americas and Asia.

²⁰ The split between or dependence on investor types: central banks, pension and insurance funds and financial institutions.



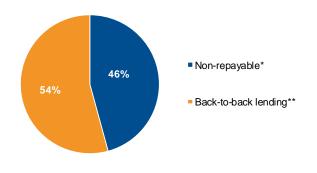
SURE funding volumes to increase significantly in 2020 and 2021

EUR 750bn of issuances for NGEU until 2026 will make EU largest supranational issuer funding volumes ranged between EUR 100m and EUR 6.3bn, with the funding volume in 2019 amounting to EUR 420m, raised for disbursements under MFA programmes for Tunisia (EUR 300m), Jordan (EUR 100m) and Moldova (EUR 20m).

The European Commission has significantly revised upward its funding programme for 2020 and 2021 to raise funds for the SURE programme, whose maximum size is EUR 100bn. Most of the package is already committed after the European Council approved EUR 87.4bn of loans, and we expect the full envelope of EUR 100bn to be utilised until end-2021. The funds raised for these loans will be lent to member states via back-to-back transactions, similar to existing EU lending programmes. The European Commission will issue funds for SURE in euro and has set up the EU SURE Social Bond Framework, which complies with the International Capital Market Association's Social Bond Principles. The maturity of issuances will range between three and 30 years with a maximum average maturity of 15 years; we expect the average maturity to be close to that limit. Moreover, total annual repayments for SURE-related borrowings are limited to 10% of the programme's actual utilisation, i.e. a maximum of EUR 10bn per year.

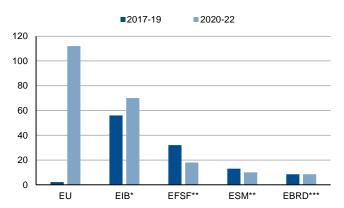
The issuances for NGEU add up to EUR 750bn in 2018 prices, or around EUR 811bn in current prices. This will transform the EU into the largest supranational issuer. The European Commission will issue the funds until 2026, with some frontloading expected in 2021-24, while actual funding volumes will depend on funds disbursed under NGEU. Importantly, for the first time a significant part of the package (EUR 390bn in 2018 prices) will not follow the back-to-back lending principle, but will be disbursed as grants. These debt-financed grants will be repaid by future EU budgets. Loans under NGEU (EUR 360bn in 2018 prices) will follow the back-to-back lending principle. NGEU borrowings will be repaid between 2028 and 2058, with annual repayments limited to EUR 29.25bn in 2018 prices. The European Commission's stated aim is to raise 30% of NGEU funds under its forthcoming Green Bonds Framework.

Figure 10: Aggregate EU funding 2020-27F, operation type %



* Grants under NGEU ** Includes funding for EFSM, MFA, BoP, SURE and NGEU loans (under full utilisation). Source: European Commission, Scope Ratings GmbH

Figure 11: Average annual funding volume vs peers EUR bn



* Based on borrowing authorisation for 2020 and constant thereafter. ** Based on latest investor presentation. *** Assumed constant for 2020-22. Source: European Commission, EIB, EFSF, ESM, EBRD, Scope Ratings GmbH

Ability to issue for a very long period; broadly diversified investor base; issuance only in euro

Finally, we note that the EU's weighted average maturity of issuance during 2019 was around 15 years, one of the longest among supranationals, which we have assessed positively with one notch. Conversely, the EU's funding currency is exclusively the euro. The European Commission announced that SURE funding will be carried out in euro, and we expect NGEU issuances to also be euro-denominated. While this eliminates currency risks, it may also make issuances less appealing to non-euro investors. Still, we note that the EU benefits from a broad and diversified investor base, particularly by investor type, and can use the forthcoming issuances to enhance the euro's role as a global safe asset.

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Additional considerations

We acknowledge the heterogeneity of supranationals and include idiosyncratic factors in our assessment that may affect the supranational's creditworthiness.

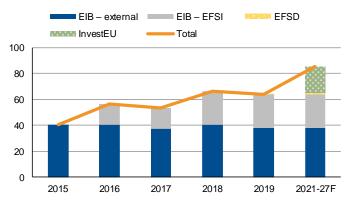
Meaningful EIB-related quarantees

We note that the EU's budget is materially exposed to contingent liabilities, specifically from its guarantees to the EIB for non-EU operations and those classified under the EFSI, the EFSD and, going forward, the InvestEU programme.

