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GRÉGORY CLAEYS ARGUES THAT THE SURE PLAN IS A SMALL STEP FORWARD

CHRISTINA SEGAL-KNOWLES EXPLORES THE ROLE OF DIGITAL CURRENCIES

AN ECB DIGITAL CURRENCY. YVES MERSCH ASKS IF THIS IS A FLIGHT OF FANCY

THE GLOBAL TRADE AND FINANCE PLATFORM

Foreword

Welcome to the latest *WCR* Finance ePub. This publication has been prepared in response to readership demand for an overview of the financial sector in these turbulent and unique times.

All aspects of the sector are examined, with the most respected authors providing the reader with the most comprehensive information available. Our brief is to provide all the data necessary for the readership to make their own informed decisions. All editorials are independent, and content is unaffected by advertising or other commercial considerations. Authors are not endorsing any commercial or other content within the publication. ■

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An uncompromising budget

The EU response to the COVID-19 crisis has so far been weak. Zsolt Darvas considers the Next Generation EU proposal, and feels that an opportunity has been missed to reform the EU budget

Apart from decisive European Central Bank measures, the EU-wide response to the COVID crisis had been rather weak until the Commission put on the table a drastically new proposal: the creation of a new recovery facility, 'Next Generation EU', that would borrow money in the name of the EU to finance EU-wide expenditures.

The changes to the proposed standard seven-year budget that primarily focuses on long-term structural issues are however generally small, and funding reductions are compensated by new funds from the recovery instrument, suggesting that an opportunity is missed to reform the EU budget.

Summary

The overall proposal has a number of useful aspects and some limitations. Main advantages:

- 'Next Generation EU' financed by long-term EU borrowing would include €440 billion grants, €60 billion guarantees and €250 billion loans, in addition to the standard seven-year budget.
- Two-thirds of the new €440 billion grants would be channelled via the proposed new Recovery and Resilience Facility, which increases transparency. The rest will be scattered all over in existing EU budget programmes, possibly to deploy them faster or to increase the chance of acceptance of the whole package by pleasing member states unhappy about previously proposed cuts.
- 'Next Generation EU' aims at macroeconomic stabilisation while boosting green and digital transitions.
- Funding is increased for external actions, research and health, which is welcome.

- The current 2020 EU budget is increased by €11.5 billion.
- Some useful new own resources are proposed, which help align EU revenues with EU goals and might also trigger behavioural changes, such as lower pollution.
- Leaving out earlier proposals for the 'euro area budget' is not a big loss due to their inferior design; focus should be concentrated on the new recovery facility.
- The boldness of the recovery facility proposal can boost confidence with positive impacts on the economy.

... the coronavirus pandemic has completely changed the economic and social outlook as the EU is expected to suffer from a very deep recession, jobs and well-being are at risk, and hard-hit regions might fall behind

Limitations:

- Though macroeconomically significant, the overall measures announced remain below what the dire economic situation would necessitate.

- Due to the administrative processes, programme design and approval, actual pay-outs will not be frontloaded but spread over a number of years.

- The proposed €250 billion loans are a less useful mechanism than the grants.

- The proposal misses the opportunity for a more fundamental reform of the EU's budget, including the Common Agricultural Policy.

- Only the new own resources that are paid by non-EU entities will help the financing of the general EU budget and loan repayment for 'New Generation EU'. Own resources coming from EU-based entities and governments would only change the distribution of overall national contributions.

- The Just Transition Fund to alleviate the socio-economic impacts of the transition towards climate neutrality is heavily front-loaded to 2021-2024, even though the green transition will have a longer time frame.

- Rebates would stay. This may be designed to alleviate opposition to a more fundamental reform of the MFF and help some countries accept the whole plan.

Table 1. Comparison of the May 2018 and May 2020 MFF proposals for commitment appropriations (in 2018 constant prices

	2018 MFF proposal for 2021-2027	2020 MFF proposal for 2021-2027	2020 Next Generation EU proposal for 2021-2027		
			Grants	*Guarantees*	*Loans*
Research and innovation	91.0	87.7	13.5		
European strategic investments	44.4	30.8		56.3	
Single market	5.7	5.8			
Space	14.4	13.4			
Regional development and cohesion	242.2	237.7	50.0		
Recovery and resilience		18.2	310.0		250.0
Economic and Monetary Union	22.3				
Investing in people, social cohesion and values	123.5	116.4			
Agriculture and maritime policy	330.7	340.2	15.0		
Environment and climate action	5.1	15.3	30.0		
Migration	10.0	12.1			
Border management	18.8	17.7			
Security	4.3	4.6			
Defence	17.2	9.5			
Resilience and crisis response	1.2	4.3	9.7		
External action	93.2	89.2	15.5*		
Pre-accession assistance	12.9	12.9			
European public administration	75.6	74.6			
Margins	22.2	9.6			
Total	1,134.6	1,100.00	443.7*	56.3*	250.0

*Note: Insufficient information does not allow splitting the 202102027 MFF proposal between grants, guarantees and loans. * The €15.5 billion external action component of Next Generation EU fund also includes guarantees, but their amount is not specified.*
Source: Author's compilation based on Commission Communications COM(2018) 321 final (page 30) and COM(2020) 442 final (page 20).

- Little information is provided about EU budget revenues; the earlier proposal to derive an EU revenue stream based on the common consolidated corporate tax base is dropped; nothing is said about what proportion of customs duty revenues could be kept by member states as 'collection costs'.

- The proposal also misses an opportunity to improve on the EU's outdated budgeting methodology.

- The proposal is also still incomplete as underlying calculations and proposed regulations are still to be detailed, perhaps because of time pressure.

The MFF saga

Debates around the EU's seven-year Multiannual Financial Framework (MFF) for 2021-2027 dragged on for more than two years after the Commission made its first proposal without reaching an agreement.

Member states were bickering about macroeconomically irrelevant points such as whether the size of the budget should be 1.00%, 1.08% or 1.12% of gross national income (GNI), which gaps are several factors smaller than any planning error in a national budget.

The most contentious issues led to a dead end: the assessment of EU added value of some spending like in agriculture; concerns about the proper use of some funds; proposed cuts to agricultural and cohesion policy spending; increases in spending on new priorities like the fight against climate change; linking EU funds to the respect for rule of law; the elimination of rebates; establishing new revenue sources; the euro area budget; the increase in national co-financing of cohesion projects etc.

While these disputes remain today, the coronavirus pandemic has completely changed the economic and social outlook as the EU is expected to suffer from a very deep recession, jobs and well-being are at risk, and hard-hit regions might fall behind.

Soaring public debt levels in some countries might trigger sovereign debt crises with potentially devastating social, economic and political consequences, not only for the countries concerned but for the EU as a whole.

EU-wide response so far

The EU reacted by relaxing state-aid and fiscal rules to allow governments to subsidise businesses losing revenues. Such rescues are welcome as they keep the productive and human capacity ready to take off when the recovery starts.

Moreover, stimulus in one country helps other EU countries through spillover effects. However, uneven state supports across the Union risk undermining competition in the single market, as also argued by Guntram Wolff.

The European Central Bank addressed the economic fallout by significantly expanding asset purchases, relaxing bank capital rules, offering credit to banks with a subsidy and accepting an even broader set and less credit worthy collateral from banks.

In contrast, the rest of the European response has been rather weak so far. Not much could have been done with the 2020 annual EU budget because all ceilings had been fixed in 2013, when the 2014-2020 MFF was agreed.

The Commission took several initiatives that were well made, even if they cannot make a big difference for member states' public finances: mobilise all unused funds, allow reallocations between and within programmes, simplify

access criteria, provide liquidity by delaying the repayment of unspent pre-financing and abolish national co-financing of EU cohesion spending.

Overall, the Eurogroup's €540 billion package is feeble.

- €240 billion is a new pandemic credit line from the European Stability Mechanism (ESM) for eurozone members, which offers cheap loans for 10 years amounting to maximum 2% of GDP of each country to cover pandemic-related healthcare costs. Its usefulness can be questioned, considering that no country has yet applied for it in the two weeks since it became operational.

Applying for an ESM loan could signal that the country has weak public finances ('stigma effect'), which could reduce demand for the credit line. Also, pandemic-related healthcare costs so far have been well below 1% of GDP, so the potential interest saving from a small credit line is miniscule.

- The €100 billion temporary Support to mitigate Unemployment Risks in an Emergency (SURE) for all EU countries is just a small step forward, as it can at best lead to marginal interest savings.

- The European Investment Bank's €200 billion extra liquidity support to hard-hit small and medium-sized enterprises in the EU, though welcome, would not significantly alleviate the fiscal burden of high-public debt countries.

The recovery fund proposal and the counter-proposal

The Franco-German temporary recovery fund proposal of 18 May 2020 put an entirely new alternative on the table:

€500 billion joint borrowing would finance EU budgetary expenditures for the most affected sectors and regions, involving redistribution between EU countries.

This was rightly hailed as a defining moment in the Union's history as it proposed to implement actual EU spending instead of loans or the usual EU financial trick that trigger large amounts of private investments from little EU money guarantee. This said, €500 billion (or about 3.6% of EU GDP), though a macroeconomically significant amount, was not as high as the severity of the COVID induced crisis would have warranted in my view.

The Franco-German proposal also aimed to integrate the fund into the EU's multiannual budget, foster green and digital transitions, strengthen research and innovation, support structural reforms, and ensure fair taxation and a common consolidated tax base.

A counter-proposal by the so-called 'frugal four' – Austria, Denmark, the Netherlands and Sweden – called for a *"modernised EU budget"* that reprioritized existing spending. It was in essence a call for a substantial reshuffle of current EU spending. The four countries also called for a temporary recovery fund which only provides loans and avoids any mutualisation of debt; they stated that the overall level of standard MFF (not considering the recovery fund) should not be more than 1.00% of GNI; and insisted that the EU budget rebates from which these countries benefit must remain.

The 27 May 2020 new MFF proposal

The European Commission revealed its new MFF proposal on 27 May 2020. The proposal needed to combine two features: medium- and long-term structural spending, which is the main scope of the 'standard' seven-year MFF; and, for the first time in the history of the Union, macroeconomic stabilisation at the EU level. It includes two main elements:

- The standard seven-year MFF for 2021-2027, amounting to €1,100 billion at constant 2018 prices, or €1,240 billion at current prices, which could be around 1.12% of EU GNI[1] and to be financed, as usual, by some direct EU budget revenues and member state contributions.

- The new and temporary 'Next Generation EU' instrument for 2021-2024, amounting to €750 billion at constant 2018 prices, or €809 billion at current prices. Out of €750 billion, about €440 billion would be grants, €60 billion would be guarantees and €250 billion would be loans[2]. The EU would borrow long-term to finance this instrument. While most of the commitments for this instrument would be made in 2021-2024, actual pay-out would spread over more years.

Somewhat misleadingly, the Commission's communication adds a third item, the €540 billion Eurogroup measures discussed above, that mostly constitute of loans and thereby differ from EU budget expenditures. As argued, very few countries can be expected to draw on the ESM credit line and SURE, which are part of these €540 billion earlier measures. Therefore, much less than €540 billion are likely be actually used.

In addition to the above proposals, which apply for the period starting in 2021, the Commission also proposes to amend the current multiannual financial framework 2014-2020 and make an additional €11.5 billion in funding available in 2020, reflecting the urgency of the situation.

'Next Generation EU' – the new recovery instrument

This new facility is, like the Franco-German proposal, a bold, macroeconomically relevant, positive step forward. However, considering the severity of the current crisis, on its own it remains below the levels needed for a stimulus to be efficient.

This instrument is aimed at macroeconomic stabilisation and financed by EU borrowing on capital markets. It almost fully incorporates the Franco-German proposal of €500 billion EU spending, apart from the fact that €60 billion of the €500 billion amount would be guarantees instead of EU spending.

€250 billion loans would also be available in the scheme, though this component is less useful. Some countries could benefit from cheaper borrowing from the EU than from the market, but since interest rate differentials are generally low, the benefit would be small.

However, the most fiscally-stretched countries could still benefit from long-term EU borrowing, since they would have to raise less from the market in the meantime. This can help public debt management. Whether borrowing from the EU budget under 'Next Generation EU' would carry a 'stigma' effect similar to what the literature suggests for borrowing from the IMF remains an open question.

It is so far impossible to evaluate the extent of possible redistribution via 'Next Generation EU' because the communication is not clear on this point apart from stating that *"It will be available to all member states but support will be concentrated in the parts of the Union most affected and where resilience needs are greatest."*

Countries would have to prepare recovery and resilience plans as part of their National Reform Programmes, which would be assessed in the European Semester process. Thereby, the Commission, the Council and the European Parliament will have control over the allocation of the funds. The EU support would be released in instalments depending on progress made and on the basis of pre-defined benchmarks.

The three arms of the 'Next Generation EU' instrument

Arm 1: Supporting member states to recover (€415 billion grants and €250 billion loans)

- The 'Recovery and Resilience Facility' is the largest component of the 'New Generation EU instrument', with €310 billion grants and €250 billion loans. Its goals are to support investments and reforms essential to a lasting recovery; improve the economic and social resilience of member states; and support the green and digital transitions.

- REACT-EU aims to achieve a quick response while the other instruments are put in place. It increases cohesion policy support by €5 billion as soon as 2020 via a revision of the current 2014-2020 MFF and by €50 billion in 2021-2022;

- The already planned Just Transition Fund would be significantly boosted by €30 billion, to reach a total value of €40 billion in 2021-2027;

- The European Agricultural Fund for Rural Development would benefit from an additional €15 billion to support farmers and rural areas in making the structural changes necessary to implement the European Green Deal.

Arm 2: Triggering private investments (€56 billion guarantees)

- The proposed new Solvency Support Instrument (€5 billion in 2020 by modifying the current MFF and then €26 billion from the 'Next Generation EU') aims to mobilise private investment in struggling companies by providing partial guarantees against losses. Altogether, €31 billion from the EU budget will provide a guarantee of €75 billion to the European Investment Bank Group, which in turn will leverage this guarantee up to €300 billion investment. Therefore, financial engineering aims to increase actual EU money by 10-fold;

- InvestEU programme, already agreed by the co-legislators, would be boosted by €3 billion to trigger private investment of €240 billion;

- The new Strategic Investment Facility will get another €15 billion as an additional window under InvestEU to support building strong and resilient value chains across the EU and enhance the autonomy of the Union's single market. This could generate €150 billion private investments.

Arm 3: 'Learning the lessons from the crisis': mix of measures related to health, protection, research and external actions (€39 billion mostly for grants, but some of this amount is for guarantees)

- A new EU4Health programme with a total funding of €4 billion, of which €7.7 billion would be financed from the New Generation EU instrument, to enhance EU health crisis prevention, preparedness and response;

- rescEU, the EU's civil protection mechanism to finance investments in emergency response infrastructure, transport capacity and emergency support team, is to be reinforced by €2 billion;

- Horizon Europe is proposed to be boosted by €5 billion to reach a total envelope of €94.4 billion, to increase European support for health and climate-related research and innovation activities;

- To strengthen external actions, €5 billion would be allocated to the neighbourhood instrument (including a new External Action Guarantee) and €5 billion to humanitarian aid.

Composition and timing of EU spending

Disbursement from the Recovery and Resilience Facility is not expected to be frontloaded (Table 2). Only 6% is

expected to be actually paid out in 2021, and about half between 2023-24. REACT-EU, which is supposed to be fully committed in 2021-2022, could help frontloading, but its firepower is less than one-sixth of the Recovery and Resilience Facility. Thereby, the total €440 billion grant component of 'Next Generation EU', which is 3.2% of annual GNI, will be distributed over a number of years, with the largest pay-outs expected in 2023-24.

Two-thirds of the grant component of the 'New Generation EU' instrument are included in the Recovery and Resilience Facility. One third of the grants is used to top up various existing facilities. Though this will make it difficult to disentangle the temporary recovery measures from the more long-lasting 'standard' EU budget expenditures (see Table 1), this method offers some advantages. Existing EU programmes are up and running and can be deployed fast.

Table 2. Expected annual breakdown of the Recovery and Resilience Facility disbursements

	2021	2022	2023	2024	2025	2026	2027	Later years
Grants - Commitments	39%	40%	10%	10%	0%	0%	0%	
Grants - Payments	6%	16%	23%	26%	18%	8%	3%	1%
Loans - Commitments	50%	50%						
Loans - Payments	15%	28%	25%	23%	10%			

Note: The table on page 40 of regulation proposal COM(2020) 408 final.
Source: This facility is proposed to include €310 billion grants and €250 billion loans (at 2018 constant prices).

Moreover, countries that complained about EU expenditure cuts in the 2018 proposal might find it advantageous that the new recovery facility increases these spending categories, which might in turn increase the chances that the whole package is accepted. Allocating more funds to EU public good such as research in health, resilience, and the green and digital transitions is welcome.

More generally, the recovery facility aims at combining macroeconomic stabilisation with the goals of green and digital transitions, which is welcome too. By attaching green conditions to state aid, governments can promote companies' economic and environmental viability thereby accelerating the adoption of low-carbon and circular technologies, which are important EU goals, as argued by Dirk Schoenmaker. The same principle should be extended to EU-financed programmes.

The new proposal to increase the allocation from the Just Transition Fund (JTF) from €10 billion to €40 billion is welcome, considering that this is positive EU-wide initiative (Cameron *et al*), which had been allocated a rather small amount in the initial January 2020 proposal.

However, the JTF seems to be heavily frontloaded as the increase would be financed by the Recovery and Resilience Facility, which is available for the next four years. While frontloading macroeconomic stabilisation would be important, frontloading JTF is inconsistent with its objective to alleviate the socio-economic impacts of the transition towards climate neutrality.

The green transition it is meant to accompany, will not be that frontloaded; neither its social impacts. Moreover, important changes are needed for the country allocations to avoid undue concentration of this funding in some member states, as Cameron *et al* argued. The Commission's communication does not foresee such changes.

The proposed increased funding of external actions is a positive aspect and corrects to some extent the timid 2018 proposal. The EU Commission thus proposes to take a greater responsibility for helping our less fortunate neighbours and other parts of the world.

Reinforcing EU's health capacities is obviously welcome, as the coronavirus pandemic revealed that the EU can play an important role in addressing public health crises.

The proposed overall amount of the 'standard' seven-year MFF, €1,100 billion, is slightly lower than the €1,1134.6 billion proposal made two years ago (both are at 2018 constant prices). In the meantime, GNI forecasts were revised downward and the current proposal as a share of GNI (estimated at 1.12%) is practically the same as the 2018 proposal as a share of GNI (1.11%)[1].

Otherwise, the differences between the May 2018 and the May 2020 proposals are generally small and wherever a somewhat larger cut is proposed, this is compensated by top-ups from the 'New Generation EU' instrument. This suggests that the current opportunity for a more fundamental reform of the EU's budget was missed.

Leaving out the 2018 proposal for the 'euro area budget' is not a big loss, given that its proposed design was disappointing. The so-called Budgetary Instrument for Convergence and Competitiveness (BICC) seemed to replicate existing EU budget facilities without a meaningful redistribution across countries.

The pandemic-induced emergency has not led to more wide-ranging changes to the EU's Common Agricultural Policy even though the European value added of support for farmers is questionable (see our paper with Guntram Wolff). Importantly, CAP is ineffective and possibly counterproductive in achieving the goal of greening European agriculture.

It would have been desirable to reallocate farmers' earnings subsidies to correcting market failures and promoting public goods, such as environment and biodiversity, and, like in the US, insuring against large risks such as earthquakes and animal disease epidemics.

National co-financing of earnings subsidies is another missed reform opportunity.

Little is said about the other major EU budget spending item, cohesion policy, beyond that the Commission is currently adjusting its earlier proposals.

The role of new own resources

Little information is provided about the financing of the EU budget, beyond reaffirming some useful proposals already made in 2018 (a simplified value added tax-based own resource, a non-recycled plastics packaging waste levy and a revenue based on the EU's Emissions Trading System) and naming some new possible revenue sources (a carbon border adjustment mechanism, a levy on large companies and a digital tax).

While the 2018 revenue source proposals were positive (see our blogpost with Grégory Claeys), there is a debate on the desirability of carbon border adjustment. Aligning EU revenues with EU goals is sensible and might trigger behavioural changes, such as lower pollution.

The 2018 proposal to derive an EU revenue stream based on the common consolidated corporate tax base is dropped, even though we had a positive view of this proposal earlier. The commission communication contains the somewhat misleading claim that new direct EU budget revenues (called 'own resources') will 'help' the repayment of EU borrowing for the New Generation EU instrument 'in a fair and shared way'. This claim calls for clarification.

Own resources might reduce the contributions by national finance ministries to the EU budget, but do not necessarily reduce the total contribution of the country, if we take into account what companies, which are subject to the own resources, contribute.

Guntram Wolff highlights that an EU tax on companies would mean that the revenues from such a tax would not accrue to national budgets, implying lower national budget revenues. Some new own resources would even be paid by finance ministries.

Therefore, unless the new resource comes from entities outside the EU, they just change the distribution of total national contributions to the EU budget. Only some of those proposed by the Commission, like the carbon border adjustment mechanism proposal and a new digital tax, would be paid, at least partially, by non-EU based entities and therefore reduce national contributions. Others do not, like the one based on the EU's Emission Trading Scheme and the levy on non-recycled plastic waste.

The rebate compromise

EU budget revenue corrections, or rebates, are granted in a complex and non-transparent system (see here). The rationale for rebates does not correspond to the original idea of the 1984 Fontainebleau Summit, which stated that *"any member state sustaining a budgetary burden which is excessive in relation to its relative prosperity may benefit from a correction at the appropriate time"*: countries that benefit from the rebates are among the most prosperous in the EU and have low public debt levels.

In my view, the largest net contributors might judge that a big share of the EU budget is redistributed to countries for spending that do not constitute European public goods, or that there are risks for their proper use. In this case their attempt to reduce net contributions is understandable.

The May 2020 proposal said that: *"in the present situation, given the economic impact of the COVID-19 pandemic, phasing out of rebates would entail disproportionate increases of contributions for certain member states in 2021-2027. To avoid this, the current rebates could be phased out over a much longer period of time than foreseen by the Commission in its proposal in 2018."* In other words, rebates remain.

Full elimination of the rebates would increase the net contribution of the Netherlands by 0.15% of GNI, of Sweden by 0.12%, of Germany by 0.07%, while it would not change the net contribution of Denmark and would reduce the net contribution of other countries by 0.05%, in each year (see Table 4c here)[3].

Perhaps keeping the rebates will be the price for the approval of the New Generation EU instrument. ■

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Endnotes

1. The Commission has not expressed the overall amount of the proposed MFF as a share of GNI. For my calculations, I used the May Commission forecast for 2021 and assumed that real GNI growth will be 1.5% per year in 2022-2027. Under such a scenario, the €1,100 billion seven-year MMF amounts to 1.12% of GNI. The May 2018 proposal foreseen that the then-proposed €1,134.6 billion overall value would amount to 1.11% of GNI. Between May 2018 and May 2020, GNI outlook deteriorated and thereby a lower amount now accounts for the same share of expected GNI as previously proposed larger amount.

2. The Commission's Communication talks about €500 billion grants, but the detailed description reveals that part of that

would be guarantees.
3. The reason why Denmark would not face any change in net contributions by a complete elimination of rebates is that Denmark is entitled to lower rebates than the Netherlands, Sweden and Germany, but contributes to the rebates of these three countries. Denmark's rebate is projected to be the same as the Danish contribution to the rebates of the three countries in the 2021-2027 MFF. Austria benefitted from temporary reductions in its GNI-based contributions in 2014-2016, but not later, plus benefitted from a reduction in its contribution to the UK rebate, which ends with Brexit. Hence, no rebate is considered for Austria in the post-2020 period.

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A small step forward

Grégory Claeys argues that the EU's SURE plan to safeguard employment is too modest to have a significant impact the COVID-19 crisis

The European Union's new instrument, the so-called temporary Support to mitigate Unemployment Risks in an Emergency (SURE), will provide temporary support of up to €100 billion in loans to EU countries that request financial assistance to fund job-saving initiatives. While the creation of the instrument has generated a lot of interest, its main benefit is to show that, if needed, the EU can create a borrowing capacity and issue a common safe asset.

In terms of having a significant impact on the EU's fiscal response to the COVID-19 crisis, however, SURE is too modest, and should be evaluated as only a part of a more complete recovery plan.

What is SURE?

The EU has been making back-to-back loans to its member states since the 1970s, but SURE has two original features. First, its stated objective is to ensure that countries can easily and cheaply finance the short-term work schemes heavily used since the beginning of the COVID-19 lockdowns.

Second, to protect the EU's AAA rating, the money raised by issuing bonds on international financial markets will be guaranteed by the so-called 'headroom' of the EU budget (ie. the additional resources the Commission can call on from member countries to service its debt, principal and interest, if a debtor defaults), but also by an additional €25 billion in direct irrevocable callable guarantees from EU countries.

The Commission portrayed SURE as a *"tangible expression of Union solidarity."* But how generous is it, and what impact can it have in the context of the COVID-19 crisis?