The overall size of guarantees has increased substantially since 2015 on account of the EFSI, to around EUR 64bn at end-2019, and will continue to rise over the coming years and likely reach around EUR 85bn, mostly driven by the InvestEU programme. Critically, any calls under the guarantees will be covered by a respective guarantee fund, reducing the direct impact on the EU budget.

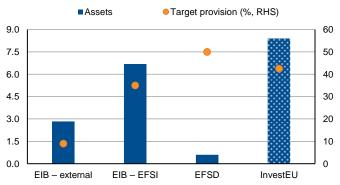
Figure 12: EU's guarantee programmes

EUR bn, maximum ceilings



2015 value based on 2016 as maximum ceiling for 2015 not available. EFSD assumed at EUR 1.5bn. InvestEU assumed at around EUR 20bn in line with available provisioning of EUR 8.4bn (in 2018 prices) and assuming a provisioning rate of 40-45%. Source: European Commission, Scope Ratings GmbH

Figure 13: Guarantee fund assets and provision rates EUR bn; % (RHS)



Source: European Commission, Scope Ratings GmbH

Three specific risks from EU guarantees...

...mitigated by liquid assets, a track record of low defaults and conservative financial management

In assessing the EU's contingent liabilities, we highlight three specific risks to the EU budget: i) the deteriorating asset quality of operations covered by the Guarantee Fund for External Actions, in particular, regarding the meaningful exposure to Turkey (B+/Stable); ii) the potential risks covered by the EFSI Guarantee Fund, including the gradual increase of its assets in relation to the increase in the overall ceiling of the EU's guarantee, as well as the short track record of operations to date of the comparatively new client base; and iii) the potential risks covered by the EFSD and, going forward, the InvestEU programmes, which will result in additional operations and new clients.

At the same time, the risk borne by the EU budget is significantly curtailed by i) the assets of the guarantee funds, with a relatively high provisioning rate for the newer programmes, which would absorb any losses before EU budgetary resources would be needed; ii) the track record of very low annual default payments, which to date have never exceeded EUR 110m in a given year; and iii) the EU's conservative financial management, including ample liquidity buffers and upfront provisioning of the funds.

Looking ahead, we could adjust the liquidity assessment negatively by one notch if i) the credit quality of the largest exposures under the EIB's external lending mandate deteriorated further; ii) the magnitude of the guarantee calls increased meaningfully; and/or iii) the overall size of the EU's guarantees increased further without a commensurate increase in liquid assets.

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Fund covers EIB's non-EU operations, and MFA and **Euratom loans to third countries**

1. Guarantee for EIB's external (non-EU) activities

Under the External Lending Mandate, the EU budget guarantees up to EUR 32.3bn of the EIB's non-EU activities during 2014-20²¹, via the Guarantee Fund for External Actions. The ceiling varies from year to year given that the guarantee depends on the mandate and timing under which loans were granted. The overall ceiling as of December 2019 stood at EUR 37.9bn.

This guarantee fund covers potential losses from the EIB's external financing activities as well as MFA and Euratom loans to third countries, with the minimum provision under the EU budget amounting to 9% of outstanding loans and guarantees covered by the fund. If the fund's resources are insufficient, the EU budget will provide the necessary funds. As of December 2019, about 90% of the amount covered by the fund consists of guarantees on EIB loans.

The Guarantee Fund for External Actions covers defaults within three months of the EIB's request²². The EIB will undertake recovery proceedings on behalf of the EU in respect of the defaulted payments. As of December 2019, the fund's net assets amounted to EUR 2.8bn; around 60% of the bond portfolio were held in assets rated at least AA-, down from 80% in 2017²³.

Elevated exposure to high-risk countries...

The total risk borne by this guarantee fund, based on amounts disbursed under MFA, Euratom and EIB operations at the end of 2019, stood at around EUR 35.5bn. Of this total, over the 2021-29 period, the fund's maximum annual risk relating to third countries amounted to about EUR 3bn. Over the coming years, the fund's main exposure will be to high-risk countries, including Turkey (B+/Stable; EUR 8.5bn), Ukraine (EUR 5.5bn), Morocco (EUR 3.5bn), Egypt (EUR 3.3bn) and Tunisia (EUR 3.1bn).

Figure 14: Total repayments covered by Guarantee Fund for External Actions

%

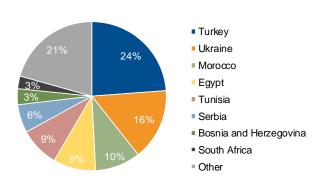
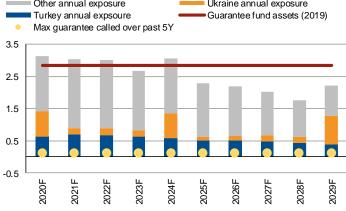


Figure 15: Guarantee Fund for External Actions, assets and annual exposure

EUR bn Other annual exposure Ukraine annual exposure Guarantee fund assets (2019) Turkey annual expsoure



Source: European Commission, Scope Ratings GmbH

We thus note negatively that the proportion of loans guaranteed by the fund relating to investment-grade borrowers has decreased markedly over time, particularly due to developments in and exposures to Turkey (B+/Stable) and Ukraine. Back in 2014, the European Commission itself noted that the share of investment-grade credit exposures, at

²³ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0136&rid=1 P27-29.

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 $^{^{\}rm 21}$ On 14 March 2018 the ceiling was increased from EUR 27bn to EUR 32.3bn.

²² For Euratom and MFA loans, the European Commission draws on the fund to cover defaults and replenish its treasury resources.



about 50%, justified the 9% target rate²⁴. In light of the fund's deteriorating asset quality, we assess this adverse development as a growing liquidity risk.

...but low guarantee calls to date

Conversely, we note that since 2011, the EIB has only drawn upon EU guarantees due to defaulted payments by i) the Syrian government, resulting in 67 calls on the guarantee fund totalling EUR 488.7m; and ii) TAV Tunisie S.A. (Enfidha airport), resulting in four guarantee calls totalling EUR 34.8m, of which EUR 0.8m has been recovered. In 2019, guarantee calls amounted to EUR 54.9m.

2. Guarantee for EFSI activities

The EU budget also guarantees a part of the signed investments under the EFSI, which is implemented by the EIB and the European Investment Fund via the Infrastructure and Innovation Window and SME Window, respectively. The EFSI Guarantee Fund is provisioned progressively, taking into account the increase in exposure borne by the EU guarantee and thus constitutes a liquidity cushion from which the EIB can be paid in the event the EU guarantee is called upon.

EUR 26bn EFSI Guarantee Fund

Following the EFSI's extension in 2017, the EU budget now provides a EUR 26bn guarantee ceiling on the EIB's related investments, which on average are riskier than the traditional risk profile of the EIB's portfolio, resulting in a significant increase in new clients for the EIB. However, we note that the first-loss coverage would not necessarily affect the EU's budget balance, as called guarantees would be covered by the EFSI Guarantee Fund, which had assets of EUR 6.7bn at end-2019.

EFSI Guarantee Fund to gradually reach EUR 9.1bn to cover 35% of EFSI guarantees The EFSI Guarantee Fund started in April 2016 and was originally foreseen to gradually reach EUR 8bn by 2022, thus provisioning for 50% of the maximum exposure of the original EU guarantee of EUR 16bn. Following the EFSI's extension, its guarantee fund is now expected to gradually reach EUR 9.1bn by 2022, i.e. 35% of total EU guarantees for EFSI operations. As of the end of December 2019, the assets of the EFSI Guarantee Fund covered 30.5% of the actual exposure covered by the EU guarantee.

Figure 16: Distribution of signed EFSI operations %

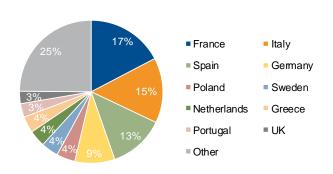
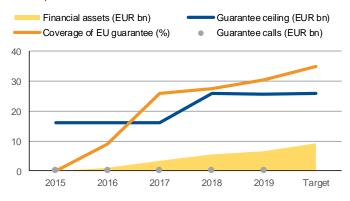


Figure 17: EFSI Guarantee Fund, assets and exposure EUR bn. %



Source: European Commission, Scope Ratings GmbH

EFSI operations carry higher risks but limited guarantee calls

Still, despite the higher-risk profile of loans, guarantee calls for defaulted exposures have so far been very limited at around EUR 78.5m in 2018 and EUR 3.5m in 2019. Looking ahead, given the Covid-19 shock, guarantee calls could increase somewhat over 2020-21. Still, we note positively that all operations are i) within the EU; and ii) highly diversified

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²⁴ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52014SC0129&from=EN P6.



across countries and sectors, with research, development and innovation constituting the highest share (35%), followed by energy sectors (20%) and smaller companies (15%)²⁵.

3. InvestEU (forthcoming)

As a follow-up to the EFSI under the 2021-27 Multiannual Financial Framework, the European Council established the InvestEU fund, whose objective is to mobilise public and private investment within the EU. While the overall guarantee is yet to be legislated, the European Council has set the fund's available provisioning to EUR 8.4bn (in 2018 prices).