The three main advantages of SURE

- SURE will provide an extra source of financing for EU countries on top of market financing and potential

credit lines from the European Stability Mechanism (ESM). Its loans could be cheaper and possibly longer-term than what some countries, including Greece, Cyprus, Italy, Portugal and Spain, can currently obtain from the market, because the EU should currently be able to borrow on the market at around 0% and pass this rate to member states.

- SURE offers a lighter and more agile governance framework than other EU financial assistance programmes, particularly the ESM credit lines, even under the simplified procedures of its new 'Pandemic Crisis Support' facility. To access the SURE funds, EU countries would only need to show that the money is deployed for short-term work schemes. Approval just requires a qualified majority in the Council, and there will be no need

SURE is too modest to have a significant impact on the EU's fiscal response to the COVID-19 crisis, and should be evaluated as only a part of a more complete recovery plan

to consult each national parliament for every request. Given its novelty, SURE might also be less politically toxic than the ESM in some countries, such as Italy.

- Finally, SURE provides an additional incentive for countries to put in place short-term work schemes and use them during future possible lockdowns. Short-term work schemes help avoid the break-up of labour relationships, which is very costly for workers and companies. They have been used extensively in the past two months and have proved crucial to ensure the survival of European firms and to prevent a very quick rise in unemployment.

However, these schemes are very different in different EU countries: countries including Germany, Italy, France and Belgium have well-established schemes; others including Cyprus, Greece, Estonia and Latvia entered the crisis without such schemes and had to improvise. The fact that SURE emphasises the need to have such schemes in place and encourages member states to use them is good in itself. If it were to be prolonged, SURE could also be used to share national best practices on short-term work schemes, for example using workers' idle time for online training to improve their skills.

Four limits of SURE

- SURE's effect on public finances will be very marginal as the programme is too small (€100 billion) to lead to significant savings in interest costs. Imagine for example that Italy were to borrow from SURE €20 billion at 0% for 10 years, instead of the 1.8% it would pay the markets, at the time of writing. Italy would then save around €360 million per year. Considering its forecast deficit of 11.1% of GDP in 2020, ie. around €200 billion, SURE would cover 10% of the new debt incurred this year, and thus reduce borrowing costs on this new debt by 10%. Given the relatively low level of the spread between the two, this would only represent savings equivalent to 0.02% of Italy's GDP.

- There is a risk that a stigma will be attached to the use of the programme. There are not yet studies on stigma effects from EU financial assistance programmes, but (even if they are not fully comparable) there is some empirical evidence that the announcement of IMF programmes can increase yields. Markets could interpret a request as a sign of weakness and therefore ask for higher rates when countries issue new bonds, thus erasing savings generated by the lower cost of SURE loans.

In addition, unlike an ESM credit line, a loan from SURE would not make a country eligible for the ECB's Outright Monetary Transactions scheme (OMT). One solution to avoid any 'first-mover' stigma would be for a large number of countries, ideally all of them, to use SURE at the same time.

However, there would be two limits to that solution: first, SURE is not financially advantageous for countries that already enjoy interest rates at a similar or lower level to what they could secure using SURE (eg. Germany, France, the Netherlands, Austria). Second, if many countries use it, the relatively small amount of money available would have to be divided between them, reducing the already small savings on interest costs made by each country.

- The main limitation of SURE is that it solves the wrong problem. Access to finance is not an issue for euro area countries at this stage, thanks in particular to the massive intervention by the European Central Bank since mid-March. If access to finance were to become a real problem for some countries, SURE would then be too small.

This was already an issue for one of its predecessors, the European Financial Stabilisation Mechanism (EFSM), which was limited to €60 billion. The European Financial Stability Facility (EFSF) and the European Stability Mechanism (ESM) were created to address this very problem.

- Finally, SURE is not a significant and permanent EU borrowing capacity to be used as a stabilisation tool. Nor

is it an *"emergency operationalisation of a European Unemployment Reinsurance Scheme"*, as the Commission put it when it was announced. At the request of some EU countries, SURE will be temporary and will be dismantled in a couple of years. SURE is also not an insurance mechanism, as it does not involve any ex-post transfers following the materialisation of a risk. As a lending facility, SURE only involves mutualisation of borrowing costs.

Conclusions

The Commission's quick proposal and negotiations with member states, establishing SURE within a few weeks, should be commended. SURE also rightly highlights the importance of short-term work schemes and gives EU members an incentive to use them in the current crisis, and maybe also to improve them in the future.

However, the facility will have a small impact on the EU's fiscal response to the COVID-19 crisis. Its merits should be measured as part of the complete recovery initiative that will be presented by the Commission by the end of the month.

The main advantage of SURE is to show that, if needed, the EU can create a borrowing capacity and issue a common safe asset using the community method, instead of using intergovernmental agreements, as was done with the ESM and the EFSF.

Undeniably, a common debt-management office issuing a common safe asset at large enough scale would be very useful to the euro area in a crisis. In particular, such an EU debt instrument would help the ECB fulfil its mandate – politically, it would be easier for the ECB to buy European debt than to buy national debts.

However, such a facility would need to be much bigger than SURE. The 18 May Franco-German 'Recovery Fund'

proposal to issue €500 billion of EU debt to increase the size of EU programmes in the next few years goes in this direction. Issuing such a large amount of EU debt should be possible by increasing drastically the headroom of the EU budget. What is needed now is support from the other 25 EU countries. ■

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Sustainable finance in the COVID-19 era

The current crisis has given a reminder about the need to strengthen our societies. Cosmina Amariei argues that sustainability will remain an enduring policy in the (post) COVID-19 era

Context

The spread of the COVID-19 virus brought the European economy to a standstill and heightened market volatility. This unprecedented shock has been hitting certain sectors hard and exacerbating the vulnerabilities of many governments, businesses and households.

Most exit strategies are gradual and informed by the evolving public health situation in the member states. Fiscal and monetary stimulus packages are being rolled out in an effort to attenuate the negative consequences. Prudential buffers have been lowered in order to allow the financial sector to channel funds to corporates.

Even though markets have witnessed a remarkable rebound, supervisors warn against the potential decoupling from the real economy. There are also concerns that financial insecurity among individuals will become more widespread, with an impact on their saving, consumption and investment decisions.

Market developments

Asset owners and asset managers will continue to face a lower-for-longer yield environment, with positive returns harder to generate especially in the fixed income space.

In the initial phase, repositioning took place through defensive strategies in equities (high quality, low volatility, momentum), with targeted environmental, social and governance (ESG) factors, in addition to investment-grade credit/government bonds and cash/liquid buffers.

The main objective was protecting investment capital from any permanent loss. Many investors also stayed the course and did not make drastic changes.

In the near future it is expected to go beyond traditional asset classes, with an increasing demand for alternatives/ real assets, as well as to rethink the mix of alpha-seeking, index- and factor-based strategies. A total portfolio approach organised around risk and return streams could become the norm, in comparison with the classical segmentation of the investment universe by asset classes, regions or sectors.

The corporate landscape is likely to change. While many companies will remain in survival mode, certain sectors/ companies deemed strategic could benefit from public assistance. For many small and medium-sized enterprises (SMEs), capital markets are still not an actual option and they will rely on other financing mechanisms.

Sustainability will remain an enduring policy and market theme in the (post) COVID-19 era

This crisis will trigger more downgrades, a possible surge in bankruptcies and a wave of industry consolidation. Hence, a common thread among investors will be the focus on strong fundamentals (P/B rather than P/E ratios[1]), namely companies with sound balance sheets, resilient business models and sectors with high intangible assets intensity.

But opportunities could emerge for otherwise stressed corporates, with upside potential from a resumption in activity combined with policy/financial support.

Despite a rapidly evolving situation, some investors were still able to separate temporary shifts from structural changes in the markets and maintained (or even accelerated) their ESG commitments, namely 'not only talk the talk but walk the walk'.

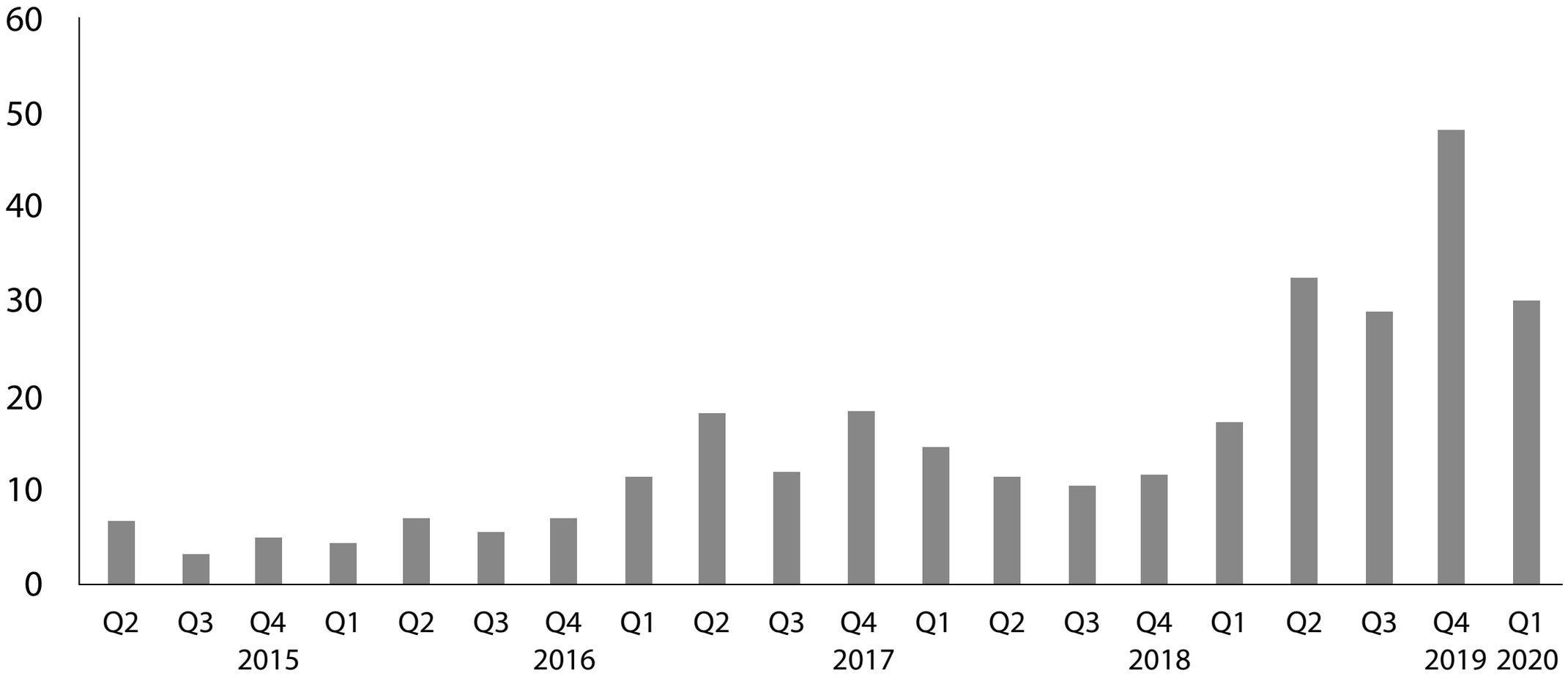
Multiple industry reports highlighted that the majority of sustainable funds and indices outperformed their mainstream counterparts in the first quarter of 2020. The ESG component was the strongest contributor to the performance even after correcting for other variables.

In practice, highly rated ESG companies tend to be less cyclical. In addition, the inflows into sustainable funds remained strong (see Figure 1), compared to outflows from conventional funds. This confirms that certain sustainable strategies could offer better risk-adjusted returns and improve portfolio resilience.

Environmental, Social and Governance

In the midst of the pandemic, an important question emerged: Is there any apparent trade-off between crisis management measures and pursuing the sustainable finance agenda? Many stakeholders argued for the European

Figure 1. Quarterly European sustainable fund flows (€ billion)



Total AuM: €621 billion (March 2020).

Source: Morningstar Direct, Manager Research.

Green Deal to remain central for a robust recovery and growth in the EU, and this was recently reinforced in the Commission's Communication on *Europe's moment: Repair and Prepare for the Next Generation*.

In order to meet the 2030 climate and environmental targets, around €470 billion additional annual investments are needed (see Figure 2). As initially announced, the European Green Deal Investment Plan aims to mobilise at least €1 trillion in public and private funds for achieving climate neutrality by 2050.

At present, many bottlenecks actually lie in the unsatisfactory pipeline of sustainable projects/assets across the EU. Nonetheless, this should actually be seen as an opportunity to build competitive advantage in new industries, taking into account future trajectories and needs.

Figure 2. Overview of investment gaps (€ billion, per year)

Green transition	470
Climate mitigation and energy 2030 targets	340
Wider environmental objectives, beyond climate	130
Digital transformation	125
Strategic investment (for EU autonomy on critical value chains)	20
Social infrastructure	192

Source: European Commission, SWD (2020) 98 final, Brussels.

Beyond that, it has to be acknowledged that the larger challenge is the investment case in relevant sectors. Some companies cannot economically justify 'radical' green investments. The financing of the 'pure' green players is imperative but not sufficient.

Inflows into climate-related investment funds could play a greater role in targeting solutions that are not yet competitive. Climate stewardship by asset managers[2] should be oriented towards clear outcomes, and institutional investors[3] with a long-term outlook, for example insurance companies and pension funds, could use their track record when delegating external mandates.

In the longer run, most corporates will have to demonstrate a clear pathway in terms of capital investments, operational expenditures, revenue generation and low-carbon solutions for end-consumers. If the externalities of their economic activities are not adequately priced in, or in the absence of adequate economic incentives, sustainable investments may not reach the desired levels.

A recovery in the green context could lay the groundwork for more issuance of green bonds, supported by an EU standard and an accreditation/supervision regime for external verifiers. Moreover, equity markets could be the 'perfect' candidate for supporting the transition to carbon neutrality, in particular by stimulating innovation and skills upgrades that lead to the adoption of greener technologies, with shorter payback periods.

More broadly, understanding the impact of ESG factors on corporate performance, and consequently portfolio construction, security selection and risk management, is essential. The Social and Governance dimensions will be brought to the forefront, in particular impact on employees, customers, supply chains and local communities but also scrutiny over dividends, share buybacks, executive remuneration and investors' engagement.

To ensure environmental and social interests are fully embedded into business strategies, a new initiative on sustainable corporate governance was announced by the Commission for 2021; this should also account for the diversity in ownership and control structures across the EU.

This crisis could mark a turning point for social bonds. The current outstanding amounts (with proceeds invested in healthcare, housing, education and entrepreneurship) is small but growing. Still, much like greenwashing, the risk of social/governance washing must be avoided by expanding the EU taxonomy, especially if there are 'strings attached' to public support.

When it comes to ESG ratings/scores, investors report divergence across providers and advocate an overhaul of the practices. In addition, trading venues refer to expanding their capacity in tracking ESG metrics.

Corporates, investors & supervisors

Corporate disclosure is a fundamental bedrock for sustainable finance. Establishing standards for non-financial information at the EU level (mandatory or voluntary) is the way forward in order to achieve greater consistency, comparability and reliability.

The scope of companies to be covered is another central aspect. Once a certain level of maturity has been achieved, the Commission should consider creating a public centralised database at the EU level, with both financial and non-financial information, linked to a unique identifier for the reporting entity.

At present, large companies tend to report more comprehensively on ESG factors and dominate investors' portfolios compared with SMEs, for which such a regime should be adequately calibrated. Failure by SMEs to provide non-

financial information may have a negative impact on their business opportunities as suppliers to large companies, or limit their ability to benefit from private capital for certain green or innovative projects.

Nonetheless, raising the bar for disclosure for smaller, non-listed companies – with a focus on double materiality and third-party assurance – may politically be a 'hard sell' under the current economic circumstances.

Transparency, proportionality, aligned incentives between corporates and investors, and ultimately performance will contribute to mainstreaming sustainability. Financial advisers, asset managers and institutional investors have a fiduciary duty to act in the best interest of their clients/end-beneficiaries, and therefore should be equipped to seize the investment opportunities and manage the risks arising from ESG factors.

More specifically on retail investors[4], further analysis on (and detailed guidance on how to cope with) the potential variation in investment preferences will be needed, namely standardisation vs. customisation of products/solutions. This comes on top of already well-known problems, such as unbalanced asset allocation, biased advice and closed distribution channels.

The EU ecolabel criteria for financial products should be ambitious enough but at the time not stifle market adoption. For institutional investors, COVID-19 could accelerate interest in mandates aligned with the Sustainable Development Goals (SDGs). And again, robust data on the universe of investments is key for portfolio-level analysis and double-materiality assessments.

ESG risks are characterised by deep uncertainty, non-linearity and endogeneity. Pricing them requires moving from backward- to forward-looking approaches, for example through scenario analysis. Climate-related stress testing is still at a nascent stage (with a few exceptions) for the industry and supervisors, with many identifying challenges

related to firm-specific data availability, methodological difficulties and insufficient mapping of transmission channels.

In addition to adapting/upgrading their sectoral reviews, the European Supervisory Authorities (ESAs) could provide comprehensive technical advice. It is essential to accelerate the efforts on monitoring interconnected exposures to stranded assets and any emerging risk differential.

The use of prudential regulation ('green supporting factor' or 'brown penalising factor') should be exercised with great caution and be evidence-driven. Similarly, other sectoral policies, such as adequate carbon pricing, subsidies and tax incentives linked to taxonomy-eligible activities, should be more carefully re-examined.

Outside of the supervisory dimension, representatives from the ECB alluded to the impact of climate-related risks on monetary policy, and how to potentially integrate these parameters in asset purchase programmes or collateral framework.

Concluding remarks

Sustainability will remain an enduring policy and market theme in the (post) COVID-19 era.

At the EU level, the Action Plan on Sustainable Finance (March 2018) put forward an extensive list of legislative and non-legislative initiatives related to the taxonomy, disclosure, suitability and fiduciary duties, low-carbon benchmarks, non-financial corporate reporting, credit and sustainability ratings, green bond standards and ecolabels for retail financial products.

These will be continued with a Renewed Strategy (December 2020) focusing on the overall ecosystem, implementation of the toolbox and systemic risk implications.

The current crisis has given a brutal reminder about the need to strengthen the preparedness and resilience of our societies as a whole.

The next three to five years will certainly be crucial in terms of the impact on the real economy, ie. translating sustainability in a consistent manner at the operational level, and mobilising significant private capital flows to support recovery and growth in Europe. From a policy perspective, synergies with the capital markets union (CMU) initiative should also be further explored. ■

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Endnotes
1. Price-To-Book Ratio (P/B) and Price-to-Earnings Ratio (P/E).
2. At end 2019, the total net assets of UCITS and AIFs amounted to €17 trillion (EU-28).
3. At end-2019, the total assets of insurance companies and pension funds amounted to €14 trillion (EU-28).
4. At end-2019, the total financial assets of households amounted to €37 trillion (EU-28).

This commentary is part of a dedicated series, as a follow-up to the CEPS–ECMI Task Force Report on "Asset Allocation in Europe: Reality vs Expectations" released in April 2020.

An ECB digital currency – a flight of fancy?

Most central banks are working on CBDCs. Yves Mersch outlines the preparations the ECB is making should the European people embrace digital currencies

A recent survey among 66 central banks by the Bank for International Settlements shows that more than 80% are working on central bank digital currencies (CBDCs)[1]. The European Central Bank is one of them. Not because we want to keep up with fashionable trends, but because we have to be ready. Ready to embrace financial technological innovation which has the potential to transform payments and money faster, and in more disruptive ways, than ever before.

We are technology neutral. But if our customers, the people of Europe signalled a change in payments behaviour, we would want to preserve their direct link to the ultimate owner of our currency by maintaining their access to central bank liabilities in euro. Although cash often gets a bad press, demand is not receding. We currently see no indication that the public at large is willing to abandon the valued and trusted advantages of cash. But we are preparing to be ready should things change.

Part of ECB mandate to be ready for change

One implication of financial technological innovation could be an increasingly cashless economy in which people may no longer be able to hold risk-free central bank money. Reliable access to money would then hinge on the stability and efficiency of private retail infrastructures. And trust in money itself would rely on trust in the intermediaries that issue private money[2].

This is one reason why central banks keep fully up to speed on financial technological developments. After all, providing safe money and a reliable means of payment have been an integral part of the mandate and core business of central banks since their very inception. The ECB is no exception.

So we should be looking ahead and consider whether, in the future, central banks will need to provide the public with some form of digital currency. While electronic payments are already crowding out the use of cash in some

countries, whose currencies seem less attractive than the euro, there is no such trend away from cash in the euro area. Some 76% of all transactions in the euro area are carried out in cash, amounting to more than half of the total value of all payments[3].

The demand for cash in the euro area currently outstrips the rate of nominal GDP growth. In crisis times, the demand for cash surges even higher. At mid-March this year, the weekly increase in the value of banknotes in circulation almost reached the historical peak of €19 billion[4].

In monitoring the evolution and uses of technology, the ECB respects technological neutrality. We do not serve technology – technology serves us

The ECB's debate on CBDCs is therefore mainly analytical. Whether and when it becomes more of a policy debate will largely depend on the preferences of households. We are always willing to innovate in the form of money and payment services that we provide.

If, for instance, people voiced a preference tomorrow for plastic or polymer banknotes rather than the traditional paper ones, we would happily accommodate them. In the same vein, we closely follow technological developments and reflect on the type of money and payments that are best suited to the needs of an increasingly digital economy.

The lack of a concrete 'business case' for a CBDC at present should and does not stop us from seriously exploring the optimal design of a CBDC so that we will be well prepared should we ever take a policy decision to issue a digital currency. To this end, we have set up a task force on a CBDC within the Eurosystem.

Let me give you a preview of our deliberations, starting with different design options. Legally solid despite fancy design?

Most of the money issued by central banks is in fact already digital, albeit not called CBDC. This is true for the bulk of the money issued through our wholesale credit operations with our counterparties. At present, access to the central bank balance sheet offers the possibility to access digital central bank money.

What could change in the future is the scope of the parties eligible to access our central bank balance sheets. Indeed, this lies at the heart of the discussion on CBDCs.

A wholesale CBDC, restricted to a limited group of financial counterparties, would be largely business as usual. However, a retail CBDC, accessible to all, would be a game changer. So a retail CBDC is now our main focus.

Setting up a CBDC would require a solid legal basis, in line with the principle of conferral under EU law. One key consideration here is whether a retail CBDC could and should have the same legal tender status as banknotes and coins. In practice, legal tender status implies that a CBDC would have to be usable at any location and under any condition, possibly even offline.

Without legal tender status, the legal basis would need to be clarified, as would the relationship between a CBDC and euro banknotes and coins, along with the process by which one could be exchanged for the other. Should it not be acknowledged that the ECB's exclusive right to authorise issuance in euro would also be applicable to a digital issuance?

A retail CBDC could be based on digital tokens, which would circulate in a decentralised manner – that is without a central ledger – and allow for anonymity towards the central bank, similar to cash. Some argue that a token-based digital currency might not guarantee complete anonymity.

If that proved to be the case, it would inevitably raise social, political and legal issues. We are currently looking into the legal questions raised by the potential use of intermediaries to facilitate the circulation of a CBDC and also the processing of transactions in a CBDC. To what extent are we permitted to outsource public law tasks to private entities? And what would be the appropriate extent of supervision over such entities?

Alternatively, a retail CBDC could be based on deposit accounts with the central bank. Though involving vast numbers of accounts, it would not be a particularly innovative option from a technological viewpoint. For the euro area, it would basically mean increasing the number of current deposit accounts offered from around ten thousand to between 300 and 500 million.

A CBDC of this nature would enable the central bank to register transfers between users, thereby providing protection against money laundering and other illicit uses (or those considered illicit by the rulers of the day), depending on the degree of privacy granted to users.

These are just two of the many ways to design a CBDC. We are currently scrutinising the various options to assess their potential impact – both positive and negative – on the financial system and on our ability to honour our mandate.

Disintermediation – economically inefficient and legally untenable

You may wonder why central banks have not chosen to provide retail access to central bank money, despite the technology for an account-based CBDC already being largely available. The main reason is that introducing a retail CBDC could have major consequences for the financial system.

If households were able to convert commercial bank deposits into a CBDC at a rate of 1 to 1, they may find it far more attractive to hold a risk-free CBDC rather than bank deposits. During a systemic banking crisis, this could trigger digital bank runs of unprecedented speed and scale, magnifying the effects of such a crisis.

Banks might manage to render their deposits more attractive than central bank ones. They could, for instance, provide additional services to those offered by central banks. Such services could include paying bills, or cross-selling financial insurance products.

Otherwise – even in the absence of a crisis – a readily convertible CBDC could crowd out bank deposits, leading to the disintermediation of the banking sector. This could have far-reaching implications for the structure of the

financial system and for the ability of central banks to perform their core tasks and ensure that their monetary policy is transmitted to the real economy.

If the central bank were to take retail deposits, it might also have to provide loans, with all the ensuing consequences. The central bank would need to launch customer-facing business lines. Deposit and lending facilities would also require the central bank to take on the burden of regulatory compliance in areas such as anti-money laundering, consumer protection and confidentiality.

Some argue that this may reinforce monetary sovereignty, as disintermediation would make the financial system safer and reduce the moral hazard of banks by diminishing their role in money creation[5]. But disintermediation would be economically inefficient and legally untenable. The EU Treaty provides for the ECB to operate in an open market economy, essentially reflecting a policy choice in favour of decentralised market decisions on the optimal allocation of resources.

Historical cases of economy-wide resource allocation by central banks are hardly models of efficiency or good service. Furthermore, a retail CBDC would create a disproportionate concentration of power in the central bank. These potentially highly adverse effects on the financial system would appear to outweigh the benefits envisaged by the introduction of a retail CBDC. What, then, could be done to mitigate the impact of a CBDC on the financial system?

One option could be to remunerate CBDC at below-market rates in order to create incentives for non-banks to rely more on market-based alternatives rather than on central bank deposits. The drawback would be that, in times of crisis, it may become necessary to apply highly negative rates, which could generate criticism from the public and substantially undermine public confidence in the central bank as well as in the basic values of saving which underlie our societies.

Another option is a tiered remuneration system[6]. In line with the functions of money, the first tier could serve as a means of payment. The central bank would have to refrain from setting a lower or a negative interest rate in order to keep a CBDC attractive to the public as a means of payment. While the second tier could serve as a store of value, the central banks could discourage people from using it as such by setting unattractive interest rates.

However, such schemes should draw from the experience of multiple exchange rate regimes. And the repercussions of the intentional use of such schemes need to be subjected to an additional comprehensive investigation.

Conclusion

In monitoring the evolution and uses of technology, the ECB respects technological neutrality. We do not serve technology – technology serves us. We will only introduce a digital currency if we become firmly convinced that it is both necessary and proportionate to fulfil our tasks in ensuring the stability of our currency.

In the meantime, we take a keen interest in digital innovation and in the changing expectations of money users, and we are refining our thinking on CBDC – both within the ECB, the Eurosystem and in the international central banking community. CBDC design choices are not merely technical questions. They have policy and legal implications. This is why we are devoting so much attention to every detail. If and when the time comes, we want to be ready – and we will be ready. ■

Yves Mersch is a Member of the Executive Board of the European Central Bank and Vice-Chair of the Supervisory Board of the ECB

Endnotes

1. See Boar, C, Holden, H and Wadsworth, A (2020), "Impending arrival – a sequel to the survey on central bank digital currency", BIS Paper, No 107.

2. Including payment solutions denominated in currencies other than the euro, which could affect monetary sovereignty.

3. Survey data from 2017; see Esselink, H and Hernández, L (2017), "The use of cash by households in the euro area", Occasional Paper Series, No 201, ECB.

4. Blog post by Fabio Panetta, Member of the Executive Board of the ECB, (28 April 2020): "Beyond monetary policy – protecting the continuity and safety of payments during the coronavirus crisis".

5. Dyson, B and Hodgson, G (2016), "Digital cash: why central banks should start issuing electronic money", Positive Money.

6. See Bindseil, U (2020), "Tiered CBDC and the financial system", Working Paper Series, No 2351, ECB.

This article is based on a speech delivered at the Consensus 2020 virtual conference, 11 May 2020

Designing central bank digital currencies

Payment systems and money are evolving rapidly. Itai Agur, Anil Ari and Giovanni Dell'Ariccia consider the implications of CBDCs

Various central banks are currently weighing up the introduction of central bank digital currency. This column proposes a framework that captures the key features and studies the implications of such a payment system. Central bank digital currency can be designed with attributes similar to cash or deposits. Currency that closely competes with deposits would likely depress bank credit, while cash-like currency could lead to the disappearance of cash.

The optimal central bank digital currency design hence trades off bank intermediation against the social value of maintaining diverse payment instruments. The currency could be interest-bearing, which may help alleviate this trade-off.

Evolving payment systems

Payment systems and, more fundamentally, money are evolving rapidly. Developments in digital networks, information technology and the increasing share of internet-based retailing have created the demand and technological space for peer-to-peer digital transactions that have the potential to radically change payment and financial intermediation systems.

Central banks have been pondering whether and how to adapt. Many are exploring the idea of issuing a central bank digital currency (CBDC) - a new type of fiat money that expands digital access to central bank reserves to the public at large, instead of restricting it to commercial banks (BIS 2018, Mancini-Griffoli *et al*. 2018)[1].

A CBDC would combine the digital nature of deposits with the peer-to-peer transaction use of cash. But would it also resemble deposits by coming in the form of an account at the central bank, or would it come closer to cash, materializing as a digital token? Would it pay interest rates like a bank deposit, or would its nominal return be fixed at naught, like cash?[2]

An analytical approach

In Agur *et al*. (2019), we build a theoretical framework geared at analysing the relationship between CBDC design, the demand for money types, financial intermediation, and network effects[3].

The starting point is a model economy where banks collect deposits, extend credit to firms, and create social value in doing so: firms' projects are worth less if they cannot receive bank loans. Households have heterogeneous preferences over anonymity and security in payments, represented by an interval with cash and deposits at opposite ends: cash provides anonymity in transactions, while bank deposits are more secure.

The optimal central bank digital currency design trades off bank intermediation against the social value of maintaining diverse payment instruments

A CBDC can take any point on this interval, depending on its design. For instance, a central bank could provide partial anonymity (eg. towards third-parties but not the authorities), set transaction limits below which anonymity is retained, or make anonymity conditional, only to be lifted under court order.

All of those possibilities are under consideration in central banks' CBDC studies (Mancini-Griffoli *et al*. 2018). As emphasized by Lagarde (2018), there is potential demand for partially anonymous means of payment that can, for example, protect consumers from the use of personal transactions data for credit assessments. This possibility is increasingly enabled by technological developments, as for instance discussed by Yao (2018) in the Chinese context.

Taking into account the design of the CBDC, households sort into different types of money according to three considerations: their (heterogeneous) preferences, network effects which make it inconvenient to use payment instruments with few users, and the interest rates offered on deposits and possibly on CBDC.

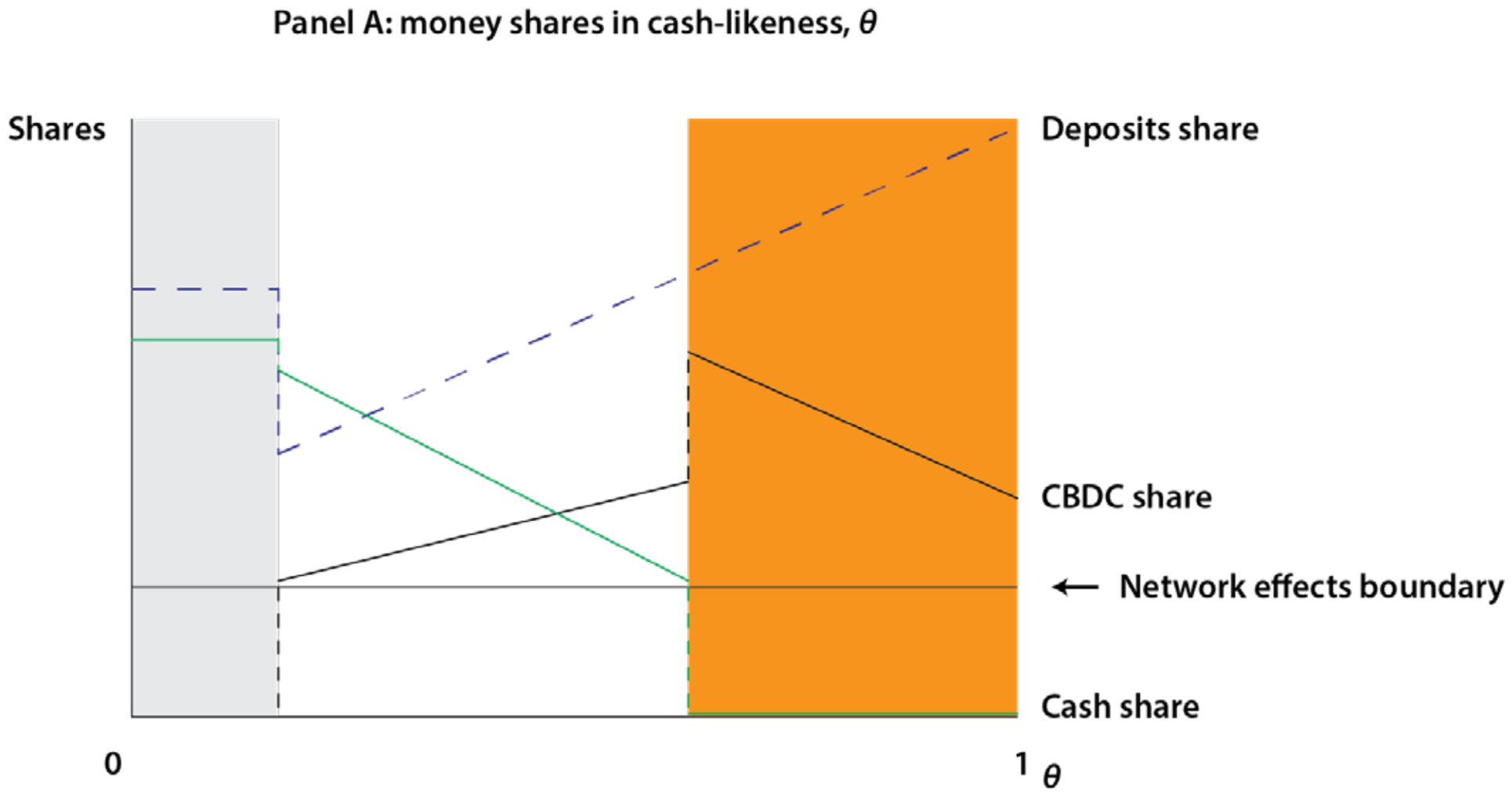
Figure 1 depicts how money shares evolve in relation to CBDC design, where θ represents how cash-like the CBDC is made (0 is fully deposit-like and 1 is fully cash-like) and rcbdc is the interest rate offered on the CBDC[4]. Panel A shows that cash holdings decline, and bank deposits rise as the CBDC becomes more cash-like.

Panel B shows that a higher CBDC rate reduces the shares of both cash and deposits, while raising that of CBDC. Notably, when CBDC becomes sufficiently cash-like or rcbdc is sufficiently high, network externalities drive cash out of use. Deposits prove more resilient to competition from CBDC, as banks raise deposit rates in response.

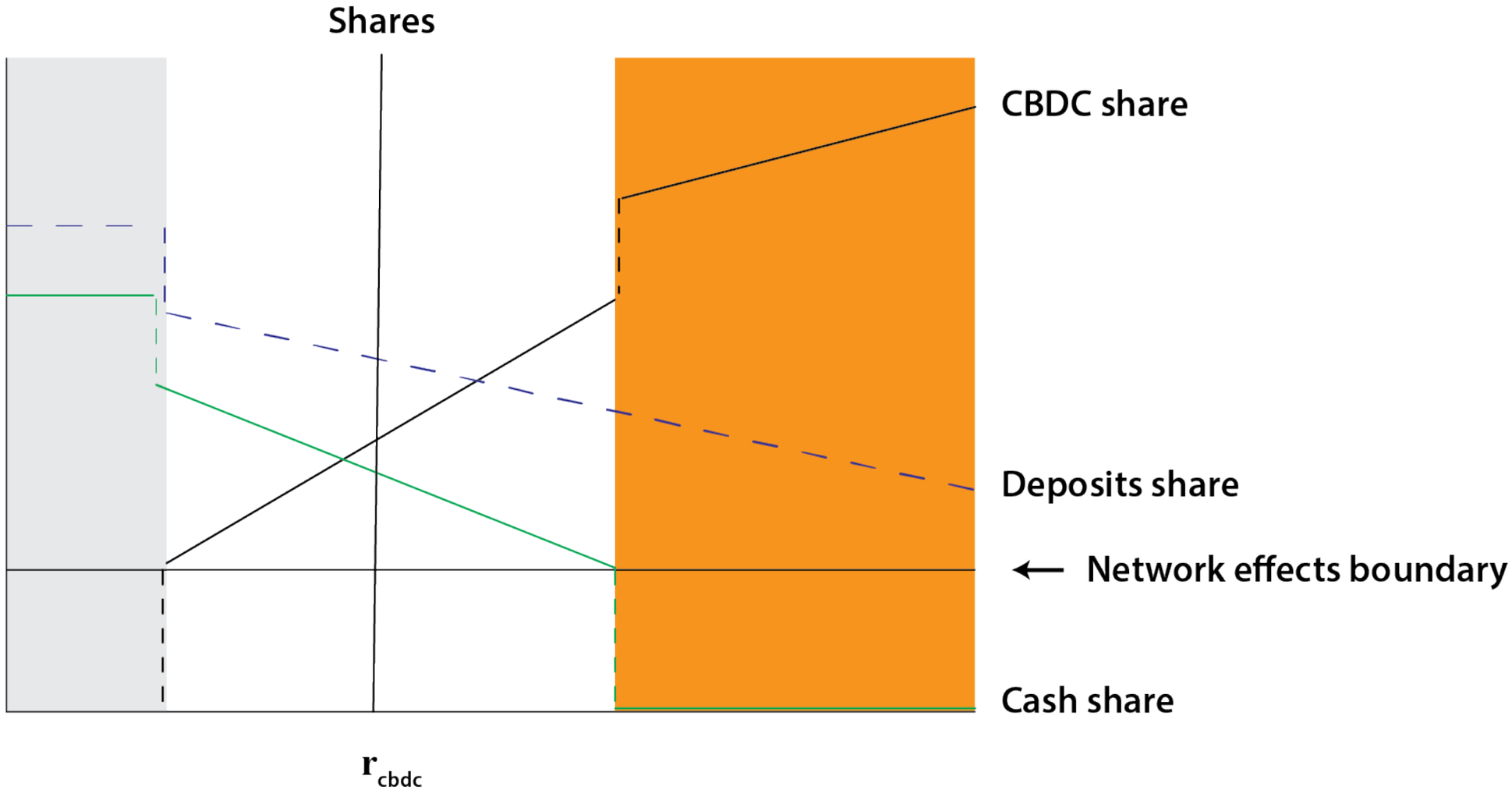
Designing a non-interest-bearing CBDC

Variety in payment instruments increases welfare because of heterogeneity in household preferences. CBDC then

Figure 1. Money shares and CBDC design characteristics



Panel B: money shares in CBDC interest rate, r_{cbdc}



has social value due to its ability to blend features of cash and deposits. At the same time, introducing a CBDC has welfare costs to the extent that it crowds out demand for cash and deposits.

Specifically, a cash-like CBDC design can reduce cash demand to the point where network effects cause the disappearance of cash, while a deposit-like design causes an increase in deposit and loan rates, and a contraction in bank lending to firms. Because of relationship lending frictions, this decline in bank intermediation also curtails investment and output[5].

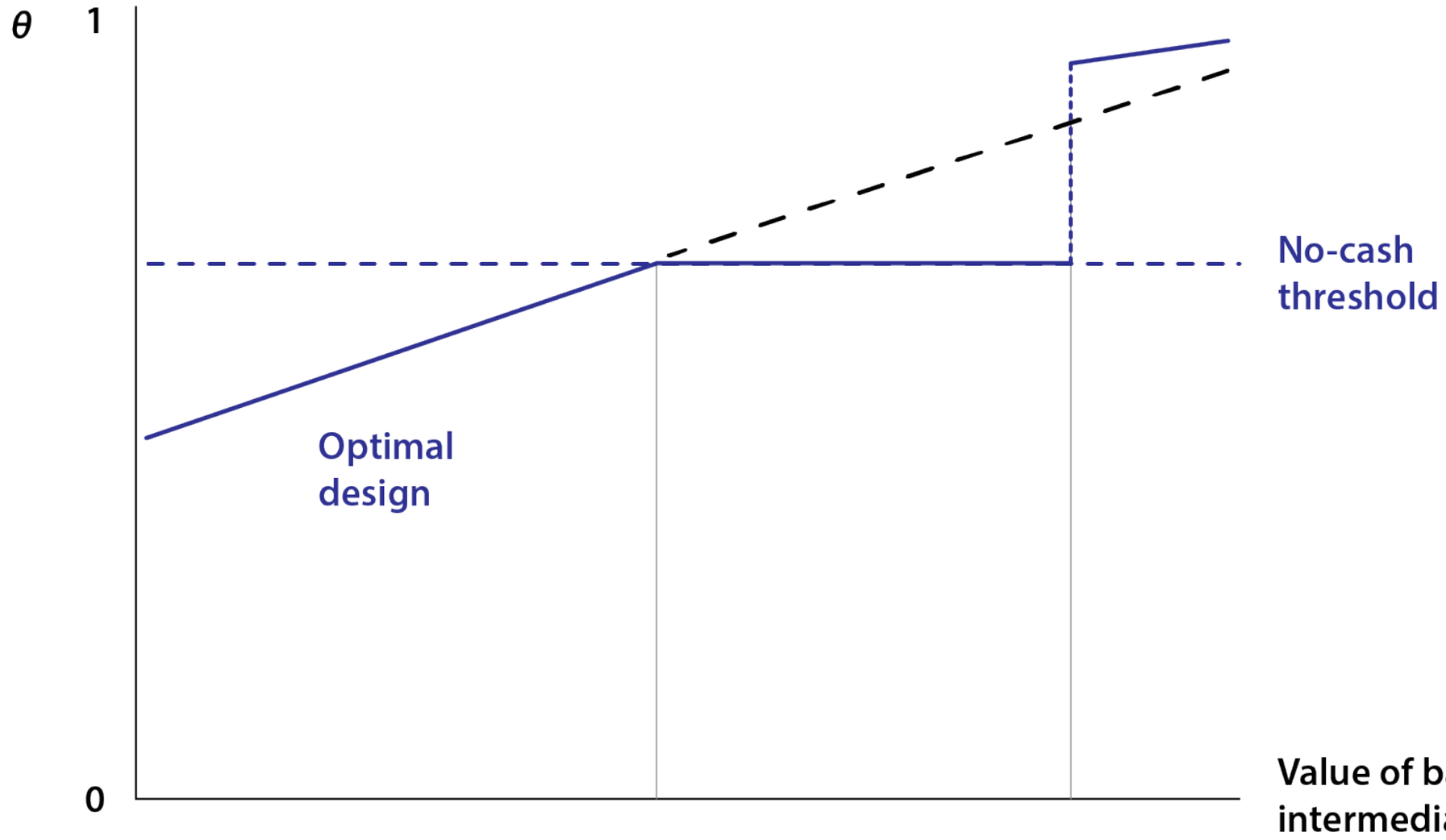
The best way to design a CBDC hinges on whether the CBDC is interest-bearing and the strength of network effects. When the CBDC is not interest-bearing, its similarity to cash becomes the sole design instrument and a non-linear optimal design pattern emerges as shown in Figure 2.

On the one hand, locating the CBDC 'centrally' relative to deposits and cash serves the payment needs of households with diverse preferences. On the other hand, when bank intermediation has more value, the CBDC is optimally made more cash-like to limit its adverse impact on bank credit.

As the value of bank intermediation rises, a threshold is eventually reached, beyond which optimal design 'freezes'. This is because optimal policy prevents the disappearance of cash in order to protect payment instrument variety.

As long as the welfare gains from variety outweigh the welfare costs from lost bank intermediation, optimal policy maintains all three payment instruments. However, when preserving bank intermediation becomes the dominant concern (at the right end of the figure), optimal policy foregoes on variety, allowing for the disappearance of cash, in exchange for a larger deposit base for banks.

Figure 2. Optimal non-interest-bearing CBDC design



Moreover, once cash vanishes, the CBDC bears the brunt of servicing former cash users, and therefore optimally moves further towards cash than it would have if all three forms of money were still in existence.

Bringing in the CBDC interest rate

When network effects do not constrain policy, the CBDC interest rate is best kept at zero, because it creates price distortions in households' choice of payment instruments. However, an adjustable CBDC rate may be desirable as a second design instrument when network effects are strong.

With a non-interest-bearing CBDC, the only means to safeguard deposits is to make the CBDC eat into cash demand. But with a variable CBDC rate, the central bank may combine a (more) cash-like CBDC with a negative CBDC interest rate, thereby avoiding adverse network effects on cash use and preserving payment instrument variety, while simultaneously limiting the CBDC's impact on financial intermediation, as shown in Figure 3.

This is a policy-relevant finding that provides an economic counterweight to political economy considerations that may otherwise drive central banks to opt for non-interest-bearing CBDCs. Notably, all ongoing central bank CBDC initiatives currently centre on non-interest-bearing CBDCs.

Who gains from CBDC and who loses?

Introducing an optimally designed CBDC always raises aggregate welfare in this framework, but this is far from a Pareto improvement: some households gain while others lose. Figure 4 shows the welfare impact of introducing a CBDC across the distribution of household preferences (represented by i). The blue line depicts the impact of a non-interest-bearing CBDC[6].

Figure 3. Optimal interest-bearing CBDC design

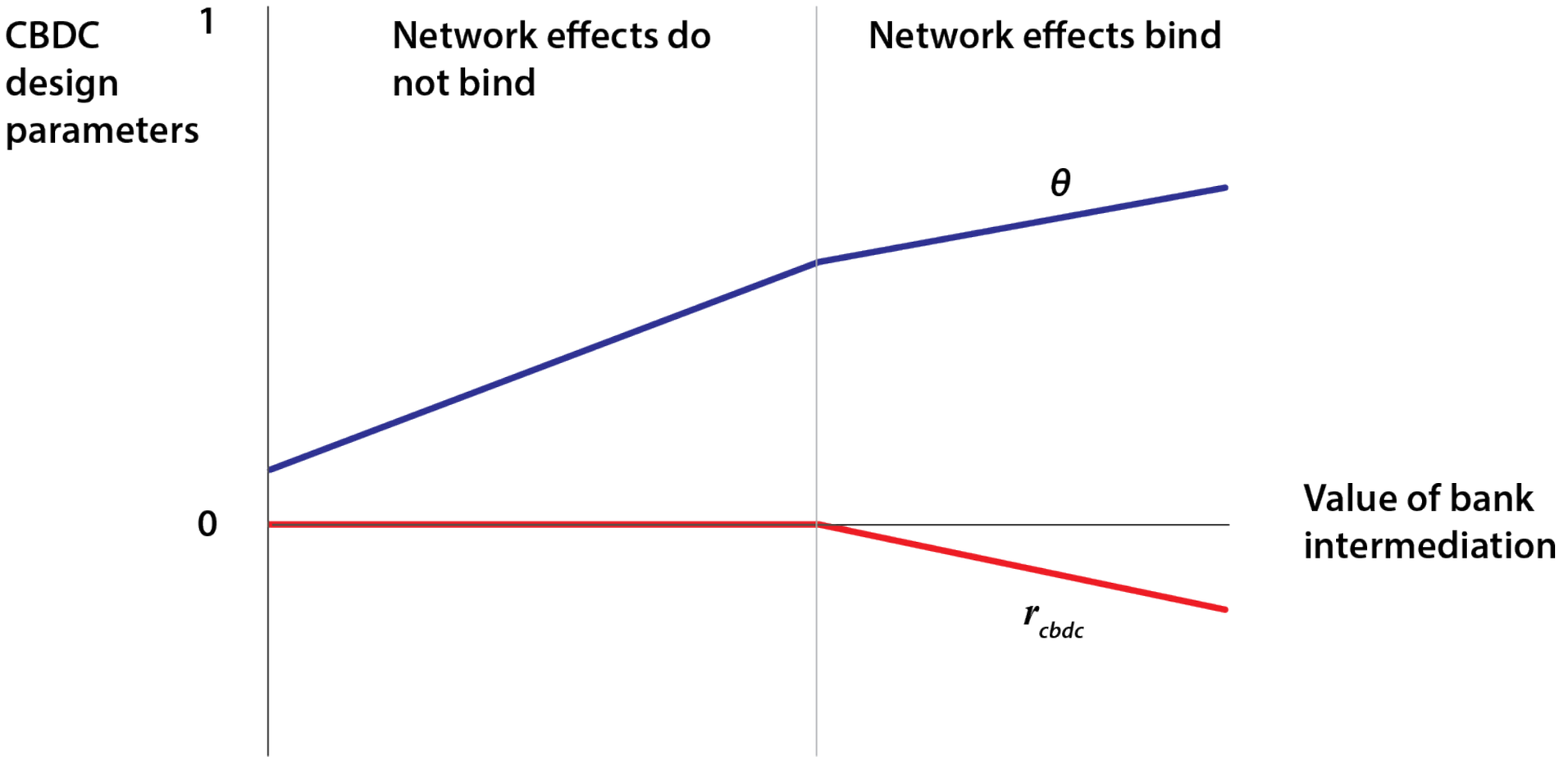
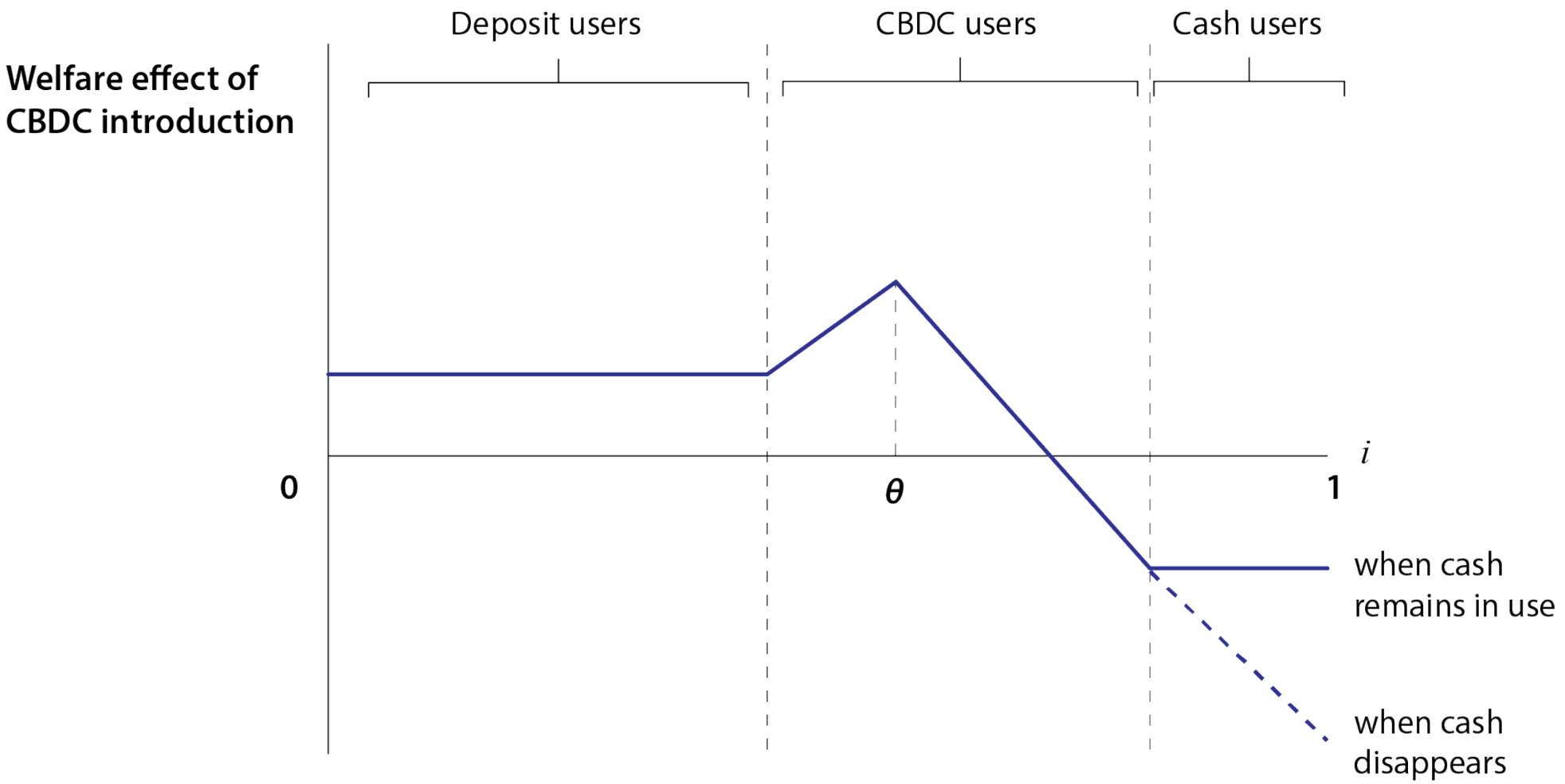