Assuming a provisioning rate of 40-45%, in line with the original European Commission proposal, this would translate into an overall guarantee of EUR 18.6bn-21bn. While InvestEU will thus pose an additional contingent liability to the EU budget, any calls emanating under the programme would be first covered by the substantial provisions, which will be paid upfront and kept in the common provision fund.

4. European Fund for Sustainable Development (EFSD)

Since 2018, the EU budget also covers the financing of operations in Africa and countries neighbouring the EU, with its EUR 1.5bn guarantee intended to serve as a risk mitigation mechanism to leverage private sector financing. The EFSD Guarantee Fund provides a liquidity cushion from which eligible counterparts can be paid in the event an EFSD guarantee is called. The amount to be provisioned is 50%. As of end-2019, the fund had assets of EUR 599.6m, three EFSD guarantee agreements have been concluded worth EUR 165m, and no calls had been made²⁶.

Other considerations

Other considerations, including interest rate risk, foreign exchange rate risk, derivatives and collateral management have resulted in no adjustment for the liquidity and funding assessment.

Leverage and asset quality

We may positively adjust this part of the assessment to account for the possibility that an institution's i) actual leverage could be significantly lower than its potential leverage as calculated under Scope's shock absorption capacity measure; and ii) actual balance sheet risk could be significantly lower than the risk we assigned in the assessment of the institution's mandated activities. Conversely, a negative adjustment may be applied to reflect that i) an institution's high shock absorption capacity may depend primarily on highly rated callable capital as opposed to paid-in capital and reserves; and ii) an institution may conduct most of its operations in relatively creditworthy countries but still have a poor actual asset quality.

Leverage

To calculate the leverage ratio, we use the supranational's liabilities, as measured by outstanding debt securities, relative to its paid-in capital and accumulated reserves. This assessment can result in a two-notch (one-notch) positive (negative) adjustment.

Leverage ratio does not apply but outstanding liabilities to increase almost twentyfold As the EU has no paid-in capital, this ratio does not apply. Still, we note that the EU's total borrowings stood at around EUR 52bn as of December 2019. Moreover, due to borrowings for SURE and NGEU, the EU's total borrowings are expected to increase almost twentyfold to just under EUR 1trn by 2026.

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https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0162&from=EN

²⁶ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020DC0346&from=EN



Asset quality

To assess the riskiness of assets, we use the historical non-performing loan ratio, calculated by standardising the numerator to loans with interest or principal payments overdue by at least 90 days, adjusted for provisions. In a second step, we assess the extent of the supranational's actual direct equity participations in private sector entities. To avoid double-counting, we account for the assessment of the institution's risk of its mandated activities when determining the appropriate notching. Depending on the interaction with the assessment of 'risk of mandated activities' this can result in a one-notch positive or negative adjustment.

No losses on EU loan portfolio funded by borrowings on markets

Despite lending counter-cyclically to crisis-hit countries and having a highly concentrated portfolio, the EU has, to date, never suffered a loss on its loan portfolio. This is because loan disbursements depend on the governments' compliance with agreed policy conditions, which are also monitored by the European Commission in the context of financial assistance programmes. In addition, as the EU does not invest directly into equity participations in private sector entities, we assess the risk from its asset quality as 'low'.

Looking ahead, while no strict conditionality and monitoring will apply to loans under SURE and NGEU, member states are still expected to honour repayment obligations under these loans in full and on time. We therefore expect these programmes to have no adverse impact on the EU's asset quality.

Portfolio concentration

We assess a supranational's portfolio concentration by evaluating the concentration by geographies and sectors based on the Herfindahl-Hirschman Index (HHI). For consistency, to assess the sectoral concentration across institutions, we map the sectors in which the supranational operates to the UN's International Standard Industrial Classification. All else equal, a concentrated portfolio is riskier than a diversified one. This assessment can result in a one-notch positive adjustment.

Highly concentrated loan portfolio in line with mandate; SURE to lessen concentration

The EU's mandate to lend to sovereigns that require financial assistance results in a more highly concentrated portfolio than that of other supranationals. At end-2019, loans to Portugal (24.3bn) and Ireland (EUR 22.5bn) accounted for about 90% of the EU's loan exposure.

Looking forward, this concentration will significantly reduce based on the loans already approved for SURE, totalling EUR 87.8bn to 17 member states. Thus, as of 2021, the loan book will be significantly diversified, which we capture with a positive one-notch adjustment.