Figure 4. Distributional effects of CBDC



To begin with, households with payment preferences closest to deposits remain as deposit users after the introduction of a CBDC. On the one hand, the decline in financial intermediation reduces the profit transfers that these households receive from firms.

On the other hand, CBDC competition with bank deposits drives up deposit rates. Overall, the latter effect dominates and the introduction of a CBDC raises the welfare of all deposit users.

At the other end of the spectrum, households with a strong preference for anonymity remain cash users. These households also suffer from the decline in financial intermediation, but do not benefit from higher deposit rates, leading to a welfare loss.

Moreover, their welfare losses are aggravated if CBDC leads to the disappearance of cash, forcing them to switch to a less preferred payment instrument. Finally, for households that switch to CBDC, the interplay between the gains from using the new payments instrument and the losses brought about by reduced financial intermediation is complex, and some emerge with a net gain and others with a net loss.

The fact that depositors emerge as winners and cash holders as losers, hints at a potentially regressive impact of a CBDC. In our analysis, all households have identical endowments. In practice, however, households that primarily conduct their payments with cash tend to have lower income, while higher income households more often rely on deposit-based payments.

Beyond network effects

Are network effects the only reason that CBDC rates optimally diverge from zero? Extending the analysis shows

that also considerations other than network effects can lead to situations where the optimal CBDC rate is non-zero. Imperfect competition in the banking sector is one example.

When banks have market power, it may be socially optimal for CBDC to compete harder with bank deposits, leading CBDC rates to diverge from zero, regardless of network effects. The same is true when there are negative externalities associated with anonymity in payments, possibly because this may spur illicit activities.

When policymakers have an additional ball to juggle – such as countering a negative externality – an interest-bearing CBDC may provide a valuable design instrument. ■

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Endnotes

1. Notably, the central banks of China, Norway, Sweden, and Uruguay are actively investigating the possibility of introducing a CBDC for domestic retail payments.

2. See Mancini-Griffoli et al. (2018) for other design aspects of CBDCs, which are mostly of an operational nature, such as

the means to disseminate, secure and clear CBDCs.
3. Swings in the usage of payment instruments become particularly disruptive in the presence of network effects. For example, with declining cash use, banks may cut back on ATMs or shops may refuse to accept cash. Because of such network effects, payment instruments may disappear when their use falls below a critical threshold.
4. The striped areas at the left ends of Panel A and B represent domains where CBDC design is not attractive enough for households, and CBDC falls out of use.
5. A central bank could attempt to mitigate the decline in bank lending by providing banks with cheap liquidity to replace lost deposits. However, this may not be feasible for two reasons. First, banks' ability to intermediate funds may depend on their reliance on deposits (see eg. Diamond and Rajan 2001, Donaldson et al. 2018). Second, this policy would permanently expose the central bank to credit risk.
6. The distributional impact of an interest-bearing CBDC is more intricate, and we refer to Agur et al. (2019) for details.

References

Agur, I, A Ari and G Dell'Ariccia (2019), "Designing Central Bank Digital Currencies", IMF Working Papers 19/252.
Bank for International Settlements (2018), "Central Bank Digital Currencies. Technical report", Basel Committee on Payments and Market Infrastructures.
Diamond, DW and RG Rajan (2001), "Liquidity Risk, Liquidity Creation, and Financial Fragility: A Theory of Banking", Journal of Political Economy 109(2): 287-327.
Donaldson, JR, G Piacentino and A Thakor (2018), "Warehouse Banking", Journal of Financial Economics 129(2): 250-267.
Lagarde, C (2018), "Winds of Change: The Case for a New Digital Currency", Remarks at the Singapore Fintech Festival.
Mancini-Griffoli, T, MS Martinez Peria, I Agur, A Ari, J Kiff, A Popescu and C Rochon (2018), "Casting Light on Central Bank Digital Currencies", IMF Staff Discussion Notes 18/08.

Yao, Q (2018), "A Systematic Framework to Understand Central Bank Digital Currency", Science China Information Sciences, 61(3): 033101.

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Libra still needs more baking

The Libra Association has updated its White Paper. Barry Eichengreen and Ganesh Viswanath-Natraj argue that much more needs to be done

In April 2020 the Libra Association issued a new White Paper updating its paper of June 2019. This column argues that while the authors of the paper now understand that to succeed, their project must address economic and political concerns, they have done nothing to address worries about currency substitution. A new proposed capital buffer is underspecified. A key market in Libra futures or forwards is missing, as is a Libra lender of last resort.

It's back, *"it"* being Libra. Earlier this month, the Libra Association issued a new and improved White Paper updating its paper of June 2019. The authors now understand that their project is about more than technological solutions. It must also address economic and political concerns. That much, at least, is progress.

To this end, White Paper v2.0 replaces, or more precisely supplements, the original basket-based stablecoin with a set of single-currency stablecoins. More consequentially, it seeks to address a range of regulatory concerns (as voiced by, among others, Cecchetti and Schenholtz 2019). *"Anyone,"* including law enforcement, we are told, will be able to *"audit the accuracy of all operations."*

It is unclear whether this means that anyone will be able to verify the identify of the transactors and the purpose of the transaction (so much then for privacy) or not (so much then for cracking down on money laundering and terrorist finance). One suspects that the answer is the latter, since the White Paper also proposes a Financial Intelligence (FIU) Function to monitor the network and flag suspicious activity. Details to follow in White Paper v3.0.

We are told that the Libra Reserve, made up of cash and short-term securities that serve as stablecoin backing, will be held by a *"geographically distributed network of well-capitalized custodian banks."* Only Designated Dealers (DDs) who *"commit to making markets with tight spreads"* will interface with both the Libra Association on one side and Libra users on the other. DDs, we are assured, will be *"regulated, well-capitalized financial institutions."*

On the consumer-facing side, DDs will interact mainly with Virtual Asset Service Providers (VASPs), large entities that provide financial services to end users. VASPs will be regulated, although by whom is not clear, and will have to comply with the anti-money laundering and anti-terrorist finance requirements of the Financial Action Task Force, the relevant standard-setting body.

While VASPs will be free of transaction and open-position limits, end users, holders of so-called *"unhosted wallets"*, will be subject to transaction-size ceilings. Someone, presumably the Libra Association, will hold a capital buffer to further buttress the system and protect end users. So far, so good.

The [White Paper] authors now understand that their project is about more than technological solutions. It must also address economic and political concerns

But we come not to praise Libra but rather… (You can tell where this is going.) We see a number of unsolved problems.

Take-up problem solved, other problems not so much

First, the substitution of a set of single-currency stablecoins solves only one problem, that of take-up. Previously, it was not clear why a US resident transacting in dollars would prefer a basket-based unit, digital or not.

Now the Libra Association plans to offer her a dollar-linked stablecoin, LibraUSD. This arrangement, where the US resident uses that digital unit in transactions intermediated by her VASP, differs from the wholesale version of a central bank digital currency (CBDC) only in that the Libra Association rather than the Fed would issue and burn the digital units.

The White Paper even moots the possibility, if a CBDC is issued, that the Association could replace the applicable single-currency stablecoin with the CBDC (on this see also Niepelt 2019). This implies that the VASPs will converge to none other than the same regulated commercial banks with which central banks will presumably open wholesale digital accounts.

But the addition of individual-currency stablecoins alongside the composite unit does nothing to address other concerns. These units can still circulate outside the country or countries to whose currencies they are linked. If residents of another country shift into LibraUSD, that country's central bank will lose the ability to earn seigniorage. It will lose control of monetary conditions. It will lose the ability to backstop local financial markets.

What capital buffer exactly?

Second, the source and structure of the capital buffer is unclear. The White Paper states that the capital buffer will

be supplemented by interest earned on the short-term treasury securities in the Reserve. The rest of the capital presumably will be subscribed by the members of the Libra Association, in return for a share of the fees earned on Libra Network transactions.

But will such fees provide a return commensurate with the size of the capital subscriptions needed for an adequate buffer? How will fees be shared between the Association members who subscribe the capital and the DDs and VASPs who execute the transactions? If fees are non-negligible, will Libra be able to compete with cash and debit cards?

There are still other questions about the capital buffer. Will it be adjusted countercyclically? Will it be set by the Libra Association or the central bank to which the single-currency stablecoin is pegged?

Presumably the answer is: by the central bank, since countercyclical capital buffers are key macroprudential tools critical for financial stability.

The missing forward market

Third, the White Paper acknowledges that an ecosystem of Libra-related derivatives is likely to develop around its stablecoin. This seems to be what the authors mean when they anticipate the development of *"smart contracts [that] allow participants to agree on more complex business logic…"* (You can see that technologists and monetary economists still use different jargon.)

Actually, the key derivative instrument, which will be essential to the operation of the network, is entirely missing from the White Paper. We refer to a forward market in Libra stablecoins. Recall that DDs will be responsible for keeping the stablecoin stable. If the price of LibraUSD rises above $1 – if LibraUSD appreciates – it is the dealer's role

to deposit $1 with the Libra Network and sell that additional LibraUSD into the secondary market, earning a profit on the transaction and driving the price back down toward $1.

But the dealer's ability to execute these arbitrage transactions is limited by its own reserves of dollars, which are finite. For dealers to perform this function smoothly, there will have to be a forward market.

Again, suppose that the price of LibraUSD on the spot market rises, say to $S, where S>1. The dealer can then sell LibraUSD on the spot market for $S and buy it back at the forward price F tomorrow. Assuming that the forward is priced at $1, this forward-spot arbitrage pushes the price back toward $1. (We are also assuming that interest rates are zero without loss of generality.)

Crucially, the existence of this forward market also enables non-dealers to conduct peg-stabilizing arbitrage, which they would be unable to do otherwise. In this set-up, the spot rate will never diverge from $1, assuming of course that F is $1, which is the rational expectation if arbitrage capital is ample and the Reserve is solid.

The missing lender of last resort

But if a forward market and other derivatives markets solve one problem, they create another: who serves as Libra lender of last resort? When something goes wrong in US derivatives markets, the Federal Reserve steps in, providing emergency liquidity, as we have seen so dramatically in the recently.

But if something goes wrong in the market for a widely traded and widely held LibraUSD smart contract, will the Fed be able to do the same under the provisions of Section 13(3) of the Federal Reserve Act? Will it do so willingly?

White Paper v2.0 alludes to this issue. It is worth quoting the relevant passage. *"If extreme circumstances occur and Designated Dealers no longer make markets in Libra Coins, Libra Networks will call on a pre-existing arrangement with a third-party administrator or dealer to assist, in an administrative capacity, in burning Libra Coins for end users and liquidating assets comprising the Reserve to make payment as appropriate. These emergency operations will always be implemented under the guidance of the relevant regulators."*

If we're talking about the failure of an individual DD, then the *"third-party administrator"* could be another DD or a member of the Libra Association. But if we're talking about the illiquidity or insolvency of DDs as a class, are we talking about the Federal Reserve?

Evidently, the authors of the White Paper have doubts about whether the Fed will be a compliant lender of last resort to the market in LibraUSD. In the event of a run on the Reserve, they suggest that rather than forcing the Libra Network to convert its securities into cash and incur fire-sale losses, the Libra Network might adopt redemption stays (delays in providing cash) and early redemption haircuts (additional fees for redemption).

Financial historians will recognise these devices for what they are. They resemble the clearinghouse certificates issued by bank groups in the US in the 19th century in response to bank runs and financial crises. This practice created a situation where not every dollar was as good as every other dollar. It was this unsatisfactory state of affairs that led to the establishment of the Federal Reserve System in 1913. ■

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References
Cecchetti, S and K Schoenholtz (2019), "Libra: A Dramatic Call to Action," VoxEU.org, 28 August.
Niepelt, D (2019), "Libra Paves the Way for Central Bank Digital Currency," VoxEU.org, 12 September.

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Save markets to save the single market

It’s time for the EU to make quick and indispensable progress in forming a capital markets union, Maria Demertzis writes

Necessary though it was, the temporary relaxation of state aid rules in the EU has brought grave unintended consequences. Through indiscriminate support, the EU is rapidly moving from an even playing field that promotes the 'survival of the fittest' to a situation where only those with the 'richest parents' survive.

The EU economic system will come out battered and unbalanced. Countries in the south will lose a substantial part of their production fibre as they lack the means to save those in need. But indiscriminate help in the richer north will also delay the natural sorting between productive and unproductive firms. As companies slip into liquidity problems, they risk predatory takeovers below their market's worth from EU and non-EU firms rushing to exploit market distress.

The EU needs to reverse this process and needs to think about how to safeguard all markets. We see reasons for rethinking state-aid rules and making some long needed progress with creating capital markets.

Clearly, some form of state-aid rules must be reinstated as quickly as possible to preserve the integrity of the single market. However, for as long as state-aid rules are not in operation, the EU must rethink a strategy for the future of its industry.

For all its faults, the current relaxation of such rules offers a unique opportunity to rethink how the rules must be adapted to a new global order. State-aid rules have up till now constrained the EU from defending itself against rising global structural imbalances.

The new but crucial objective should be the notion of economic sovereignty. Decide which industries should be promoted as necessary for sustaining economic independence and protect the EU from unfair practices elsewhere, without however succumbing to protectionism.

In the meantime, national 'rescue' operations cannot be indiscriminate but have to be based on balance sheet information before a cut-off date.

Productive firms will be asked to drive the recovery, so they need to be ready to go. They need to be given liquidity, preferably in the form of grants not loans, to prevent the negative future consequences of accumulating debt.

Markets are the only ones capable of sifting through the risks the EU currently faces and identify who is the fittest to survive. The best the EU can do is provide the legal certainty necessary for this to happen

Firms with very precarious balance sheets, on the contrary, should be allowed to fail. Their employees should receive support through unemployment benefits and help with employment transition. This would be the best pursuit of societal purposes.

The real problem however rests with a third category of firms, the largest of all: those who are neither clearly productive nor clearly failing. The difficulty in deciding what to do for them was the real reason behind the policy of indiscriminate support.

A tempting response for some is to call for state participation in the form of equity. If taxpayers are to take a share in the losses, the argument goes, they must also have a share in the profits.

This argument is seductive, but it puts the role of the state on a par with the markets. The state can support those that are clearly productive, in its role as a buffer against truly unforeseen circumstances.

But it is not well placed to identify those that are worth saving. Its involvement in this third, problematic category, needs to be limited, therefore, to encouraging others to do it. Should it be banks? Partially yes, but mostly no because banks are constrained in how much risk to take and they are not meant to have 'skin in the game'. But if not banks, then who? The answer is capital markets. Unfortunately, the EU is very poorly prepared in this respect.

It's time for the EU to make quick and indispensable progress in forming a capital markets union. And it can do it, as it did with Banking Union during the previous financial crisis. This could take the shape of a '28th regime': a separate legal jurisdiction, created from scratch and separate from any national jurisdiction. By design, it should encourage more private capital involvement, domestically but also across member states.

Markets are the only ones capable of sifting through the risks the EU currently faces and identify who is the fittest to survive. The best the EU can do is provide the legal certainty necessary for this to happen. ■

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A common eurobond market in sight

Vítor Constâncio, Karel Lannoo and Apostolos Thomadakis argue that the Next Generation EU proposal has given a boost to a eurobond market, European capital markets, eurozone stability and the international role of the euro

The 'Next Generation EU' budget proposal has brought a common eurozone bond market suddenly and unexpectedly much closer. To fund the recovery, the EU Commission will go directly to the markets in the next two years and raise €750 billion. This will give an enormous boost to a common eurobond market, a *conditio sine qua non* for long-term stability in the eurozone, the European capital markets, and the international role of the euro. It also is an impetus for further joint work on government bond issuance and settlement procedures, and for expanding maturities' coverage.

Debates about creating a eurozone sovereign bond market or a European safe asset have been ongoing for at least one decade. Unlike in the US where the federal state is at the centre of a vast government bond market, in Europe, eurozone countries have no common Treasury and issue debt separately, while having different ratings and consequently different degrees of safety[1].

Complex proposals were made to stabilise euro government bond markets, such as the Blue-Red bonds[2], or the Sovereign Bond-Backed Securities (SBBS)/European Safe Bonds (ESBies) with junior and senior tranches of sovereign bonds, but they had partial joint liability or too much financial engineering[3]. A more recent proposal, based on the principle of seniority of European debt issued without mutualisation, has not yet been officially discussed[4].

The urgency of the Corona crisis changed views, and the acceptance is now there that the EU Commission can directly borrow in the markets to address an unprecedented economic situation, following Art. 122 of the Treaty on the Functioning of the European Union (TFEU)[5].

This basis was already used for the Support to mitigate Unemployment Risks in an Emergency (SURE) regulation[6], which allows the EU to raise €100 billion to support national unemployment schemes in the EU. It creates a

contingent liability for the EU-27 based upon the guarantees of the member states in line with their respective share in the total Gross National Income of the Union, on a *pari passu* basis.

The same basis will now be used for the €750 billion recovery fund in the context of the EU's next 7-year budget, the Multiannual Financial Framework (MFF).

The big increase of budget financing requirements as a result of the unavoidable response to the coronavirus crisis constitutes an opportunity to discuss forms of European debt without mutualisation that creates a new European safe asset

The Recovery Bond issued by the Commission, if approved by the European Council, will represent a sea change in European policies and will be a big improvement for Europe's bond markets, and create a large long-term debt security for institutional investors. The plans are that the maturities could last until 2058, or about 30 years, and that the first repayment would only happen from 2028 onwards.

Together with the about €500 billion of outstanding borrowing from the European Investment Bank (EIB)[7], the €90 billion outstanding from the European Stability Mechanism (ESM), and the €47 billion outstanding under the European Financial Stabilisation Mechanism (EFSM), this makes at least €1.4 trillion in triple A assets[8].

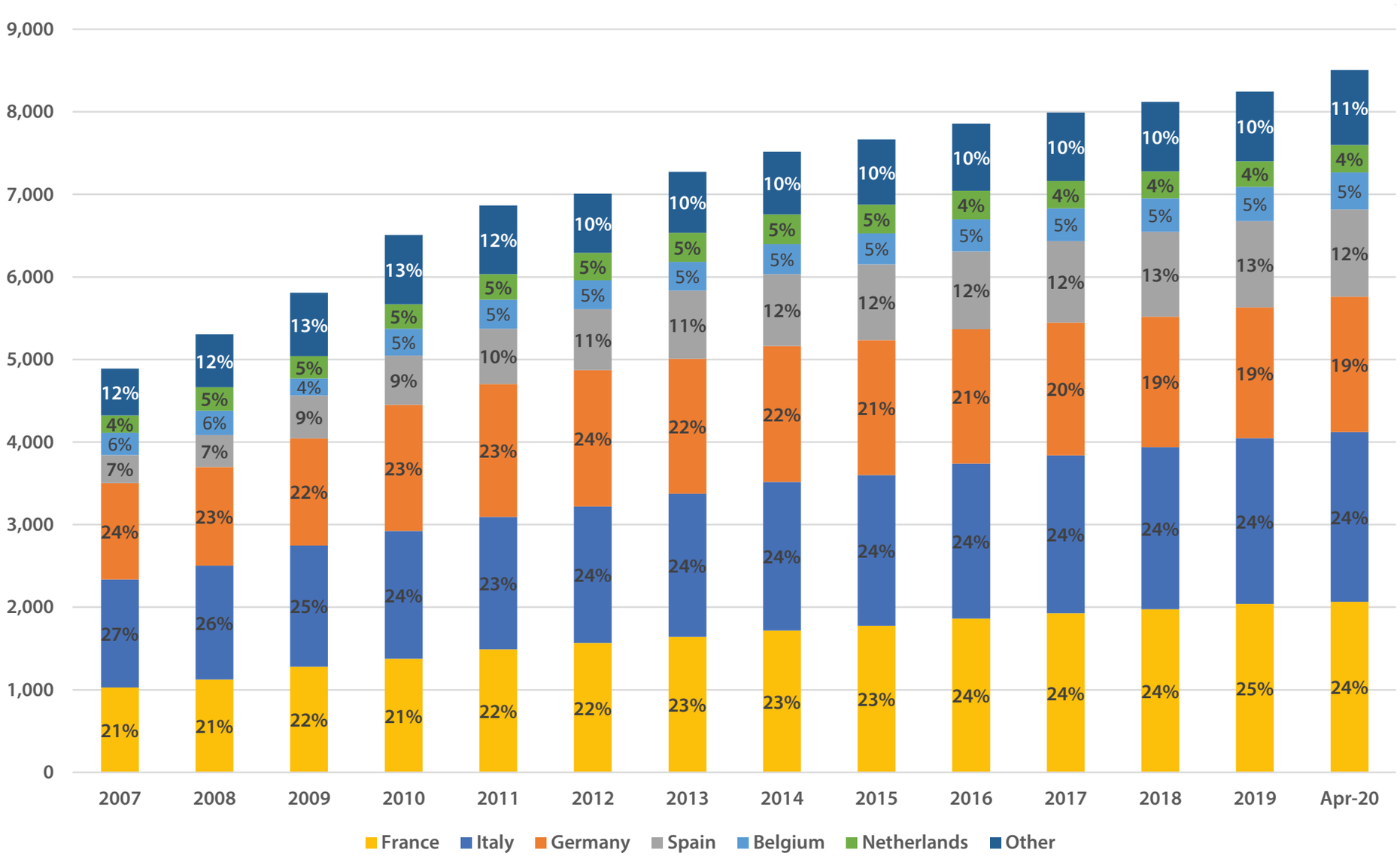
Between 2007 and 2019, the borrowing needs of euro area governments surged drastically and outstanding general government debt grew by 69% in nominal terms from €4.9 trillion to €8.2 trillion (Figure 1)[9].

With the COVID-19 crisis unfolding since the beginning of the year, the total outstanding amount of government debt securities stood at €8.5 trillion in April 2020, with four countries (France, Italy, Germany and Spain) accounting for almost 80% of that. Although about 75% of these government bonds are rated A or above, only 23% are AAA-rated bonds.

As for the new debt issuance of euro area governments, it is expected to increase well above the €2.3 trillion in 2019, given that at the end of April was already at €1.1 trillion (Figure 2).

The big increase of budget financing requirements as a result of the unavoidable response to the coronavirus crisis constitutes an opportunity to discuss forms of European debt without mutualisation that creates a new European safe asset.

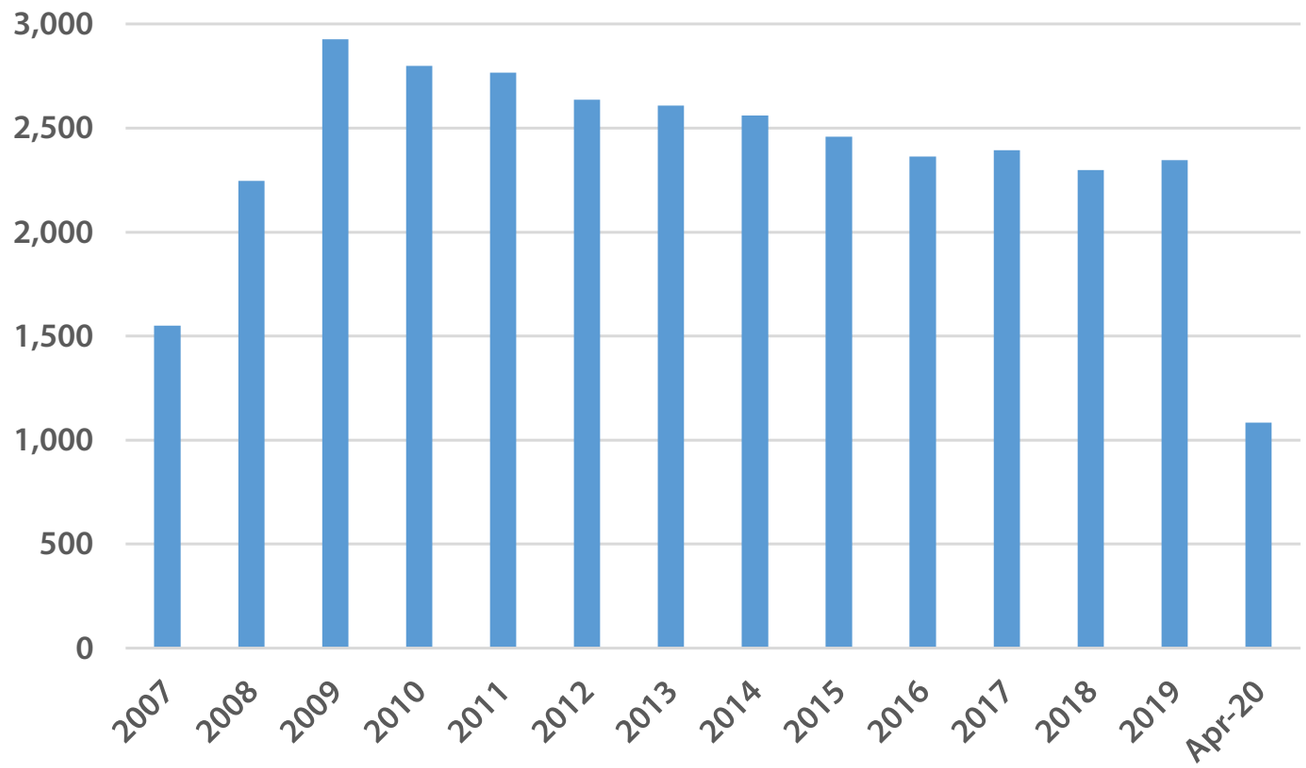
Figure 1. Nominal outstanding amounts of euro area government debt securities (€ billion)



Note: Data refer to debt securities issued by the general government (ie. central, state and local government plus social security funds). Other includes: Austria, Cyprus, Estonia, Finland, Greece, Ireland, Latvia, Lithuania, Luxembourg, Malta, Portugal, Slovakia, Slovenia.

Source: European Central Bank.

Figure 2. Issuance of euro area government debt securities (€ billion)



Note: Data refer to debt securities issued by the general government (ie. central, state and local government plus social security funds).

Source: European Central Bank.

A larger euro denominated bond market allows for a more complete yield curve over different maturities, which is used as a benchmark for other issuers and for derivative markets. It also provides for a more liquid market in eurobonds, that reduces spreads and issuance costs as compared to the very fragmented national bond markets (certainly for the many smaller EU countries).

Although it is a temporary measure, the maturities create long-term liabilities for the EU, which also create expectations of more to come (eg. new common revenues). Moreover, this is essential to really foster the role of the euro as a global currency, attract international investors, respond to the present geopolitical environment, and promote the European sovereignty.

From a prudential perspective, an additional advantage is that a larger European asset class emerges for financial institutions, not linked to a sovereign. This reduces the sovereign nexus, or the dependency of banks upon rating of the sovereign for the pricing of credits, a splitting factor for European banking markets.

It also makes the discussion about the limitations of large exposures to sovereigns – or the introduction of a risk weighting for sovereigns – less prominent, as financial institutions will automatically redistribute their assets. ■

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Endnotes

1. Only Germany and the Netherlands have a triple-A rating.

2. See Delpla, J and J Von Weizsäcker (2010), "The Blue Bond Proposal", Bruegel Policy Brief, Issue 2010/03, May. Bruegel.

3. See Brunnermeier, M, S Langfield, M Pagano, R Reis, S Van Nieuwerburgh and D Vayanos (2017), "ESBies: safety in the tranches", Economic Policy, 32(90): 175-219.

4. Leandro, A and J Zettelmaeyer (2018), "Safety Without Tranches: Creating a 'real' safe asset for the euro area", CEPR Policy Insight n. 93, June.

5. According to Article 122 of TFEU: "where a member state is in difficulties or is seriously threatened with severe difficulties caused by natural disasters or exceptional occurrences beyond its control, the Council, on a proposal from the Commission, may grant, under certain conditions, Union financial assistance to the member state concerned."

6. Regulation (EU) 2020/672 was adopted on 19 May 2020.

7. EIB has also created a Pan-European Guarantee fund in response to COVID-19 of €25 billion. This fund aims to mobilise up to €200 bilion of additional financing. However, it remains to be seen whether the ceiling of €200 billion will be reached, and whether the guarantees will lead to activation and payments that would imply the EIB having to issue debt to finance those payments to the amount of €200 billion.

8. Importanly, about half of that amount (€850 billion) is one-off operation linked to this extraordinary crisis with a 30-year maturity. This means that coverage of different maturities is not assured. In addition, issuance of 'safe debt' by the various European institutions is not really harmonised, or traded in an integrated way.

9. As a result, the debt-to-GDP ratio rose from 52% to 69% over that period.

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The EU's financial readjustment

Rebecca Christie and Thomas Wieser consider the EU post-Brexit reckoning with financial markets, and argue that time is of the essence to create highly integrated, functional and fair financial and capital markets

Executive summary

In the negotiations between the European Union and the United Kingdom over their future relationship, we see a high probability of a weak contractual outcome, given the dominance of politics over considerations of market efficiency. The EU will thus face a great deal of readjustment and regulatory realignment of its market for financial and other services.

The future relationship will start out with closely aligned regulations which will allow equivalence, and therefore seamless transactions, to continue in many sectors for a number of years. As regulatory autonomy has been one of the main Brexit rationales, we expect divergence to increase after a couple of years.

The UK will become a third country for financial service transactions, dependent on temporary equivalence rulings, whereas in the past it could do business under a comprehensive regulatory passport.

London will remain a global financial hub, even as EU companies move operations out of the UK, set up additional licences and distribute activities across the EU. This will result in duplication and thus higher costs in both the UK and the EU as market participants strive to adjust to a future structure that will remain highly uncertain for years to come.

In the EU-UK negotiations on financial services, the aims should be to seek an agreement to provide stability for a defined, though limited, time period; a plan for how to manage divergences and the regulatory barriers that may result; and an EU reckoning with what kind of financial market it wants. This would ensure a stable transition to what we assume will be a structurally very different link than existed when the UK was part of the EU.

The UK has historically been both a business centre and policy leader in the financial sector. In its absence, the EU will need to decide how prominent a role finance should play and where regulatory and supervisory responsibilities should be located.

Brexit can act as a catalyst for the EU to address what its capital markets should look like and how to get them there. The challenges of restructuring and recovery in the wake of COVID-19, of ensuring confidence in the euro and of preserving pensions systems all require highly integrated, functional and fair financial and capital markets, as public budgets are under great stress. These integrated markets do not exist in the EU. Action now is of the essence.

Brexit has caused much less volatility than forecast; a European Commission assessment of financial services preparations concluded that no additional contingency measures were required

Introduction

Brexit is now a reality. The future relationship between the United Kingdom and the European Union remains open and will be decided in negotiations taking place during 2020. These talks can be extended, just as previous deadlines were lengthened in response to political and logistical considerations. The COVID-19 pandemic suggests that these negotiations will take longer than some might have hoped.

In the early phases of the UK's withdrawal from the EU, the financial sector was an area of significant concern. It seemed increasingly unlikely that the UK could remain part of the internal market while leaving the EU, because of the need for regulatory alignment and ongoing European judicial oversight.

This in turn raised questions about financial stability, given fears that contracts and economic actors would have to deal with an unanticipated disruption. Competition to lure companies and EU institutions from the UK to within the EU distracted policymakers from assessing what the economic consequences of increased financial fragmentation would be.

But Brexit has caused much less volatility than was widely forecast. The European Commission in 2019 assessed financial services preparations and concluded that no additional contingency measures were required (European Commission, 2019)[1], while pledging to monitor conditions and adjust as needed.

Up to now the UK has benefitted from 'passporting', which allows free and permanent operations throughout the whole EU for financial services companies based in one member state. Passporting rights are permanent for all countries in the single market and span a range of activities from deposit taking to investment services and fund management (European Parliament, 2017).

As the UK transitions to the status of third country, or one that is not under the legal regime of the EU treaties, it will no longer be eligible for such smooth cross-border acceptance. Instead it will need to establish other relationships, which will necessarily be more limited.

The EU already provides for regulatory 'equivalence' with non-members. This essentially means that as long as both parties regard each other's regulations as being equivalent, trade can flow more freely than would otherwise be the case in designated areas. This sort of arrangement is established on a case-by-case basis for specific sectors.

Most importantly, it can be withdrawn unilaterally at relatively short notice. Because there is no clear global definition of equivalence, governments have wide latitude to act as they see fit.

The UK has a robust financial rulebook that, at the point the Brexit transition period ends, will be fully aligned with the EU. This means that equivalence will be readily available at the beginning. It seems highly unlikely that the new agreement between the EU and the UK, still foreseen to be concluded by the end of 2020, will be able to regulate in detail how the financial sectors of the EU and the UK would interact with each other at the regulatory and supervisory level.

We expect it will take three to five years for political, technical and transitional work to lead to a new equilibrium in financial-sector relations between the UK and the EU, taking into account possible negotiating extensions, 'technical details' left to be resolved after the main agreement is concluded and sector-specific transition timelines.

While it would be nice for the process to work faster and more efficiently, realistically markets and politicians tend to ease into new equilibrium rather than creating a new system overnight.

In the EU-UK negotiations on the future relationship, much of the rhetoric may focus on the drama of what extensions are needed and by when they must be requested, coupled with fears or warnings of a new 'no-deal' situation. Despite all the political rhetoric we have little doubt that ultimately there will be an agreement, also on financial services, preventing a cliff edge.

The eventual agreement will, however, have to set the scene for a divergence of regulation between the UK and the EU. It will need to address the issues of:

- Determination of regulatory equivalence at the start of the new relationship between the UK and the EU;
- Mutual recognition of financial regulatory and supervisory frameworks; and
- Establishment of mechanisms for granting and reviewing such determinations.

Granting equivalence is not an across-the-board solution for a new relationship between the two partners for the financial sector as a whole. It will need to be established sector by sector, regulation by regulation. Over time, as indicated already by UK politicians, there will be changes to UK legislation and/or regulatory decisions that will deviate from EU standards and rules. At that point, whether for technical, substantive or political reasons, equivalence will therefore in all probability expire or be withdrawn in the sectors or areas where divergence has opened up.

London, which has been the hub of EU capital markets, will not be the same, but neither will it wither. The EU will have to decide how much of what historically has been done in London should be duplicated inside its borders, and how much it is willing to outsource to the UK or other third-country jurisdictions, such as New York.

We expect a slow but inevitable shift to the EU of a certain part of financial services activity that for now is still conducted from London. This will reinforce the relocations that have taken place over the last two years or so.

The think tank New Financial identified 332 firms that have relocated at least part of their financial business away from London (Hamre and Wright, 2019), with Dublin being the most popular destination and target of 28 percent of the moves. Paris, Frankfurt, Amsterdam and Luxembourg have also seen inflows, with a number of other cities in the EU also benefitting from the changes. Financial companies want to keep their operational options open.

Historically, most European politicians have seemed to want to keep finance at arm's length, with London's dominance providing the EU with an efficient centre for financial and capital markets. As the EU now loses this convenience, policymakers will need to confront longstanding questions about how to make EU markets more efficient and stable, and how to ensure that cross-border flows of finance work to the benefit of member countries.

Brexit offers an opportunity to reshape EU financial infrastructure for the better. If policymakers take up the challenge, the EU may emerge with a more unified and functional financial market that enhances confidence in the euro area and will better serve the EU economy. Otherwise, the markets – and the broader economy – may sputter along without living up to their potential.

The EU's priorities in the coming decades include tackling climate change, ensuring the viability of pensions, and dealing with the financial turbulence induced by COVID-19. Without a fully integrated and single financial and capital market, the EU will not be able to meet these challenges and mitigate the negative fallout of the crisis.

Public finances, under severe strain in many EU countries for the foreseeable future, will need to work closely with the private sector as they will not be able to shoulder these multiple burdens and challenges by themselves. The time to take political decisions on these financial market issues is therefore now.

To make these decisions, the EU will have to transcend what we have seen over the past 20 years, namely attempts by national politicians, regulators and supervisors to retain as much market segmentation as possible. When it comes to financial services, the EU faces the additional challenge of how to push forward on something that is important but not urgent.

In 2020, the immediacy of the COVID-19 pandemic makes structural financial regulation feel even more abstract, and it thus becomes harder to prepare for the future. The EU will need to overcome this inertia to build the finance sector it needs.

The negotiation period

With the UK out of the Union, EU and British officials have started debating what the future relationship between the two countries will look like once the transition period ends. At time of writing, this is set for the end of 2020, with extensions of the status quo pre-arranged in some areas of financial services where operational continuity is a priority.

Assuming that the uncertainties associated with COVID-19 abate over the year then negotiations will go on. But there will be no solution to financial services until the very end. Additionally, initial debate may focus on procedural issues such as interim deadlines by when various extensions need to be requested, rather than on the substance of the future arrangement.

During this time, there is little likelihood of significant market volatility associated with Brexit, as most of the contingencies and possibilities have been known for quite some time. Firms have taken their precautionary measures, and fallback solutions are in place.

In the years between the referendum and the UK's departure, financial firms made the necessary preparations to brace for a hard Brexit (ECB, 2020; European Commission, 2019). Those preparations can be called on to the extent the future arrangement is not fully worked out when the UK takes on true third-country status.

London will not lose its important global position, but it is seeing changes in its position in relation to Europe. The scale of the broader financial industry is enormous. The UK is home to nearly €11 trillion in banking assets.

EU clients account for roughly 20 percent of total UK banking revenue, suggesting that up to 20 percent of these assets could be on track to relocate, while the rest, related to UK and non-EU clients, might stay in London (Calò and Herzberg, 2019). Beyond banking, Brexit could also ultimately lead to a reallocation of as much as 40 percent of turnover in interest rate derivatives and 14 percent of other financial intermediary assets.

London will not lose its important global position, but it is seeing changes in its position in relation to Europe

Calò and Herzberg concluded these shifts will have a bigger impact on the recipient cities than they will on London, increasing fragmentation risks while also possibly easing concentration risks across the industry.

The scale of such a shift also raises the question of whether this will affect the global importance of London itself. It appears likely that London will keep its importance at the global level, while weakening as a single point of concentration for European markets as firms distribute themselves into and across the single market.

The future for EU financial markets is therefore more decentralised. There is no single financial centre rising up to replace London. Instead, companies are spreading out across Europe to cities that specialise in specific lines of business or offer other benefits.

The industry will lose some of the one-stop-shop advantages of having its financial market workforce all in one place, and it may become more dependent on communications and travel infrastructure. But diversification also has its advantages.

Just as banks learned to keep their headquarters and back-up facilities in separate physical locations, they may now see advantages in terms of function and human capital in splitting up their operations. These shifts are well underway and will continue in parallel to the official track of the EU-UK negotiations.

What will the EU-UK agreement look like?

The European Commission's negotiating mandate, published on 3 February 2020, makes clear that equivalence is *"the key instrument"* that each side will use to regulate financial interactions. The Commission calls for supervisors to cooperate and communicate, while essentially leaving all doors open in terms of what the final outcome will be: *"The envisaged partnership should reaffirm the Parties' commitment to preserving financial stability, market integrity,*

investor and consumer protection and fair competition, while respecting the Parties' regulatory and decision-making autonomy, and their ability to take equivalence decisions in their own interest. This is without prejudice to the Parties' ability to adopt or maintain any measure for prudential reasons" (European Commission, 2020).

In plainer English, stability is good, and being able to act unilaterally in the name of stability is better.

The final deal will keep both of those objectives in mind. It may well result in something that goes beyond piecemeal equivalence for individual rules and market segments. Politics matter, so there will be a need for trade-offs between otherwise unrelated dossiers. The outcome will depend on the political priorities of both sides.

For example, the EU might seek a favourable agreement on access to fishing waters by offering a more stable contractual relationship on financial services for a certain period of time, compared to mere equivalence.

One possibility for a more favourable agreement could be to give full and unequivocal financial-sector equivalence for at least five years, which could only be withdrawn in the case of serious divergences by one of the partners. There has been some hope that financial services could be put on a separate track, but we think it is unlikely that political negotiators will allow it to become delinked from other important sectors (for example, see *The Guardian*, 2020).

Equivalence is not a single state, but rather a patchwork of arrangements that replace only some of the things that are dealt with by passporting within the EU. The industry views selective and time-limited equivalence decisions as the most likely outcome, with a tail risk that political conflict will mean that no such arrangements can be worked out (Asimakopoulos and Wright, 2020).

'Permanent equivalence' was floated in Britain's opening gambit in the future relationship negotiations (*Financial Times*, 2020a). When the UK published its initial negotiating position at the end of February 2020, it took a more pragmatic line.

The future relationship should be legally binding and follow precedents set in the EU's trade agreements with Japan and Canada. At the same time, it *"could include appropriate consultation and structured processes for the withdrawal of equivalence findings"* (UK, 2020).

The EU will have a lot of latitude when deciding how to proceed. As the industry-commissioned Norton Rose (2017) analysis of equivalence noted, there is no international standard for how to determine equivalence or which benchmarks to use. Regulators will not want their cross-border reach to be limited only to areas where such standards exist, however.

As Klaus Löber, head of the European Central Bank's oversight division for payments and infrastructure has pointed out, authorities can sometimes justify applying their rules in an extraterritorial fashion if they feel cooperation is lacking. Pressure to do this is magnified in industries seen as too important to rely exclusively on deference (Löber, 2019).

To be effective, the new EU-UK agreement will need an arbitration process that produces rapid results. Ideally this process would require demonstration of economic cause for such a withdrawal of equivalence, and will take advantage of independent expertise.

The EU has a better track record of looking at economics and expertise when granting equivalence than when withdrawing it, when technical and diplomatic factors can come into play. For example, in the period leading up to Brexit, the EU chose not to focus on technical solutions while the political backdrop was still so much in flux.

Neither the EU nor British negotiators wanted to give away the end game any earlier than was necessary. Political constraints have therefore limited technocratic problem-solving, and we expect that this will continue while the bulk of the future arrangement is still undefined.

In 2019, the European Commission put the world on notice that equivalence is not guaranteed. First, it allowed some provisions in relation to Switzerland to lapse on 1 July 2019 as part of a broader stalemate in renewing a series of trade agreements. Later in July, the Commission moved to withdraw equivalence for Argentina, Australia, Brazil, Canada and Singapore in the specific field of credit rating agencies.

The UK will have to join the rest of the world in undergoing equivalence evaluations. These take time: the Commission works in consultation with supervisory agencies to assess whether the rules applied in the country under consideration are equivalent to those applied in the EU, and to verify that they are legally binding, ensure effective supervision and achieve the same results as the EU rules.

The decision to let Swiss equivalence expire created headlines because of Switzerland's finance ties to the EU and the natural questions about what would happen and what this would imply for the UK. The particular provisions most affected were those that prevented stocks traded in the European Union being traded on stock exchanges of third countries that are not recognised as having prudential and business conduct requirements equivalent to those in the EU (Baltensperger, 2019).

In a worst-case scenario, Swiss stocks that traded in the EU could have been banned from trading on their home exchange. In fact, not much happened. Swiss regulators ordered their companies to trade only on Swiss exchanges, thus removing the requirements related to trading on EU exchanges. Relationships were established for middlemen and associated fees (*Financial Times*, 2019), and trading on Swiss exchanges was broadly unchanged.

That was about it. Given the numbers and volumes of EU and UK equities respectively, this benign outcome might be difficult, if not impossible, in the case of a withdrawal of equivalence between the two. Other market segments might face even higher hurdles, depending on the sector.

This suggests that many prospective regulatory barriers could be overcome with additional paperwork and money on the part of firms and clients. Equivalence, passporting and the single market were designed to reduce costs and administrative burdens, however. Thus cross-border activity may become permanently more expensive, which may hurt the growth prospects of the broader economy.

Longer-term outlook

Ongoing equivalence matters in terms of stabilising expectations over time, not only in terms of trading conditions at a certain point in time. The point of Brexit, as often argued, is legal and constitutional independence. This only makes sense if you want to exercise it, which we assume will be the case, especially given the messaging from the Bank of England and the Johnson government (*Financial Times*, 2020; UK, 2020).

Given that, sectors profiting today from equivalence may lose their privileges, possibly incrementally, once agreement is in place and the future relationship is underway. Different financial sectors will be affected differently. In some cases, such as credit ratings agencies, firms will need EU-registered entities for their ratings to be recognized in the EU. The European Securities and Markets Authority was required to withdraw recognition of UK ratings companies on the date of Brexit, so the necessary workarounds have already been put in place.

The UK has put in place two types of transition period for financial services firms for when the current passporting regime ends at the end of the main Brexit transition period (foreseen at the end of 2020). For European companies planning to wind down their British business after Brexit, existing contracts will automatically be covered by the

Financial Services Contracts Regime, which applies for a maximum of 15 years for insurance contracts and five years for all other contracts.

For firms that wish to continue doing UK business after losing the EU passport, the UK has also established a temporary permissions regime to apply after the transition period ends (FCA, 2020). The UK Financial Conduct Authority asked firms to notify it of their plans to use this temporary permissions window before Brexit took place, and said it would consider whether and how to reopen the notifications window later.

One way for the EU to improve its financial market oversight would be to reinforce the European Securities and Markets Authority (ESMA), which was created in 2011 and already has direct supervisory duties in some market segments. A broadening of the scope of ESMA's authority requires reform of its governance and funding, which currently limit its independence and capacity (Sapir *et al*, 2017).

Many national politicians, financial services companies and interest groups thrive on market segmentation, and would resist strongly the establishment of a supervisory system for capital markets similar to that now in place for banking, even though it would make for fairer competition, increase legal and economic convergence and move the EU towards a genuine capital markets union.

Adjustment might prove to be more of a challenge for those service providers that are not financial, but whose services are closely linked to financial products, such as accounting and the legal profession. In the run-up to Brexit, UK law firms actively applied for licences in EU jurisdictions, such as Ireland, in order to have more options in terms of maintaining client relationships (Law Society of Ireland, 2019).

EU institutions and European international financial institutions will need to work with EU service providers. The European Stability Mechanism, for example, has shifted its contracts from UK law to Luxembourg law. If a wave of companies follows suit, firms that operate in the UK and in the EU will need to make sure they can manage all of the extra complexity from using multiple systems.

The legal industry faces considerable shifts to make sure it has the capacity to handle all of the new cross-border contracts and technical changes that will result from the UK's change in European status. Under some scenarios, this transition could greatly complicate working relationships, especially for London-based clients.