Additional considerations

We acknowledge the heterogeneity of supranationals and include idiosyncratic factors in our assessment that may affect the supranational's creditworthiness.

In the case of the EU, no additional considerations for the asset quality apply.

Profitability

Despite the non-profit nature of most supranationals, above-average profitability is still beneficial because it helps to generate internal capital buffers, which enhances the institution's shock absorption capacity. Conversely, sustained periods of losses will lead to lower capital levels. We assess a supranational's return on equity, after distribution of dividends to shareholders and possible transfers to concessional arms, to measure capital ultimately retained within the institution.

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Surpluses carried forward to next year's budget

The EU's profitability does not apply for our assessment as the institution has no equity. The institution's conservative budgetary practices ensure revenues exceed expenditures and annual surpluses are carried forward to the next year's budget.

Additional considerations

We acknowledge the heterogeneity of supranationals and include idiosyncratic factors in our assessment that may affect the supranational's creditworthiness. We may negatively adjust the overall rating if the institution has serious governance flaws or is facing operational risks that could impede it from pursuing its mandate. Risks include but are not limited to reputational damage resulting from inadequate or failed internal processes, people and systems, or external events.

In the case of the EU, we see no reason to adjust our assessment based on operational or governance issues.

Methodology

The methodology applicable for this rating and/or rating outlook 'Supranational Entities' is available on www.scoperatings.com.

Historical default rates of Scope Ratings can be viewed in the rating performance report on https://www.scoperatings.com/governance-and-policies/regulatory/esma-registration.

Please also refer to the central platform (CEREP) of the European Securities and Markets Authority (ESMA): http://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml.

A comprehensive clarification of our definitions of default and definitions of rating notations can be found in our public credit rating methodologies at www.scoperatings.com.

The rating outlook indicates the most likely direction of the rating if the rating were to change within the next 12 to 18 months. A rating change is, however, not automatically ensured.

Rating history

Date	Rating action	Outlook
30 October 2020	AAA	Stable
1 February 2019	AAA	Stable

Source: Scope Ratings GmbH

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I Scope's supranational scorecard: European Union and Euratom

Diel feeten			F	Risk assessmer	nt	EU		
Risk factors	Variables	Unit	Low (+1)	Medium (0)	High (-1)	Value	Risk assessment	Notche
Key shareholder rating	Weighted average rating of key shareholders	Avg. rating				AA-		
Shock-absorption capacity (-1; +2)	Equity + callable capital/potential liabilities*	%	≥ 20	< 20; ≥ 10	< 10			
	Indicative rating						AA-	
Limits to shareholder support	Shareholder concentration	HHI			> 2,000	2600.0	Medium/High	-1
(-1; 0)	Paid-in/callable capital	%			< 10	N/A	Low	-1
	Mandate	Description	LOLR			LOLR	N/A	
Preferred creditor status	Exposure to own shareholders	% total loans	≥ 75			94.6	N/A	
(0; +1)	Private sector exposure	% total loans	≤ 25			0.0	N/A	1
	History/track record					Yes	1	
Risks from mandated activities	Weighted average borrower quality (top 10)	Rating	≥ A-	≥ BBB-	< BBB-	A-	Low	
(+/- 1)	Max. equity investments	% equity	≤ 50			0.0	Low	1
Additional considerations	. ,				_	2.0		2
	Indicative fundamental rat	ing					AAA	
	Liquid assets ratio**	%	≥ 30	< 30; ≥ 20	< 20	48.4	Moderate	1
	WAM issuance (latest)	Years	≥ 5	< 5; ≥ 2	< 2	15.0	Low	1
Liquidity & funding	Funding volume	EUR or USD bn	≥ 10			164.3	Low	0
(-2; +7)	Currency diversification	Top 1 share	≤ 70			100.0	Medium/High	U
	ESG issuance	% issuance	≥ 15			< 15.0	Medium/High	0
	Adjustments					0.0		0
	Leverage ratio***	% equity	≤ 300	> 300; ≤ 600	> 600	N/A		
Leverage & asset quality	NPLs****	% total loans	≤ 2	> 2; ≤ 4	> 4	0.0	Low	0
(-2; +4)	Actual equity participation****	% equity	≤ 50			N/A		Ü
(-2, +4)	Portfolio Geographical concentration	HHI	≤ 2,000			1400.0	Low	1
	concentration***** Industry concentration	HHI	≤ 2,000			N/A		'
Profitability (+/- 1)	Return on equity	%	≥ 3	< 3; ≥ 0	< 0	N/A		
Additional considerations						0.0		0
	FINAL RATING						AAA	

^{*}Callable capital of potentially borrowing/benefiting shareholders rated ≥ AA-. If the value is above 50, we adjust the assessment positively by two notches.