Will they continue to be able to use a London-based lawyer to manage their EU affairs, or will they need to switch to partners in Brussels or Dublin to make sure everything works smoothly? In the past, Europe has been willing to travel to London, but now Londoners might need to make the journey in reverse.

Courts could also see an increase in legal battles over which jurisdiction has precedence, and whatever substantive matters may be disputed, once the UK is no longer automatically bound by the EU Court of Justice. International firms could face additional hurdles managing their human capital because the final EU-UK deal is unlikely to include full freedom of movement.

This means workers who are posted from one jurisdiction to the other will need visas and other administrative support that was previously unnecessary, increasing costs and giving companies incentives to consolidate in new financial hubs, to the extent that EU cities can establish knowledge centres and standardise professional qualifications.

One reason this transition is difficult to navigate is that many of the services the UK has provided were done cross border efficiently and well. London has been a home in particular to non-bank financing channels. This is the area in which cross-border relations will require the most attention.

Brexit thus forces Europe to consider what else its financial sector needs to have. The EU has already been grappling with dependence on bank financing and a general situation in which there are too many banks and too few capital market options (Pagano *et al*, 2014). After Brexit, the question of how to encourage and support capital markets activity will take on new resonance.

It is too simple to say that the UK is home to 'more finance' and the EU has a preference for 'less finance'. The financial sector and the real economy are intertwined to a great extent. Europe might have a general distrust of 'speculation', but it has long counted on cross-border finance to be one of the single market's strongest enablers.

The EU's economic success thus depends crucially on how the EU organises itself without the UK. The less progress there is towards a more efficient and integrated capital market in the EU, the greater the negative effects on the EU will be.

To move ahead, the EU should take action in the following areas:

- Clear-eyed analysis of where Europe's financial stability requires certain functions to remain in-house, and where the EU would be weaker if it fences itself off from global financial channels. Ringfencing is not new with the debate on the EU-UK relationship, but it will take on new resonance.

- Vigilance on operational risks, particularly settlement snags that could arise because of unexpected blockages in the financial plumbing.

- Recognition of the current tension between home and host countries, particularly in the context of cross-border issues including resolution planning, capital set-asides and operational risk management. This will require a balance between consistent pan-European rules and a fair framework for a multipolar union.

A functional system will require a fair degree of flexibility to be workable, but it must not have so much leeway that it becomes effectively unaccountable. If the aim is to have a smoothly functioning internal market and capital market, it will be necessary to move towards more centralised oversight in a number of financial sectors, including equity trading and issuance.

- Completion of the euro area banking union, including full deposit insurance across the currency union. Brexit might not affect this debate directly, but it should offer a new momentum to address existing weaknesses in the current system.

Current vulnerabilities will take on a new prominence as the EU financial system reshapes itself: the bank-sovereign link that the euro area has tried so hard to break could inadvertently strengthen if national champion banks in bigger EU countries take up a larger proportion of the EU financial sector. Deposit insurance would build worldwide confidence in the euro, while continued fragmentation will hold back the currency's global role.

- Data-sharing policies that are practical, effective and adequately protective. Data-transfer questions will be a particular point of contention, as they cut across multiple sectors and industries. To the extent that new barriers inhibit information exchange, regulators will be more likely to require industry retrenchment.

Furthermore, the EU has a strong tactical incentive to withhold data adequacy recognition for the UK in this area, given its usefulness as a bargaining chip.

- Renewed consideration of whether non-euro countries will join the banking union. There would be considerable operational constraints for countries outside the Eurosystem to shift financial supervision to the European Central Bank, so the hesitation of countries such as Denmark and Sweden is understandable.

- Action to increase trust among EU nations. It is hard to imagine how Europe can emerge from Brexit stronger than before if it continues on its current course of setting up self-protective national barriers alongside new cross-border supervisory structures. COVID-19 underscores and amplifies these concerns.

- Renewed focus on anti-money laundering initiatives. Once again, the change to the financial system arising from Brexit could be an opportunity to strengthen the EU financial system across the board, not just by absorbing business from London.

- Consider emerging sectors such as financial technology (fintech) and sustainable finance, where regulatory divergence might have a broader impact because markets are evolving quickly, and weigh how much regulatory competition to allow within the EU.

As discussions on the future EU-UK relationship continue, uncertainty remains a central policy issue. At a minimum, financial firms face extra legal and administrative costs to make preparations and continually review them to avoid unpleasant surprises. At worst, a neglected part of the financial infrastructure could break down and set off a shock that unravels much of the careful work that went before.

As of this writing, operational risk and settlement risk seem to have been thoroughly vetted by lawyers and financial

managers. But the nature of crisis is that it often comes from unexpected directions. Political considerations require policy technicians to leave many loose ends, in order to allow negotiations to take their course.

Financial sector risks in the wake of COVID-19 will become greater. This will in itself bring about change to the structure of all sectors concerned, and will require further changes in supervision, regulation and international cooperation.

The adjustments will force the EU to confront longstanding questions about how member states work together. Historically, European politicians have been able to keep finance at arm's length, because of London's dominance as a market centre.

The EU now loses this shield. But the EU also has an opportunity to reshape its financial infrastructure for the better. If policymakers take up the challenge, the EU may emerge with a more unified and functional financial market, which enhances confidence in the euro area and will better serve the EU economy. ■

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Endnotes

1. See European Commission communications of June 2019 and September 2019 on Brexit preparations.

References

Asimakopoulos, P, and W Wright (2020) A Reality Check on Equivalence, New Financial, available at https://newfinancial.org/report-a-reality-check-on-equivalence/

Baltensperger, M (2019) 'The consequences of Switzerland's lost equivalence status', Bruegel Blog, 25 July, available at https://bruegel.org/2019/07/the-consequences-of-switzerlands-lost-equivalence-status/

Calò, S, and V Herzberg (2019) 'The Future of Global Financial Centres after Brexit: an EU Perspective', Central Bank of Ireland Financial Stability Notes Vol. 2019, No.9, available at https://www.centralbank.ie/docs/default-source/publications/financial-stability-notes/no-9-the-future-of-global-financial-centres-after-brexit---an-eu-perspective-(calo-and-herzberg).pdf?sfvrsn=4

ECB (2020) 'Press conference transcript, 23 January', available at https://www.ecb.europa.eu/press/pressconf/2020/html/ecb.is200123~0bc778277b.en.html

European Commission (2019) 'State of play of preparations of contingency measures for the withdrawal of the United Kingdom from the European Union', COM(2019) 276 final, available at https://eur-lex.europa.eu/resource.html?uri=cellar:40eadc58-8dc8-11e9-9369-01aa75ed71a1.0016.02/DOC_1&format=PDF

European Commission (2019a) 'Commission sets out its equivalence policy with non-EU countries and presents its recent EU equivalence decisions', 29 July, available at https://ec.europa.eu/info/publications/190729-equivalence-decisions_en

European Commission (2019b) 'Finalising preparations for the withdrawal of the United Kingdom from the European Union on 1 November 2019', COM(2019) 394 final, available at https://ec.europa.eu/info/publications/communication-4-september-2019-finalising-preparations-withdrawal-united-kingdom-european-union-1-november-2019

European Commission (2020) 'Recommendation for a Council Decision authorising the opening of negotiations for a new partnership with the United Kingdom of Great Britain and Northern Ireland', COM(2020) 35 final, available at https://ec.europa.eu/info/sites/info/files/communication-annex-negotiating-directives.pdf

European Parliament (2017) 'Understanding equivalence and the single passport in financial services Third-country access to the single market', Briefing, February, available at https://www.europarl.europa.eu/RegData/etudes/

BRIE/2017/599267/EPRS_BRI(2017)599267_EN.pdf
FCA (2020) 'Web pages on Brexit transition measures', updated 24 March 2020 and 18 Feb 2020, respectively, Financial Conduct Authority, available at https://www.fca.org.uk/brexit/temporary-permissions-regime and https://www.fca.org.uk/news/statements/financial-services-contracts-regime
Financial Times (2019) 'Trading costs rise after Switzerland's loss of EU access rights', by Philip Stafford, 24 September, available at https://www.ft.com/content/1aa1561a-dea5-11e9-9743-db5a370481bc
Financial Times (2020) 'Central banks running low on ways to fight recession, warns Mark Carney', interview with Mark Carney, by Lionel Barber and Chris Giles, 7 January, available at https://www.ft.com/content/713a70b4-315d-11ea-a329-0bcf87a328f2
Financial Times (2020a) 'Sajid Javid to push for "permanent equivalence" for City in Brexit talks', by David Crow, George Parker and Sam Fleming, 10 February, available at https://www.ft.com/content/9623b8a2-4c3a-11ea-95a0-43d18ec715f5
Hamre, EF and W Wright (2019) An update on 'Brexit & the City – the impact so far', New Financial, October, available at https://newfinancial.org/an-update-on-brexit-the-city-the-impact-so-far/
Law Society of Ireland (2019) 'Growing numbers seeking a "Brexit backstop"', 29 November, available at https://www.lawsociety.ie/gazette/in-depth/brexit-backstop/
Löber, Klaus (2019) 'Extraterritorial Application or Regulation in the Area of Financial Market Infrastructure: The Case for Cross-Border Cooperative Oversight', in European Financial Infrastructure in the Face of New Challenges, European University Institute, available at http://fbf.eui.eu/ebook-download-european-financial-infrastructure-in-the-face-of-new-challenges/
Norton Rose Fulbright (2017) Examining Regulatory Equivalence, report commissioned by FSN Forum, available at https://www.nortonrosefulbright.com/-/media/files/nrf/nrfweb/imported/regulatory-equivalence-paper.pdf
Pagano, M, S Langfield, VV Acharya, A Boot, MK Brunnermeier, C Buch, MF Hellwig, A Sapir and I van den Burg (2014) Is Europe Overbanked? Reports of the Advisory Scientific Committee 4, European Systemic Risk Board, available at

https://www.esrb.europa.eu/pub/pdf/asc/Reports_ASC_4_1406.pdf
Sapir, A, D Schoenmaker and N Véron (2017) 'Making the best of Brexit for the EU Financial System', Policy Brief 2017/1, Bruegel, available at https://bruegel.org/wp-content/uploads/2017/02/Bruegel_Policy_Brief-2017_01-090217.pdf
The Guardian (2020) 'EU trade chief foresees "financial services for fishing" Brexit bargain', by Daniel Boffey, 13 January, available at https://www.theguardian.com/politics/2020/jan/13/city-access-eu-markets-eu-fleets-uk-fishing-rights-brexit
United Kingdom (2020) The Future Relationship with the EU The UK's Approach to Negotiations, February, available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/868874/The_Future_Relationship_with_the_EU.pdf

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Banking regulation in the euro area: Germany is different

Nicolas Véron considers the extent to which the COVID-19 pandemic may influence future debates and decisions on the still-unfinished banking union

Despite progress in recent years towards a single banking policy framework in the euro area – a banking union – much of the German banking system has remained partly sheltered from uniform rules and disciplines that now apply to nearly all the area's other banks. The resulting differences in regulatory regimes could generate vulnerabilities in the still-incomplete banking union, which is being tested in the context of the COVID-19 pandemic.

Two reports published in early 2020 shed new light on this challenge. The European Central Bank's risk report on less-significant institutions is the first of what is intended to be an annual series. The impact assessment study on the most important differences between accounting standards used by banks in the banking union was prepared by legal consultants for the European Commission's Directorate-General for Financial Stability, Financial Services and Capital Markets Union (DG FISMA). The reports provide comparative quantitative information that was not previously available in the public domain.

The new data highlights differences in rules and oversight in different countries that matter in the context of efforts to achieve an EU single market and banking union. From a single-market perspective, the fact that many German banks are subject to a different supervisory, state-aid and accounting framework raises the possibility of competitive distortions, even though a subset of these banks only have local activity and don't compete outside of Germany.

German stakeholders might misjudge and underestimate the extent of EU-imposed discipline in the banking sectors of other member states, by wrongly assuming that national discretions and exceptions in those countries are similar to those in Germany.

Conversely, in euro area countries other than Germany, a politically corrosive perception of unfairness can arise from differences in regulatory and/or supervisory treatment. From a banking-union perspective, the exceptions could, at least in certain scenarios, contribute to fragmentation of the euro area financial space and thus to the risk that bank-sovereign vicious circles become worse, and potentially unmanageable.

The history that led to this situation is too long to summarize here. In a nutshell, the banking systems of a number of euro area countries previously displayed significant idiosyncrasies, memorably expressed by former prime minister Giuliano Amato's description of Italy's banking system in 1988 as a *"petrified forest."*

It is too early to assess the extent to which the COVID-19 pandemic may influence future debates and decisions on the still-unfinished banking union

But in Italy as in other euro area countries, such idiosyncrasies have been eroded by successive waves of reform. Germany has reformed less than most others, largely because it has not been compelled to by circumstances. It also has unique leverage over EU legislation, which could have played a role in the creation or persistence of legislative loopholes. Furthermore, Germany's public bank community is uniquely intertwined with its political community.

Supervisory authority

The ECB risk report gives, for the first time, a national breakdown of the assets of significant versus less-significant institutions in the euro area. This distinction matters for the assigning of supervisory authority within the banking union. Significant institutions (SIs) are all euro area banks with more than €30 billion in total assets, plus a few more on the basis of criteria that include cross-border activity and prominence within a single country.

Less-significant institutions (LSIs) are all the other banks. Only a small number of banks are deemed SIs by the ECB for reasons other than total assets above €30 billion (31 in the ECB's latest listing, compared to more than 2,600 LSIs), so that the boundary between SIs and LSIs is primarily, though not exactly, determined by the asset-size criterion.

The ECB directly supervises SIs, while most supervisory tasks related to LSIs are carried out by national supervisory authorities (though the ECB has authority over banking licences and other infrequent procedures). The ECB also exercises oversight over the national supervision of LSIs.

A fact that jumps out from the report is that LSIs are found disproportionately in Germany (Figure 1). At end-2018, German LSIs represented 55% of total LSI assets in the euro area, whereas Germany accounted for 25% of total banking assets (LSIs and Sis).

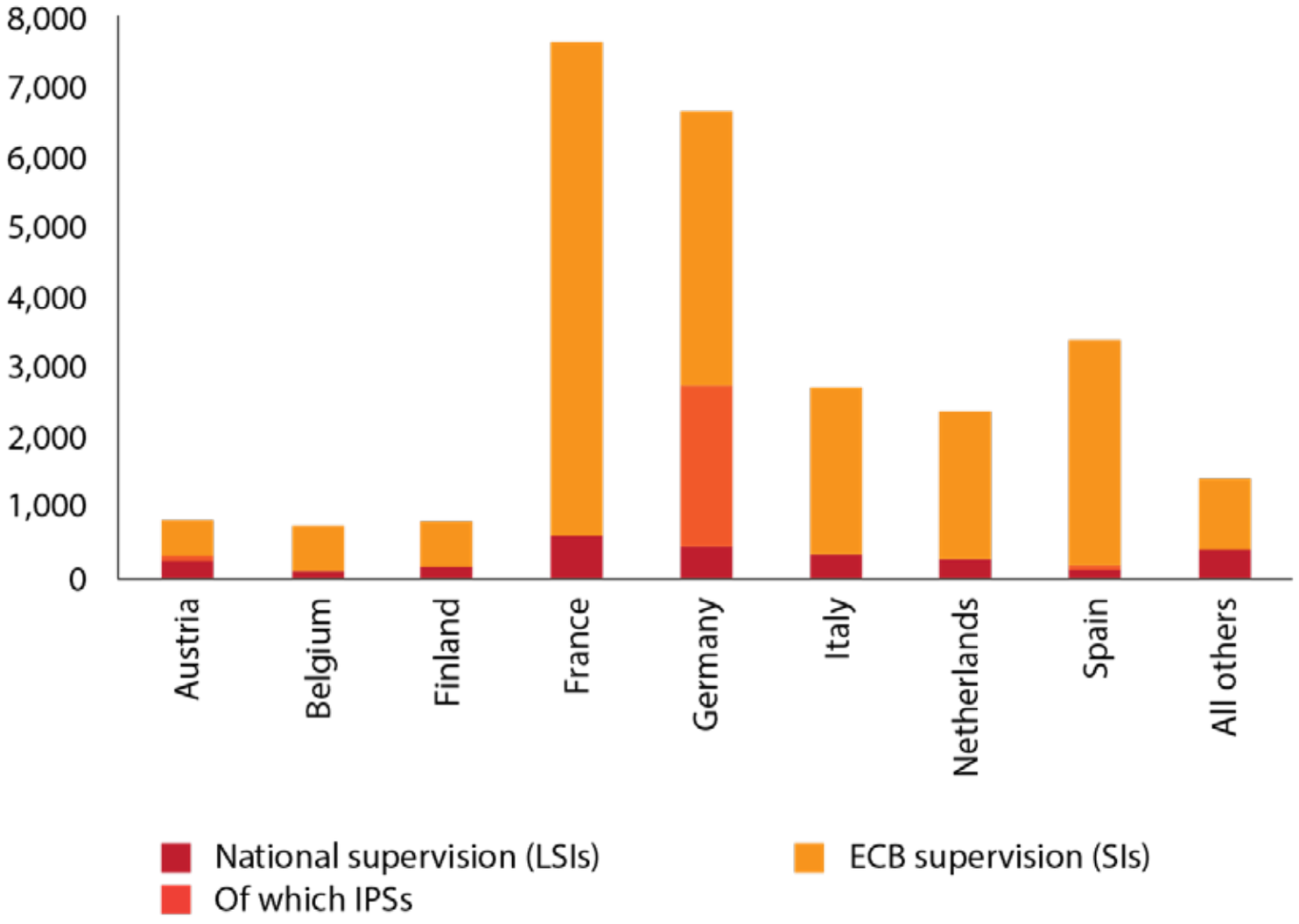
The vast majority of German LSIs, however, are not fully on their own, even though they are managed on a decentralised basis. They benefit from mutual support arrangements known in EU prudential law as institutional protection schemes (IPSs), labelled *"virtual groups"* by the ECB's then second-most-senior supervisor at the start of her tenure in 2014. LSIs within an IPS support each other: if and when one becomes unviable, it is generally rescued by its peers.

As a consequence, the group as a whole, rather than its individual member banks, is the relevant level of observation for financial-stability purposes. As Figure 1 shows, not all LSIs belong to an IPS. Conversely, all existing IPSs include at least one SI.

There are two IPSs in Germany: the Savings Banks Financial Group (Sparkassen-Finanzgruppe) and the Volksbanken Raiffeisenbanken Cooperative Financial Network (Genossenschaftliche Finanzgruppe Volksbanken Raiffeisenbanken, hereafter 'Cooperative Group'). Entities in the Sparkassen-Finanzgruppe belong to the public sector and are controlled by different sub-federal levels of government under various legal forms and ownership patterns. Such entities include local savings banks (Sparkassen) and regional wholesale banks (Landesbanken). Entities in the Cooperative Group are ultimately owned by the individual cooperative members.

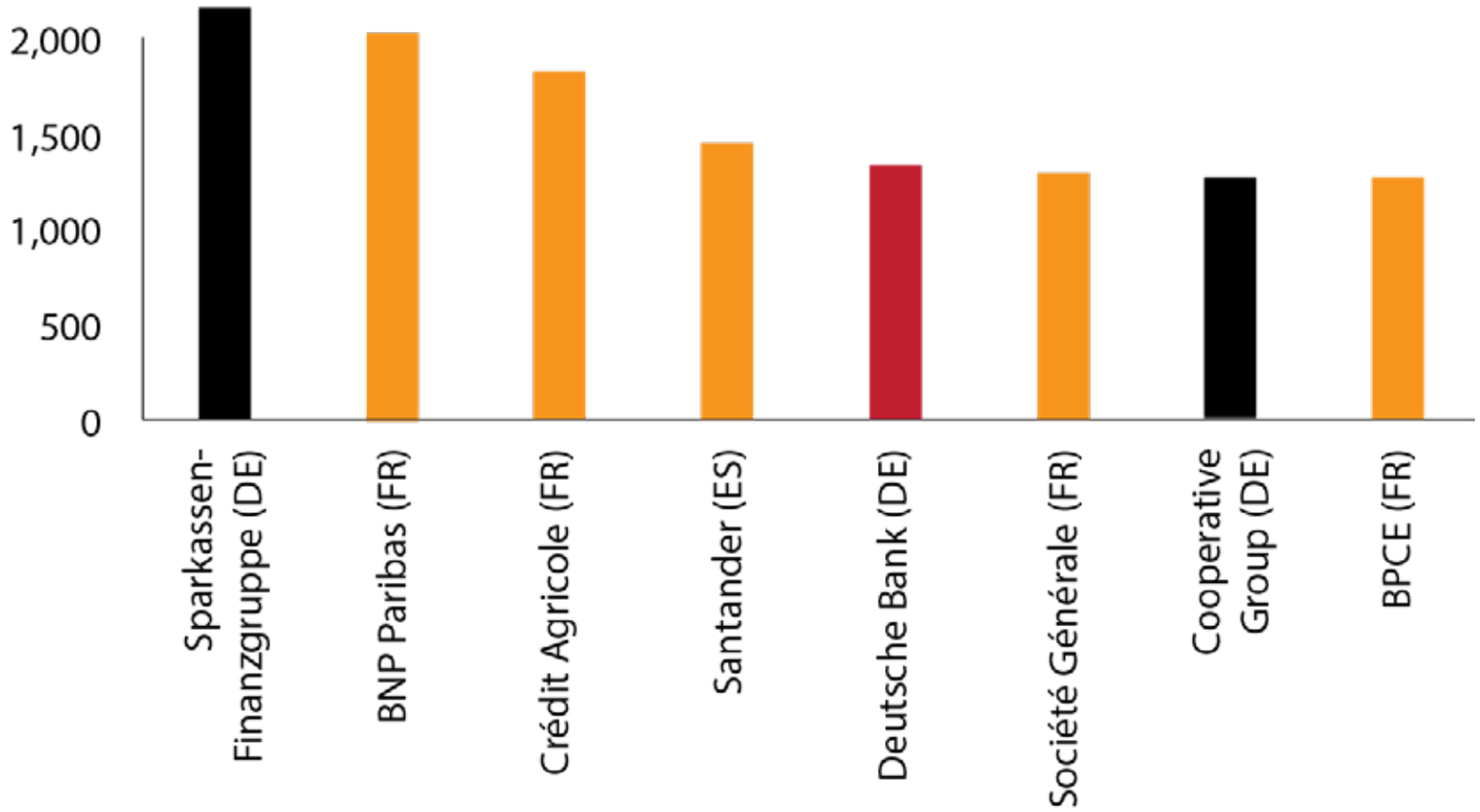
As of end-2018, based on data from the German Central Bank, LSIs in the Sparkassen-Finanzgruppe represented 45% of total German LSI assets. Those in the Cooperative Group, including buildings and loan associations, represented another 39%. In recent years, both groups have published group-level financial statements (using the accounting methods, respectively, of aggregation and consolidation), which indicate that, taken together including their SI members, they are among the largest banking players in the euro area. Indeed, in 2018 the Sparkassen-Finanzgruppe in aggregate had more assets than any euro area bank (Figure 2).

Figure 1. Aggregate assets of SIs (ECB supervision) and LSIs (national supervision), end-2018 (€ billions)



Source: ECB risk report on LSIs, Table 1; IPS (institutional protection schemes, see below) assets based on The Banker database, Deutsche Bundesbank (page 110) for Germany, and Grunewald 2017 (Figure 1, page 8) for Austria and Spain.

Figure 2. Total end-2018 assets of the largest euro area banking groups (€ billions)



In black: group-level assets of German institutional protection schemes; in red: other German banks; in yellow: other banks with total assets above €1 trillion. Source: The Banker database, Savings Banks Group website, and Cooperative Group website.

On the basis of publicly available information, it is difficult to assess the specific differences, if any, between the supervisory regimes of the ECB (applicable to SIs, including those in IPSs) and of national authorities (applicable to LSIs, including those in IPSs). The applicable prudential rulebook is substantially harmonised by the EU capital requirements directives and regulations.

Thus, differences which may remain despite the above-mentioned supervisory oversight by the ECB, are mostly in supervisory enforcement and discretion. There are indications that at least some banks have a preference for being labelled LSIs. For example, L-Bank (full name Landeskreditbank Baden-Württenberg Förderbank), a public bank in southern Germany, unsuccessfully sued the ECB over its SI determination.

It was later removed by new legislation from the scope of application of EU banking law altogether (together with two other former German public SIs, NRW.Bank and Landwirtschaftliche Rentenbank), and is thus no longer under direct ECB supervision.

State-aid control

European banks are subject to state-aid control conditions, enforced by the European Commission. The application of these disciplines, however, takes a distinctive form for unlisted public banks, for which the boundary between an arm's-length recapitalisation (with the government providing funds as a shareholder) and state aid (the government transferring funds in a non-market transaction) is less well-defined than in cases when there are shareholders other than public entities.

The leeway that results from full government ownership was put under the spotlight in the recent case of Norddeutsche Landesbank (or NordLB), a public bank in Northern Germany, which was recapitalised by its public

shareholders in a transaction that the European Commission deemed *"market conform"* in December 2019 but was widely viewed as distortionary by external observers.

The NordLB decision itself had precedents, particularly in the cases of Portugal's Caixa Geral de Depositos in 2017, and Romania's CEC Bank in October 2019. The upshot is that the state-aid regime appears to be different for unlisted public banks than for other banks, in practice if not in theory.

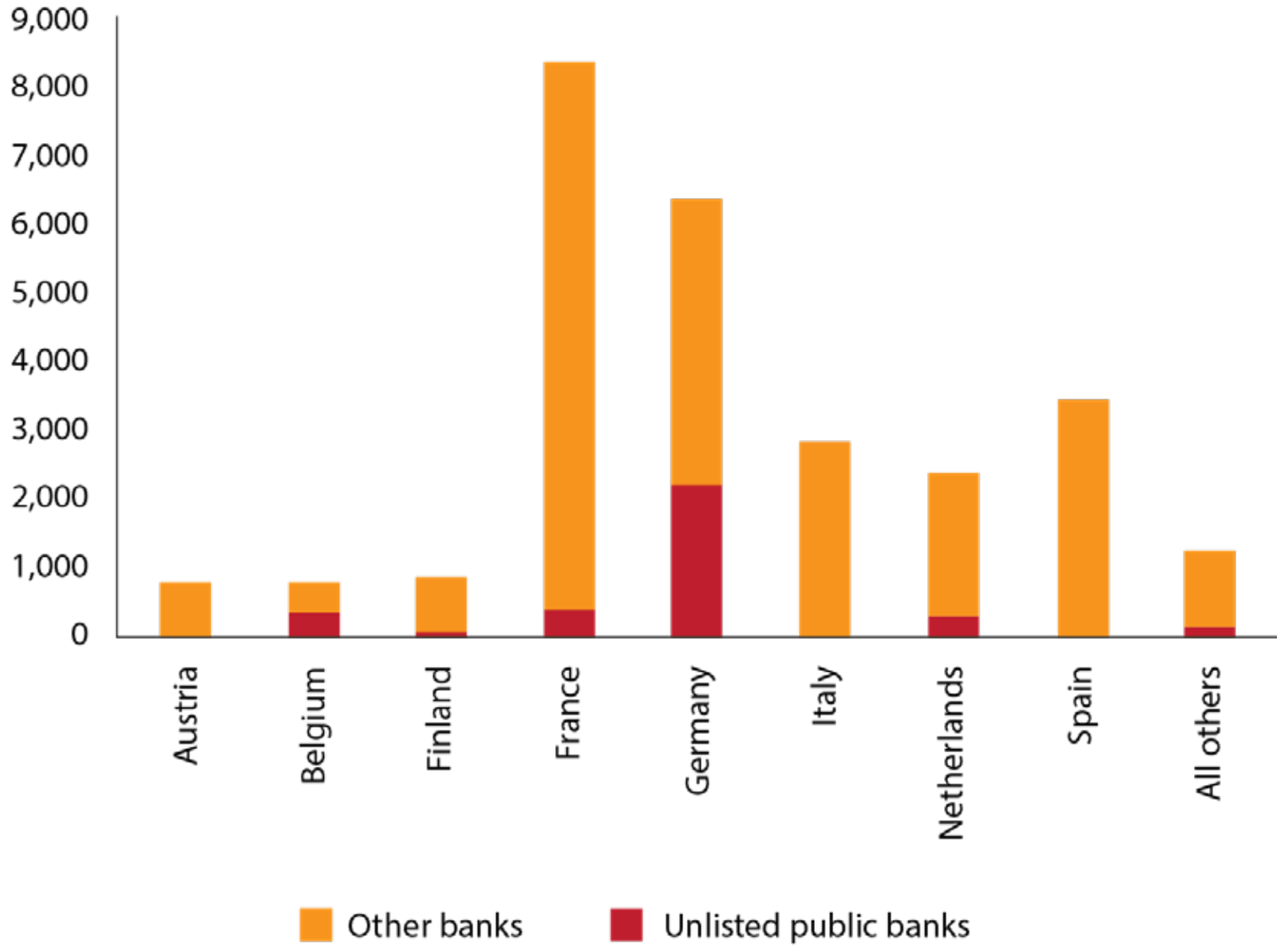
Possibly for the first time, the ECB's report on LSIs, combined with data on assets of individual SIs and a few no-nonsense assumptions, permits a tentative mapping of such banks in the euro area. Figure 3 shows the results of these calculations.

They suggest that, as with LSIs, unlisted public banks in the euro area are predominantly located in Germany. Namely, the Sparkassen-Finanzgruppe includes all of Germany's unlisted public SIs, and most if not all of its unlisted public LSIs. (Note: the differences compared to Figure 1 and Figure 4 in total amounts by country result from differences in accounting methodologies and in the scope of observation, eg. SIs that are part of non-euro area banking groups are not included in Figure 3, and some cross-border operations are assigned to the home country in Figure 3 vs. host country in Figures 1 and 4).

Accounting standards

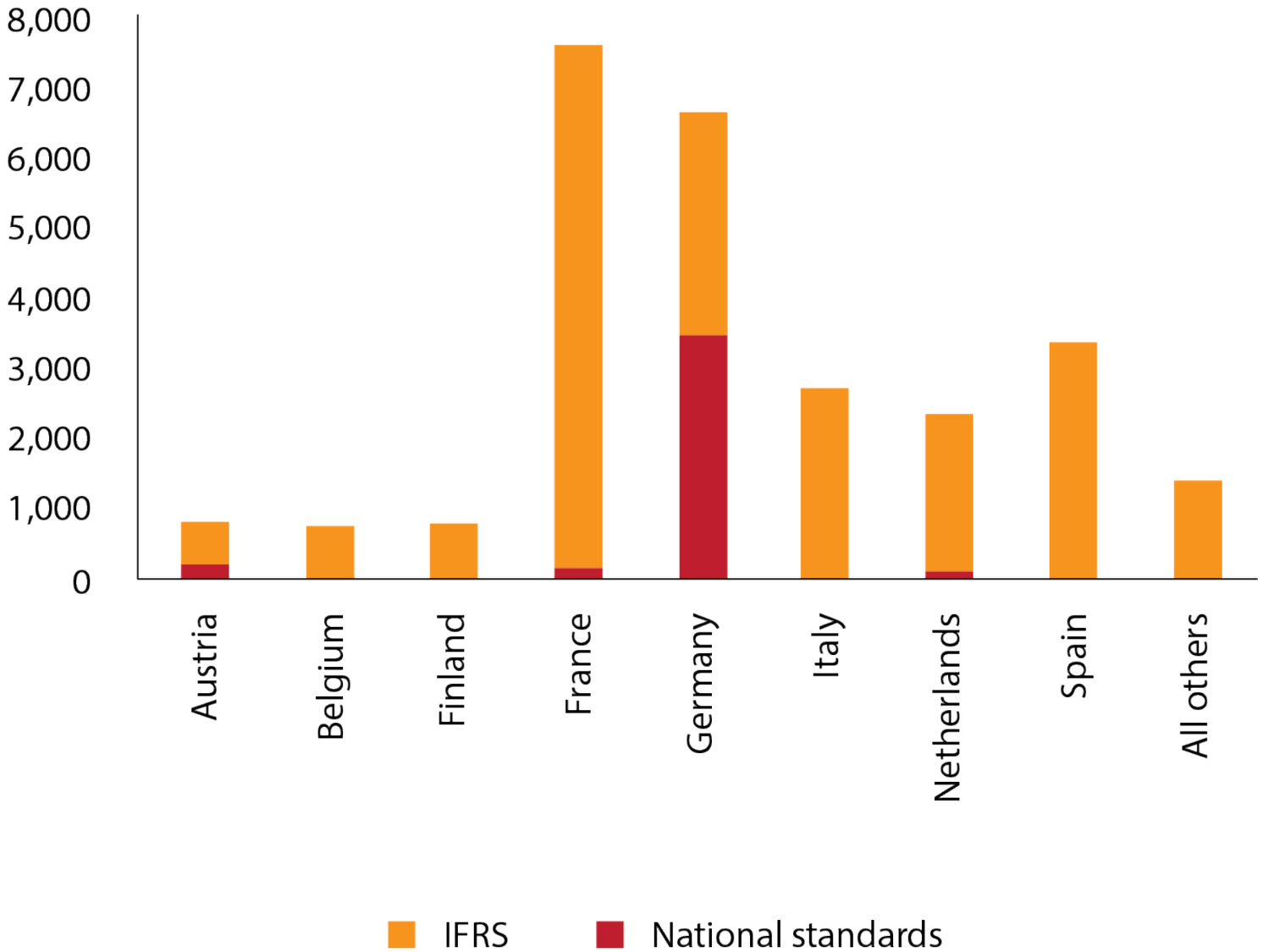
In landmark legislation adopted in 2002, the EU mandated the use of International Financial Reporting Standards (IFRS) for all its listed companies, starting in 2005. For unlisted companies, however, including unlisted banks, the choice of accounting standards was left to the discretion of individual member-state authorities.

Figure 3. Unlisted public banks in the euro area, end-2018 assets (€ billions)



Source: ECB risk report on LSIs; Deutsche Bundesbank; The Banker database; corporate websites; author's assumptions and calculations.

Figure 4. Use of accounting standards by banks in the euro area, end-2018 assets (€ billions)



Source: European Commission impact assessment study, Table 1 (page iv) for percentages; ECB risk report on LSIs for total assets per country.

This stands in contrast to most of the world's jurisdictions outside of the European Union, where all (listed and unlisted) banks generally have to comply with IFRS or, in the case of the United States, Generally Accepted Accounting Principles (US GAAP).

The DG FISMA report on banks' accounting practices includes an overview of which banks (aggregated by country and by assets) use which set of accounting standards, – IFRS or national standards. Germany stands out with 52.1% of banking assets reported under national standards. The next-highest ratio is much lower, in Austria (22.7%), followed by the Netherlands (5%), and under 2.5% in all other member states. Figure 4 illustrates these findings.

Figure 4 implies that there remain only two systems of accounting standards in wide use in the euro area banking system: IFRS and German national standards. Whether one is more demanding than the other depends on the issue; the DG FISMA report gives a wealth of detail on the differentiated outcomes. For example, for credit loss accounting, IFRS require expected loss provisioning as mandated by the Group of Twenty (G20), while German standards preserve more flexibility to maintain the prior practice of incurred loss provisioning.

Conclusion

It is too early to assess the extent to which the COVID-19 pandemic may influence future debates and decisions on the still-unfinished banking union. By providing additional data on structural quirks of the euro area banking system, the two reports analysed in this post contribute to a trend of greater supervisory transparency. Further efforts in that direction will hopefully contribute to better-informed policymaking when dealing with the difficult challenges ahead. ■

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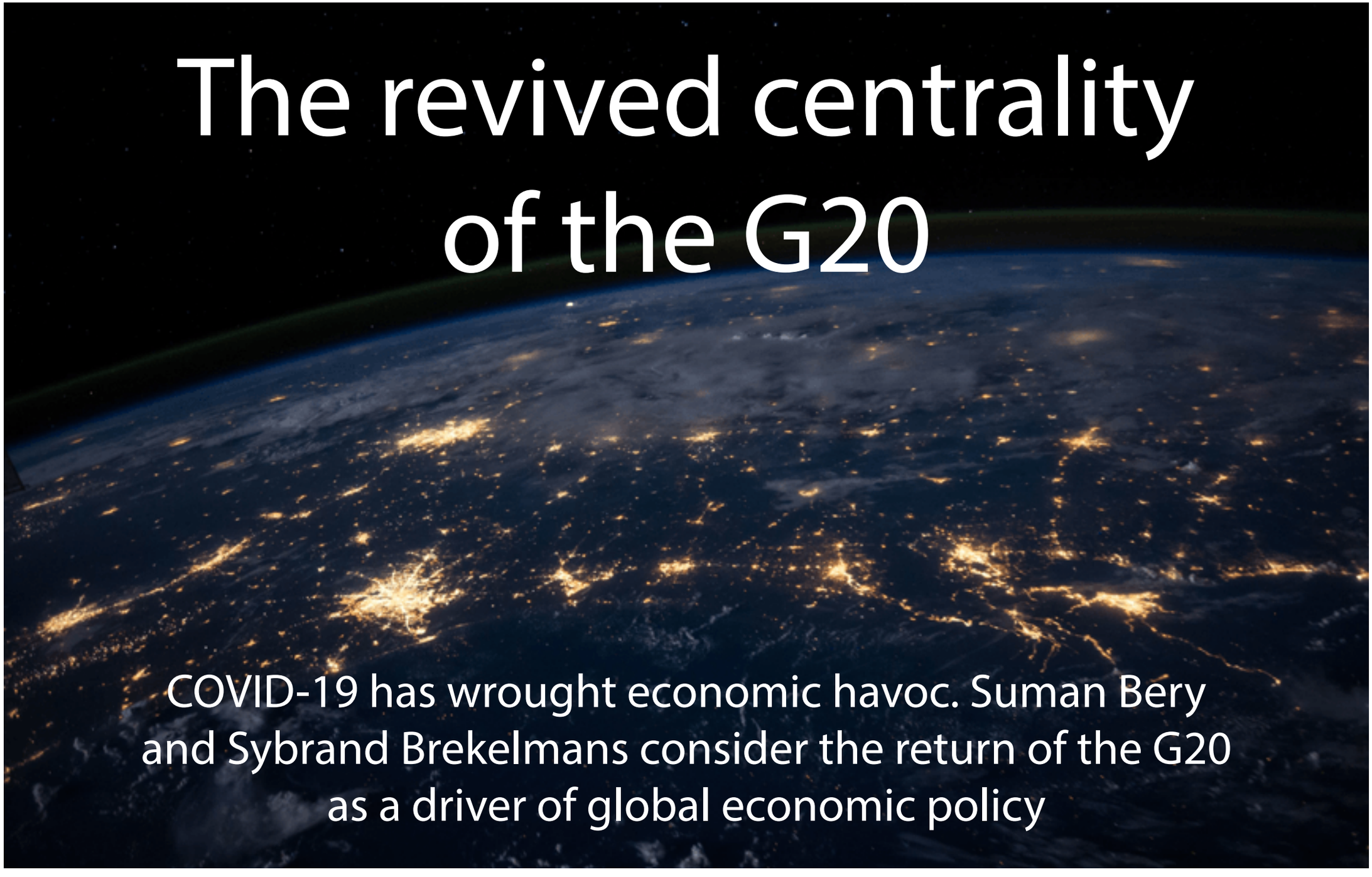
The revived centrality of the G20



COVID-19 has wrought economic havoc. Suman Bery and Sybrand Brekelmans consider the return of the G20 as a driver of global economic policy

In April G20 Finance Ministers decided on a standstill of the poorest countries' debt payment but failed to increase allocations of standard drawing rights (SDRs). In our view, the past weeks' events show the return of the G20 as a central piece of global economic diplomacy, but more could have been done.

A series of summits of governments and international financial institutions took place in April. Much was expected of these. They were seen as the opportunity for global financial leaders to provide authoritative guidance on the global response to the economic havoc wrought by the COVID-19 pandemic.

The G20 meeting of finance ministers and governors of central banks on 15 April stands out. The main announcement from the meeting was a one-year freeze of bilateral government (and private sector on a voluntary basis) loan repayments for low-income countries, for a value *"north of $20 billion."*

Other important measures were also announced, including the deployment of $200 billion through Multilateral Development Banks (MDBs) and the deployment of the International Monetary Fund's resources in an accelerated manner. However, the leaders failed to agree on a new allocation of Special Drawing Rights (SDRs) – IMF assets that IMF members can swap for currency – as was pushed for by the European countries and other G20 members, such as China.

Reaction in the press to the announcements was largely negative, driven by the inability of the ministers to mandate a substantial new issue of SDRs. Here, we argue for a more nuanced view. We believe that, in the circumstances, the role of the G20 at this early stage in this crisis has demonstrated the value and centrality of this platform. This is despite more recent news that differences between the US and China have led a planned second G20 Leaders' virtual meeting to be cancelled.

Criteria

An assessment requires both a benchmark and an awareness of context. As for the first, many informed observers would cite the G20 Leaders' summit of April 2009 in London, which responded to the global financial crisis, as the most impressive demonstration of G20 effectiveness and solidarity.

Looking back and comparing the current response with that of 2009, we make three observations:

- First, the amounts of stimulus committed are equivalent in nominal terms, in both cases $5 trillion were committed by the G20 countries (the value of the 2009 package in real terms would now be worth around

... the G20 is able to function productively at a time of deep tension between two of its important players [and] is again the central forum in a crisis

$6 trillion). Nevertheless, many observers have rightly noted that the announced $5 trillion on 26 March was money previously committed and in some cases spent.

- Second, while in 2009 world leaders used multiple IMF financing tools to support emerging economies (increased SDRs, member financing and NABs (New Agreements to Borrow – extra money the IMF can lend from member states), in the current crisis, while funding of these facilities has been assured, they have not been expanded, although access has been enhanced and a new short-term liquidity line has been created. The G20 has instead opted for debt relief for the poorest countries.

- Third, the commitments made by Multilateral Development Banks (MDBs) are greater in this instance, amounting to $200 billion compared to $100 billion in 2009 (equivalent to $120 billion 2020 dollars).

There has been much debate on exactly how the 2009 summit added value and prevented a recession from becoming a depression. In our view the demonstration of solidarity in 2009 reassured markets and provided fiscal space for emerging market economies.

Indeed, as noted by Triggs (2018), even in 2009, the G20 was not the driver of extra national spending, but rather a commitment and coordination device, giving governments the credibility both internally and externally to spend more.

The success of London was based on two political realities: first, that the shared banking crisis prompted unity in the G7; second that the large emerging markets were pleased and proud to be recognised as systemically important and to be seated at the top table of global governance. It is also the case that London was a summit of

leaders, and that the UK chair was a member of the G7 and had five months to prepare after the first summit in Washington.

The circumstances of the 15 April meetings were very different. First, the awareness of the global economic shock is relatively recent. When the G20 finance ministers met in Riyadh at the end of February, there was only slight reference to the economic impact of the pandemic.

Less than a month later, virtual meetings of the same ministers had been convened (on 23 March) and shortly thereafter the G20 leaders also met virtually to provide political cover for their ministers. Second, while individual G7 countries moved very swiftly (and at unimaginable scale) to shore up their own economies, there are divisions between them (essentially the US against Europe) over the core issue of a large additional allocation of SDRs.

These divisions within the G7 are echoed by the long-standing economic tensions with China, most manifestly with the US. These tensions are also present to a milder degree between China and key European Union member states, as well as with the EU itself, a member of the G20 in its own right.

Finally, all of this has taken place under the presidency of Saudi Arabia, not itself a G7 member, in the unfamiliar environment of virtual meetings, without the all-important opportunity for offline networking that is indispensable for successful economic diplomacy.

Assessment

All that said, by the time the meeting took place, the enormity of the finance and humanitarian challenge was well known. The finance track rightly gets the most attention because from the start the G20 has declared its core mandate to be strong, sustained and balanced growth.

It is accordingly appropriate to judge the 15 April meeting by the boldness and urgency with which the ministers acted on this core mandate. With the advanced economies largely having taken care of themselves, the issue was how to provide support to the emerging and developing economies.

Of the two important proposals before them, the G20 ministers succeeded in agreeing on a debt standstill for the least-developed countries, but were unable to come to agreement on SDRs in the face of US opposition.

We consider this outcome as at least a moderate success for two important reasons. First, it has brought China into the arena of coordinated sovereign debt relief (the Paris Club), something it has previously shunned. This is not an outcome that could have been achieved by the G7 on its own.

Second, again given the centrality of China but also because of divisions in the G7, this time the eyes of the world were clearly on the G20 meeting, which is also why there is a sense of disappointment over the SDR outcome.

In our view, then, in this crisis the G20 has indeed become the premier forum for international economic cooperation, and its guidance has in turn been central to the IMF and the World Bank.

The role of Europe

Given political tensions between the US and China (and milder, though still important, policy disagreements within the G7) it seems that European members of the G20 and G7 played an important role in bridging the divide on the issue of the debt standstill. After a meeting of G7 foreign ministers on March 25, the statement of the French Minister, Jean-Yves Le Drian, clearly mentioned France's call to the G7 to push for assistance to countries most in need at the G20 discussion table.

Since then, European leaders have become more vocal about their expectations. On 13 April, President Macron openly called for debt relief for African countries. On 14 April, 18 African and European leaders, including those of France, Germany, Italy, The Netherlands, Portugal, Spain and the European institutions, published a letter calling for a moratorium on the public debt of developing countries, but also on the new allocation of SDRs.

Thus, the call by the G20 on a debt service standstill on official debt for the least-developed countries should be seen as a partial success for Europe at the G20 and further confirmation of the centrality of the G20 platform at this time.

Conclusion

We have taken a 'half-full' view on the value-added by the G20's finance track, both on outcome and on process. On outcome, a debt standstill which includes China is an important advance, although implementation remains to be done.

On process, we have seen that the G20 is able to function productively at a time of deep tension between two of its important players, and that, despite the intimacy and cohesiveness between finance officials of the G7, the G20 is again the central forum in a crisis.

The disagreement on fresh SDRs, essentially between Europe and the US, is unfortunate and seems as though it will need resolution, if at all, at the political level. Clearly, more should be done, as the IMF estimated the overall financial needs of emerging markets at $2.5 trillion and we are still far from reaching that, with the Fund's own resources estimated at around $1 trillion.

As noted by Stephanie Segal, of the Center for Strategic and International Studies in Washington, this initial agreement is a framework on which more can be built.

Finally, the COVID-19 crisis is about much more than the economy, and the G20 operates through many more organs than the finance track. A fuller assessment of the G20's value and effectiveness will need to encompass all the fronts on which it needs to act. ■

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Managing the winds of change

Technological innovations are transforming the financial sector. Johannes Ehrentraud and Denise Garcia take stock of the policy responses to fintech developments

Technological innovations in financial services are affecting every sector of the financial industry and generating a surge of new applications. This column takes stock of the policy responses to fintech developments in approximately 30 jurisdictions worldwide and proposes a novel conceptual framework – the 'fintech tree' – that distinguishes three categories: fintech activities, enabling technologies, and policy enablers. Designing a policy framework for fintech will require finding a balance that maximises its benefits while minimising potential risks to the financial system.

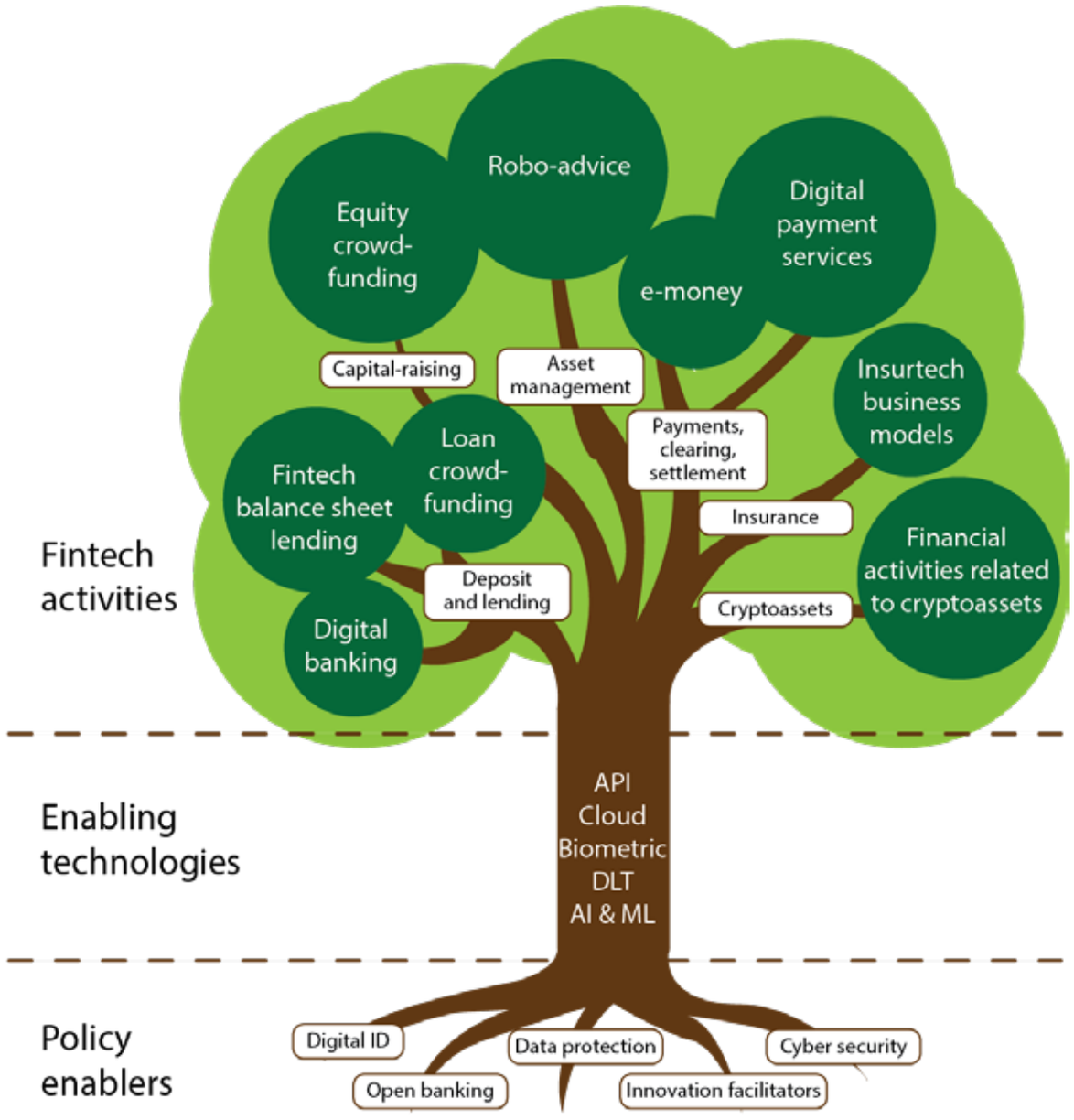
According to a Chinese proverb, when the winds of change blow, some people build walls and others build windmills. Winds of change do blow in the financial system – technological innovations in financial services (fintech) are affecting all parts of the financial industry and giving rise to a steady stream of new applications.