Source: European Commission, Scope Ratings GmbH

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^{**}If the value is above 50 (80), we adjust the assessment positively by two (three) notches. Ratios above 120 receive a four-notch adjustment.

^{***}If the value is below 100, we adjust the assessment positively by two notches.

^{****}Adjusted taking 'risks from mandated activities' into account.

^{*****}If either geographical or industry concentration is assessed as 'low' risk, we will adjust positively by one notch.

LOLR stands for lender of last resort. HHI refers to the Herfindahl-Hirschman Index. ESG-issuance can only provide positive uplift.

Operational rating drivers are calculated using a weighted three-year average.

NB. Based on Scope's estimates for the EU's future operations and balance sheet, conservatively assumed under full utilisation of the SURE and NGEU programmes and current parameters.



II Shareholders: European Union

EUR m, unless noted otherwise

Shareholders	Budgetary contribution*	% of total	% of total (excl. UK)	Pro-rata UK adjustment	After UK adj.	New GNI-based rebates	Final contribution	Final contribution (%)	Rating	Share >= AA- (%)	HHI** (index)
Germany	23,625.46	22.44	25.00	2,694.97	26,320.43	3,671.00	23,672.27	22.48	AAA	22.48	0.137
France	17,654.16	16.77	18.68	2,013.82	19,667.98		21,346.49	20.27	AA	20.27	0.111
Italy	12,693.89	12.06	13.43	1,448.00	14,141.89		15,348.79	14.58	BBB+		
Spain	8,622.40	8.19	9.12	983.56	9,605.97		10,425.76	9.90	A-		
Poland	3,472.03	3.30	3.67	396.06	3,868.08		4,198.19	3.99	A+		
Belgium	3,249.96	3.09	3.44	370.72	3,620.68		3,929.68	3.73	AA	3.73	0.004
Netherlands	4,838.35	4.59	5.12	551.91	5,390.27	1,921.00	3,825.64	3.63	AAA	3.63	0.004
Austria	2,618.20	2.49	2.77	298.66	2,916.86	565.00	2,584.70	2.45	AAA	2.45	0.002
Sweden	2,737.13	2.60	2.90	312.23	3,049.36	1,069.00	2,208.71	2.10	AAA	2.10	0.001
Denmark	2,047.14	1.94	2.17	233.52	2,280.66	377.00	2,089.95	1.98	AAA	1.98	0.001
Ireland	1,720.47	1.63	1.82	196.26	1,916.73		2,080.31	1.98	A+		
Finland	1,704.04	1.62	1.80	194.38	1,898.42		2,060.43	1.96	AA+	1.96	0.001
Romania	1,464.88	1.39	1.55	167.10	1,631.98		1,771.25	1.68	BBB-		
Czech Republic	1,428.23	1.36	1.51	162.92	1,591.15		1,726.94	1.64	AA	1.64	0.001
Portugal	1,410.74	1.34	1.49	160.92	1,571.66		1,705.79	1.62	BBB+		
Greece	1,306.24	1.24	1.38	149.00	1,455.24		1,579.43	1.50	BB		
Hungary	922.88	0.88	0.98	105.27	1,028.15		1,115.89	1.06	BBB+		
Slovakia	647.48	0.61	0.69	73.86	721.33		782.89	0.74	A+		
Bulgaria	401.99	0.38	0.43	45.86	447.85		486.07	0.46	BBB+		
Croatia	367.23	0.35	0.39	41.89	409.12		444.03	0.42	BBB-		
Slovenia	336.46	0.32	0.36	38.38	374.84		406.82	0.39	Α		
Lithuania	312.97	0.30	0.33	35.70	348.67		378.43	0.36	A-		
Luxembourg	298.35	0.28	0.32	34.03	332.39		360.75	0.34	AAA	0.34	0.000
Latvia	207.92	0.20	0.22	23.72	231.64		251.40	0.24	A-		
Estonia	189.70	0.18	0.20	21.64	211.34		229.37	0.22	AA-	0.22	0.000
Cyprus	150.50	0.14	0.16	17.17	167.66		181.97	0.17	BBB-		
Malta	87.73	0.08	0.09	10.01	97.73		106.07	0.10	A+		
United Kingdom	10,781.55	10.24							AA		
Total	105,298.07	100.00	100.00	10,781.55	105,298.07	7,603.00	105,298.07	100.00		60.81	2,600.000

^{*}Source: European Commission, refers to the year 2019. Data taken from: http://ec.europa.eu/budget/library/figures/internet-tables-all.xls

Note: We calculate the member states' 2019 GNI-based budgetary contributions, adjusted for VAT-based contributions and several corrections, including for the UK. We further account for i) a pro-rata replacement of the UK's adjusted GNI-based budgetary contributions from 2021; and ii) rebates to apply to the 2021-2027 Multiannual Financial Framework for GNI-based contributions in 2020 prices, of EUR 3.77m for Denmark, EUR 3.671bn for Germany, EUR 1.921bn for the Netherlands, EUR 565m for Austria and EUR 1.069bn for Sweden, based on the 17-21 July European Council conclusions. The calculation based on GNI-based budgetary contributions reflects our view that, in case VAT-based own resources were to drop significantly (typical during an economic downturn), the loss in revenues would have to be compensated for via higher GNI-based own resources from member states. As a result, the GNI-based contributions are determined each year such that the EU's budget is in balance, accounting for VAT own resources and pre-determined adjustments, including for the UK. The GNI-based contributions thus guarantee the EU's budget is balanced.

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^{**} Herfindahl-Hirschmann Index, rounded to nearest 100.



III Scope's liquid assets ratio calculation for the European Union, 2020E-2028F

Budgetary margin	2020E	2021F	2022F	2023F	2024F	2025F	2026F	2027F	2028+
Own resources ceiling (% EU GNI)	1.20	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Temporary increase (% EU GNI)		0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Adj. own resources ceiling (% EU GNI)	1.20	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Payment appropriations (% EU GNI)	1.01	1.19	1.18	1.15	1.15	1.16	1.16	1.17	1.17
Budgetary margin (% EU GNI)	0.19	0.81	0.82	0.85	0.85	0.84	0.84	0.83	0.83
of which pro-rata rated >= AA-*	67%	61%	61%	61%	61%	61%	61%	61%	61%
Adjusted budgetary margin (% EU GNI)	0.13	0.49	0.50	0.52	0.51	0.51	0.51	0.50	0.50
Adjusted budgetary margin (EUR bn)	19.55	69.23	70.90	74.74	75.35	75.97	76.59	77.20	78.36
Cash deposits (EUR bn)**	24.77	24.77	24.77	24.77	24.77	24.77	24.77	24.77	24.77
Liquid assets (EUR bn)	44.32	93.99	95.67	99.50	100.12	100.74	101.35	101.97	103.13
Liabilities < 1 year (excl. borrowings; EUR bn)***	33.03	33.03	33.03	33.03	33.03	33.03	33.03	33.03	33.03
Estimated annual disbursements (EUR bn)	31.50	145.86	159.47	177.93	180.59	111.47	68.28	46.52	3.00
EFSM/MFA/BOP***	1.50	3.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00
SURE	30.00	70.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NGEU****		72.86	158.47	176.93	179.59	110.47	67.28	45.52	0.00
Estimated annual bond repayments (EUR bn)	3.44	9.75	2.70	3.50	3.20	2.40	4.00	3.00	42.25
EFSM/BOP/MFA	3.44	9.75	2.70	3.50	3.20	2.40	4.00	3.00	3.00
SURE*****									10.00
NGEU*****									29.25
Liabilities + disbursements + repayments (EUR bn)	67.97	188.64	195.20	214.46	216.82	146.90	105.31	82.55	78.28
Liquid assets ratio (%)	65.20	49.83	49.01	46.40	46.18	68.57	96.25	123.52	131.74
EU GNI (EUR trn)******	15.36	14.00	14.21	14.42	14.64	14.86	15.08	15.31	15.54
UK GNI (EUR trn)*******	2.34								

^{*} Based on Scope's latest sovereign ratings, excluding the UK from 2021.

Source: European Commission, Scope Ratings GmbH

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^{** 2020} figure is an estimate based on 2017-19 figures, assumed to remain constant.

^{***} Based on average 2017-19 figures, adjusted for borrowings, which are captured under 'bond repayments'.

^{****} Estimated MFA disbursements based on latest investor presentation. From 2022 onwards, we assume EUR 1bn disbursements.

^{******} Own estimations based on Bruegel's assumptions on profile of payment appropriations, in current prices.

^{*******} Based on maximum repayment per European Council 17-21 July 2020 meeting conclusions.

^{********} Based on latest European Commission forecast for 2020 and 2021 in current prices, with constant 1.5% annual nominal growth thereafter.

^{*******} Based on latest European Commission forecast at current prices.



IV Statistical tables

	2015	2016	2017	2018	2019
Key shareholders					
Average budgetary-key weighted rating	AA	AA	AA	AA-	AA-
Share of shareholders rated at or above AA- (%)	66.9	66.9	66.9	66.9	60.8*
Liquidity (EUR m)					
Liquid assets with maturity within 12 months					
Cash & cash equivalents**	16,750.0	21,883.3	25,150.0	20,975.0	28,091.7
Own resources ceiling	176,497.0	178,056.0	183,421.0	188,972.0	197,448.5
Total expenditures	145,276.0	138,312.0	139,136.0	144,812.0	159,095.0
Margin: Own resources ceiling less total expenditures	31,221.0	39,744.0	44,285.0	44,160.0	38,353.5
Adjusted for pro-rata share of shareholders rated AA-	20,902.1	26,608.1	29,648.3	29,564.6	22,894.4
Seven-year moving average of adjusted margin	19,795.6	20,088.5	21,043.0	22,035.7	21,757.7
Total liquid assets (cash + 7-year adj. budget margin)	36,545.6	41,971.8	46,193.0	42,244.8	49,849.3
Liabilities with maturity within 12 months	40,130.0	42,288.0	45,898.0	34,829.0	28,684.0
Liquidity-coverage ratio (%, 12-month)	91.1	99.3	100.6	121.3	173.8
Funding (EUR m)					
Volume	13,405.0	4,760.0	1,063.0	5,015.0	420.0
Share of total (%)					
Euro	100.0	100.0	100.0	100.0	100.0
Other currencies	-	-	-	-	-
ESG issuance	-	-	-	-	-
Leverage (EUR m)					
Debts evidenced by certificates	56,656.0	54,951.0	54,674.0	53,725.0	52,433.0
Leverage ratio (%)	N/A	N/A	N/A	N/A	N/A
Asset quality (EUR m)					
Total loans	57,251.0	55,478.0	54,981.0	53,941.0	52,684.0
EFSM	47,509.0	47,456.0	47,456.0	47,400.0	47,394.0
BOP	5,811.0	4,272.0	3,114.0	1,734.0	201.0
MFA	3,024.0	2,964.0	3,924.0	4,388.0	4,754.0
Euratom	301.0	252.0	250.0	254.0	214.0
ESCS in liquidation	229.0	191.0	100.0	98.0	-
Other	377.0	343.0	137.0	67.0	121.0
Impaired loans***	13.0	7.0	8.0	8.0	10.0
Non-performing loan ratio (%)	-	-	-	-	-
Profitability (EUR m)					
Total revenues	146,624.0	144,717.0	139,691.0	158,642.0	163,917.6
of which, GNI-based own resource	94,009.0	95,578.0	78,279.0	105,780.0	108,820.3
of which, VAT-based own resource	18,269.0	15,935.0	16,584.0	17,624.8	18,104.8
Total expenditures	145,276.0	138,312.0	139,136.0	156,672.7	159,095.5
Budget surplus	1,348.0	6,405.0	555.0	1,969.3	4,822.1
Return on equity (%)	N/A	N/A	N/A	N/A	N/A

^{*} Adjusted for Brexit impact. ** Average of monthly cash balances. *** Refers to loans with special conditions; not related to financial assistance Source: European Commission, Scope Ratings GmbH

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Scope Ratings GmbH

Headquarters Berlin

Lennéstraße 5 D-10785 Berlin

Phone +49 30 27891-0

London

3rd Floor 111 Buckingham Palace Road London SW1W 0SR

Oslo

Haakon VII's gate 6 N-0161 Oslo

Phone + 47 21 623142

info@scoperatings.com www.scoperatings.com

Frankfurt am Main

Neue Mainzer Straße 66-68 D-60311 Frankfurt am Main

Phone +49 69 66 77 389-0

Madrid

Edificio Torre Europa Paseo de la Castellana 95 E-28046 Madrid

Phone +34 914 186 973

Paris

23 Boulevard des Capucines F-75002 Paris

Phone +33 1 8288 5557

Milan

Regus Porta Venezia Via Nino Bixio, 31 20129 Milano MI

Phone +39 02 30315 814

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Scope Ratings GmbH, Lennéstraße 5, 10785 Berlin, District Court for Berlin (Charlottenburg) HRB 192993 B, Managing Director: Guillaume Jolivet.

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