These include new approaches to how loans are granted, payments are made, investment advice is provided, insurance is priced, and funds are channelled from those who want to invest to those in need of funding. While fintech may increase efficiency in delivering financial services, widen their range, increase competition and promote financial inclusion, it may also bring challenges – posing risks to consumers, investors, and more broadly, to financial stability and integrity.

When designing an adequate policy framework for fintech, financial authorities will need to find a balance that maximises its benefits while minimising potential risks to the financial system – to choose the right combination of walls and windmills.

In a recent paper, we take stock of the policy responses to fintech developments in approximately 30 jurisdictions around the globe (Ehrentraud *et al*. 2020). Our goal is to give a sense of the different approaches pursued by regulators, and of the challenges and policy trade-offs they face. Building on the work done by global standard-

Figure 1. Fintech tree: a taxonomy of the fintech environment



Source: FSI staff.

setting bodies and other international organisations, we propose a novel conceptual framework, referred to as the 'fintech tree'.

It distinguishes three categories: fintech activities, enabling technologies, and policy enablers. Fintech activities (eg. digital banking or robo-advice) can take various forms and be performed in different sectors of the financial industry.

When designing an adequate policy framework for fintech, financial authorities will need to find a balance that maximises its benefits while minimising potential risks to the financial system

Enabling technologies (eg. artificial intelligence or cloud computing) make innovation possible in the provision of financial services and, as such, form the backbone of fintech activities. Policy enablers refer to public policy measures and initiatives (eg. open banking or regulatory sandboxes) that support the development of fintech activities and the use of enabling technologies.

Fintech activities

Our study finds that authorities pursue a range of approaches when regulating fintech activities. They may put in place fintech-specific licensing regimes that require entities to obtain a dedicated licence before offering their services.

Alternatively or complementarily, they may issue requirements that are fintech-specific, modify existing ones, or even forbid certain activities; or, they may clarify their supervisory expectations when applying the existing regulatory framework to fintech business models.

For digital banking[1] specific licensing regimes were put in place in only a limited number of surveyed jurisdictions (Hong Kong SAR and Singapore). In other surveyed jurisdictions, deposit-taking institutions have to comply with existing banking laws and regulations, regardless of the technology they deploy.

This means that applicants for a banking licence with a fintech business model need to pass through the same licensing process and face the same regulatory requirements as applicants with a traditional business model. Some jurisdictions have launched initiatives to facilitate the establishment of new banks, including digital banks (Australia and United Kingdom).

In others, regulators have clarified their supervisory expectations when considering licence applications from fintech companies. For example, in 2018 the ECB issued guidance on how authorisation requirements for credit institutions would apply to applicants with new fintech business models.

For fintech balance-sheet lending[2] most surveyed jurisdictions do not have a dedicated regulatory regime, and are subject to a variety of regulatory approaches that in most cases centre on the extension of credit as a regulated activity. The exception is Brazil, which introduced direct credit companies (sociedades de crédito direto, or SCD) as a new type of financial institution whose operation requires a licence from the Central Bank of Brazil.

For loan and equity crowdfunding, many surveyed jurisdictions have issued fintech-specific regulations that apply to both activities (Table 1). Often, crowdfunding platforms need to be licensed or registered and satisfy certain conditions before they can provide their services.

Although there may be only one type of licence for both activities, the regulatory framework typically includes requirements that apply to both activities, and requirements that apply to either loan or equity crowdfunding.

Robo-advice is typically classified as financial advice under securities regulation; ie. robo-advisers typically need to be authorised by the securities regulator, irrespective of whether the advice is provided digitally, face to face, or through a mix of both methods. Consequently, the majority of surveyed jurisdictions do not have fintech-specific regulations for providers of robo-advice.

Nevertheless, around a third of surveyed jurisdictions published guidance on issues that are unique to robo-advice, such as how the obligation to act in the best interest of clients can be met in the face of limited or no human interaction (Table 2).

Table 1. Fintech-specific regulations for crowdfunding

Equity crowdfunding		Equity and loan crowdfunding		Loan crowdfunding
Argentina	Columbia	Belgium	Peru*	Australia
Australia	Italy	Canada	Philippines	Brazil
Austria	Japan	Chile*	Singapore	China
Brazil	Turkey	European Union**	Spain	Italy
China	United States	France	Sweden*	United Arab Emirates***
		Mexico	UAE***	
		Netherlands	United Kingdom	

(*) Work in progress. In Peru, crowdfunding through issuance of securities (debt or equity) is currently not being authorised, but work is under way to introduce a new framework for different types of crowdfunding.
(**) Proposal by European Commission. Once adopted at the EU level, the new regulation will allow platforms to apply for an EU passport based on a single set of rules (see EC 2018).
(***) Dubai and Abu Dhabi have the same regulatory framework for both ECF and LCF. At the UAE level, the central bank issued a draft regulation on LCF.
ECF = equity crowdfunding; LCF = loan crowdfunding. The Swiss fintech licence (and, once implemented, the OCC fintech charter) may also enable fintech platform financing activities.

Sources: FSI survey, desktop research

Table 2. Robo-advice: elements of regulatory guidance

	Licensing/ authorisation requirements (types of licences, licensing process	Best interests duty/provision of suitable advice/collection of customer information	Use of algorithms	Provision of scaled/ streamlined advice vs comprehensive advice	Required or expected disclosures to clients
AU	✓	✓	✓	✓	✓
CA	✓	✓			
CN	✓	✓	✓		✓
CO*	✓	✓			✓
GB	✓	✓	✓	✓	✓
HK	✓	✓	✓		✓
NL	✓	✓	✓		✓
SE	✓	✓	✓		✓
SG	✓	✓	✓	✓	✓
US		✓			✓
ZA		✓			
Total	9	11	7	3	9

*Introduced under Decree 661 of 2018; secondary regulation is under consideration.

Sources: National regulations, FSI survey

For digital payment and e-money services, most surveyed jurisdictions have specific regulations. For digital payment services, initiatives put in place often aim at strengthening regulatory requirements for non-banks or facilitating their access to the payments market.

For e-money services, most surveyed jurisdictions have a dedicated regulatory framework that requires non-bank e-money providers to obtain a dedicated licence from the authority. In a few jurisdictions, e-money services are considered a banking business and are subject to bank-like prudential regulation.

For insurtech, we have not seen any licensing regimes or other requirements that are specific to technology-enabled business models in the area of insurance distribution and underwriting[3]. Existing licensing regimes and regulatory requirements are generally considered sufficient to address the features and risks of these new business models.

For cryptoassets and related activities[4] regulatory responses in surveyed jurisdictions vary considerably. Regulators have mostly focused on cryptoassets issued by non-regulated entities, issuing warnings and clarifying regulatory treatment. Several jurisdictions have introduced specific licensing regimes for entities providing services related to cryptoassets, and very few have established registration regimes (ie. exchanges, wallet providers). Only a minority of jurisdictions have prohibited certain crypto-related activities (Table 3).

Enabling technologies

Multiple technologies are enabling innovation in the financial sector. These include but are not limited to: application programming interfaces (APIs), artificial intelligence (AI) and machine learning (ML), biometric-based identification and authentication (biometrics), cloud computing (cloud) and distributed ledger technology (DLT).

Table 3. Regulatory and policy responses to cryptoassets and related activities

	Introduction of crypto-specific licence, authorisation, or registry	Clarification on applicable regulation to ICOs	Clarification on applicable regulation to crypto-related activities/providers	Clarification on tax treatment	Amendment of AML framework	Publication of warnings	Ban on certain crypto-related activities
AE	L						
AR							
AU							
AT							
BE							
BR							
CA							
CH							
CL							
CN							
CO							
DE	L						
ES							
FR	L + R						
GB							

Regulatory response has been approved

Regulatory response In progress

Regulatory prohibition

A = authorisation; L = licence; R = registration; * = state level.

	Introduction of crypto-specific licence, authorisation, or registry	Clarification on applicable regulation to ICOs	Clarification on applicable regulation to crypto-related activities/providers	Clarification on tax treatment	Amendment of AML framework	Publication of warnings	Ban on certain crypto-related activities
HK		■	■		■	■	
IT					■	■	
JP	L	■	■	■	■	■	
LU				■	■	■	
MX	A		■		■	■	■
NL	R	■	■	■	■	■	
PE						■	
PH	R	■				■	
PL			■	■	■	■	
RU	■			■			
SA							■
SE				■	■	■	
SG	L	■	■	■	■	■	
TR						■	
US*	L	■	■	■		■	
ZA	■	■	■	■	■	■	

■ Regulatory response has been approved ■ Regulatory response In progress ■ Regulatory prohibition

A = authorisation; L = licence; R = registration; * = state level.

Sources: National regulations, FSI survey

For enabling technologies, our study finds that regulators have adjusted their existing regulations to add technology-specific elements to existing laws, regulations, or guidelines. As a result of the level of market adoption, some technologies have received more attention than others. Regulators have been particularly active on cloud, APIs, and biometrics. In contrast, for AI, ML, and to some extent, DLT, authorities have not gone beyond conducting risk assessments and issuing general guidance.

Policy enablers

Our study finds that public policies enabling the provision of digital services have received considerable attention (Table 5). In order to take advantage of the economic and social opportunities that a digital economy might bring, multiple authorities (eg. financial supervisors and competition, consumer protection and data privacy authorities) are implementing various public policies that enable digital services, such as:

- Digital identification (digital ID): financial authorities in almost all surveyed jurisdictions have included regulatory provisions in their frameworks that allow institutions to use digital ID systems for customer verification and authentication for certain government, commercial, and/or financial digital services. Only a few jurisdictions are implementing national digital ID systems as part of a broader innovation and digital strategy in their jurisdictions.

- Data protection: public authorities in most jurisdictions have issued new data protection regulations or enhanced existing regulations concerning the collection, use, and protection of customer information.

- Cyber security strategies: almost all jurisdictions have put in place cyber security regulations and guidance specific to the financial sector, while a lesser number have implemented a national cyber security framework.

Table 4. Policy responses to enabling technologies

	API	Cloud	Biometrics	DLT	ML and AI
AE					
AR					
AU					
AT					
BE					
BR	W				
CA					
CH			W		
CL					
CN					
CO					
DE					
ES					
FR					
GB					
HK	W				W

Adjusting existing regulation to add technology-specific elements in laws, regulations, or guidelines

In consideration

Exploratory analysis and formulation of general principles related to the use of the technology

W = work in progress

	API	Cloud	Biometrics	DLT	ML and AI
IT					
JP					
LU					
MX	W	W			
NL					
PE					
PH					
PL					
RU				W	
SA					
SE					
SG					
TR	W	W			W
US					
ZA					

Adjusting existing regulation to add technology-specific elements in laws, regulations, or guidelines

In consideration

Exploratory analysis and formulation of general principles related to the use of the technology

W = work in progress

As EU directives and/or regulations are counted for each jurisdiction that applies such directive/regulation (either directly or via transposition mechanism) and EU jurisdictions are highly represented in our sample, this might lead to conclusions that are not necessarily representative of world tendencies.
Source: FSI survey

- Open banking initiatives: implemented in several jurisdictions, they cover the requirements that apply for accessing and sharing customer information between banks and third-party firms.

- Innovation facilitator initiatives: almost all surveyed countries have established an innovation hub. Regulatory sandboxes are also a common innovation facilitator, while accelerators have been established in only a few jurisdictions.

Concluding remarks

Our study finds that policymakers are actively managing the winds of change brought by fintech. When regulating fintech activities, they are pursuing a wide array of approaches – ranging from establishing fintech-specific licencing regimes or other regulations to providing guidance to the industry.

For enabling technologies, regulators have mostly adjusted their existing regulations to add technology-specific elements to existing laws, regulations, or guidelines. On a broader level, public policies that enable the provision of digital services have also received considerable attention.

That said, to date, technological developments have not yet resulted in any major upheaval in the structure of financial regulation. Instead, authorities have so far taken a more targeted approach to policy.

When managing the winds of change brought by fintech, authorities need to decide on the adequate combination between windmills and walls. The former, to take advantage of fintech's benefits; the latter, to minimise potential risks it poses to the financial system.

Table 5. Public policies that enable the provision of digital services

	Digital ID (eID)		Data protection	Cyber security		Open banking	Innovation facilitator
	Framework for eID systems' use in financial services	National eID system	National framework	Financial sector framework	National strategy	Type of approach	Type of facilitator
AE	✓		✓	✓	✓		
AR	✓	✓	✓	✓			IH
AU	✓	✓	✓	✓	✓	P	IH, RS
AT	✓	✓	✓	✓	✓	P	IH
BE	✓	✓	✓	✓	✓	P	IH
BR	✓		✓	✓	✓	P*	IH, RS*, A
CA	✓		✓	✓	✓		IH, RS, A
CH	✓		✓	✓	✓	P	RS
CL			✓	✶	✶		
CN	✓	✓	✓	✓	✓		RS
CO			✓	✓			IH, RS
DE			✓	✓	✓	P	IH
ES	✓		✓	✓	✓	P	IH
FR	✓	✓✶	✓	✓	✓	P	IH, A
GB	✓		✓	✓	✓	P	IH, RS
HK	✓	✓	✓	✓	✓	F	IH, RS, A

A = accelerator; F + facilitative; IH = innovation hub; P = prescriptive; RS = regulatory sandbox; * = in progress; s = state level

	Digital ID (eID)		Data protection	Cyber security		Open banking	Innovation facilitator
	Framework for eID systems' use in financial services	National eID system	National framework	Financial sector framework	National strategy	Type of approach	Type of facilitator
IT		✓	✓	✓	✓	P	IH
JP	✓		✓	✓	✓	P, F	IH, RS
LU	✓	✓	✓	✓	✓	P	IH
MX	✓		✓	✓	✓	P	RS
NL	✓	✓	✓	✓	✓	P	IH, RS
PE	✓		✓	*	*		
PH			✓	✓	✓		RS
PL	✓		✓	✓	✓	P	IH
RU			✓	✓	✓		RS
SA	✓			✓	✓		IH8, RS, A*
SE		✓	✓	✓	✓	P	IH
SG		✓	✓	✓	✓	F	IH, RS, A
TR	✓		✓	✓	✓	P	
US	✓s			✓	✓		IHs, RSs
ZA	✓		✓	✓	✓		

A = accelerator; F + facilitative; IH = innovation hub; P = prescriptive; RS = regulatory sandbox; * = in progress; s = state level

Sources: BCBS (2019), FATF (2019), FSB (2017), WB-GPFI (2018), FSI survey

Getting that mix right is easier said than done. Fintech developments present issues that are beyond the traditional scope of financial authorities, and the speed of innovation makes it difficult for regulators to respond in a timely manner.

In addition, important trade-offs may arise between different policy objectives. Achieving an orderly application of new technologies in the financial system will probably remain a desirable outcome of regulatory actions. At the same time, policy actions need to be consistent with the preservation of financial stability, market and financial integrity, competition and consumer protection.

Only with sufficient resources and access to timely and reliable information will authorities be able to steer innovation in a desirable direction, and agilely adjust their regulatory responses. In this context, cooperation and coordination at the local and international levels remain essential. ■

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Authors' note: The views expressed in this column are those of the authors and do not necessarily represent the views of the Bank for International Settlements or the Basel-based standard setters.

Endnotes

1. We define digital banks as deposit-taking institutions that are members of a deposit insurance scheme and deliver

banking services primarily through electronic channels instead of physical branches.
2. Fintech balance sheet lending refers to credit activity facilitated by internet-based platforms (not operated by commercial banks) that use their own balance sheet in the ordinary course of business to intermediate borrowers and lenders.
3. These refer to insurtech business models like mobile, on-demand, usage-based, or technology-enabled peer-to-peer and parametric insurance.
4. These activities may include creating, distributing, storing, or exchanging cryptoassets, or using them for investment or payment purposes or as reference in financial products.

References

Basel Committee on Banking Supervision (2019), Report on open banking and application programming interfaces (APIs), November.
Ehrentraud, J, D Garcia Ocampo, L Garzoni and M Piccolo (2020), "Policy responses to fintech: a cross-country overview", FSI Insights on policy implementation, no 23.
European Commission (2018), "Crowdfunding".
Financial Action Task Force (2019), Draft Guidance on Digital Identity, 21 November.
Financial Stability Board (2017), Stocktake of publicly released cybersecurity regulations, guidance and supervisory practices, 13 October.
World Bank Group and Global Partnership for Financial Inclusion (2018), G20 Digital Identity Onboarding.

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Is the US reneging on international financial standards?

Nicolas Véron considers the new Fed rule, which he argues undermines the global order without being justified by narrower considerations of US national interest

The financial shock surrounding the COVID-19 pandemic has prompted the US Federal Reserve to temporarily loosen an important capital-to-asset ratio requirement for American banks. In so doing, the US is walking away from a decade-long commitment to global financial reform that it made in the wake of the global economic meltdown of 2008-10.

This breach, together with other recent US government actions, might signal a broader departure from the Trump administration's general adherence in its first three years to international financial standards, an area in which it had so far not acted against the global rules-based order. The motives for the breaches are not compelling enough to offset the downsides for the global financial system and for the United States itself.

The new Fed rule breaches the Basel III accord

On 1 April, the Federal Reserve announced a temporary change to a regulatory requirement on banks, known as the supplementary leverage ratio (or simply the leverage ratio). The leverage ratio, calculated as regulatory capital (or own funds) divided by unweighted assets, supplements the more refined ratios of capital to risk-weighted assets, which are the mainstay of bank capital regulation.

While a crude measure of capital strength, the leverage ratio is an apt response to the incentives banks have to underestimate risk-weights. It acts as a simple sanity check, thus the epithet 'supplementary'.

The new change, which the Fed adopted unanimously, exempts banks' holdings of US sovereign debt (Treasuries) and deposits at the Fed from the assets total in the ratio calculation, until end-March 2021. This exemption reduces the denominator, making it easier for banks to meet their minimum-ratio requirements during that period.

By exempting sovereign exposures, the rule deviates from the internationally agreed definition of the leverage ratio that is part of the Basel III accord, initially published in 2010 by the Basel Committee of Banking Supervision on the back of a mandate given by the G20 in 2008-09.

The Fed's decision echoes separate congressional action in the Coronavirus Aid, Relief, and Economic Security Act, which was signed into law on 27 March 2020. Section 4014 of CARES gives banks the option of ignoring an accounting obligation known as current expected credit loss (CECL) provisioning.

The United States has benefited immensely from upholding best-in-class financial standards and regulations. If these standards are lowered, US economic achievements, all things equal, might be undermined as well

Most banks started implementing this obligation in January 2020. CECL was introduced in response to a 2009 mandate from the G20, which was implemented in 2016 by the US Financial Accounting Standards Board (FASB), and separately earlier in 2014 by the International Accounting Standards Board (IASB), whose standards are applied in most jurisdictions other than the United States.

By opting out of CECL, banks can avoid booking losses that are expected from the dramatic deterioration in the economic outlook from the pandemic and can thus make their capital positions look correspondingly more flattering.

The Fed's rule change and the Congress's action in the CARES Act suggest an incipient trend of US departures from the comprehensive package of global financial standards enacted by various bodies under the G20's authority since 2008.

One earlier signal of this came in November 2019, when the Fed and other federal bank regulators made a change – also in breach of Basel III – to an arcane rule on measuring counterparty credit risk in certain transactions.

To be sure, the United States is far from the only offender, let alone the worst. Most notoriously, in 2014, the Basel Committee found the European Union *"materially non-compliant"* with Basel III, the only jurisdiction in that category – partly for similar counterparty-credit-risk shenanigans as with the US rule of November 2019. Nor are the recent American breaches wholly unprecedented, if one goes far enough back.

In the years before the 2008-10 financial crash, US authorities were reluctant to adopt the previous Basel II accord, for prudential reasons that the subsequent crisis experience largely vindicated. But from the first G20 summit in late

2008 up to recent months, the United States was the leading champion of G20 financial reform, and that compliant stance was maintained under the first few years of the Trump administration.

Even as some financial rules were relaxed, they were kept above the minimum levels set in international accords. Indeed, the final bits of Basel III were agreed in December 2017 after Randal Quarles, a Trump appointee, replaced his Obama-era predecessor Daniel Tarullo as the Fed's point person in Basel Committee discussions.

The motivations for these changes are unconvincing

The US departures from global standards respond to specific demands from the US banking industry and some federal agencies, but whether they are in the US national interest is questionable. The experience so far of the COVID-19 crisis is precisely that strong capital standards, such as Basel III, are helpful protections against unforeseen events.

Globally-applied minimum prudential standards ensure a degree of international financial stability from which the United States benefits. Standards also prevent the most blatant competitive distortions in international banking markets – a key driver of the first Basel accord in the 1980s. It is not clear that the leverage ratio breach has benefits that offset the loss of such advantages.

The motivations for the Fed's new rule appear to include the fact that the pandemic-induced volatility has disrupted the Treasuries market and has also resulted in a sudden influx of deposits into US banks. If banks are less constrained by the leverage ratio limit, so the thinking appears to go, they can buy more Treasuries and thus contribute to more orderly markets. But it is doubtful that leverage-ratio-related constraints played any role in the recent Treasuries market turmoil.

As for the incoming deposits, banks can place them into deposits at the Federal Reserve, rather than Treasuries. A temporary exemption for such central bank deposits from the leverage ratio would not have breached Basel III in its current form.

Moreover, the exemption for US sovereign exposures creates a highly problematic precedent that other jurisdictions with less creditworthy sovereign issuers might now be tempted to emulate, against the Basel Committee's efforts to move its members towards consensus on a more rigorous recognition of the risks that such exposures might carry.

Similarly, concerns about procyclical impacts of CECL could and should have been addressed by using the standard's embedded flexibilities, similar to what was recommended outside the United States by the IASB and implemented by the euro area and the United Kingdom, among others.

By breaching G20 standards, these decisions contribute to institutional erosion at the global level and domestically. The breaches of Basel III are especially galling since Quarles now chairs the Financial Stability Board, an umbrella body whose permanent secretariat is located in the same building in Basel as the Basel Committee.

On the domestic front, the Fed also acted alone, as the other federal banking regulators, including the Office of the Comptroller of the Currency and the Federal Deposit Insurance Corporation, did not endorse its new rule as is customary. The congressional override of FASB (and, in the same move, of the US Securities and Exchange Commission, which delegates to the FASB standard-setting authority), also is without precedent in nearly half a century.

The United States would lose from abandoning global financial standards

Possibly the recent breaches are one-offs, not the start of a broader trend of divergence. In a formal sense, both the Fed's action on leverage ratio and Congress's on accounting are temporary measures, even though they could be extended.

They could, however, mirror a broader current pattern of the United States undermining the global rules-based order, from which the financial services area has been somehow ring-fenced until now. Be that as it may, these breaches are bad news for the authority of the G20, the Financial Stability Board and the Basel Committee, but are probably not crippling. Just as US agencies did not implement Basel II, and the FASB has declined to converge its standards with the IASB's global standards, global financial standard-setting bodies can probably live with US lapses of compliance, at least for some time.

It remains to be seen, however, how the implementation of the final piece of Basel III, which the Basel Committee has recently decided to delay by a year because of the COVID-19 pandemic, will be ultimately affected by an eclipse of US leadership in that area.

If the noncompliance trend is confirmed, the most damaging consequences could be to the United States itself. The chair of the foundation that hosts and oversees the FASB, in a letter that unsuccessfully attempted to persuade Congress not to pass Section 4014 of the CARES Act, argued that the action *"fundamentally undermines the longstanding and time-tested approach in the US to transparent, rigorous and independent accounting standard-setting, which market participants rely upon and that plays a critical role in supporting our capital markets and broader economy."*

The United States has benefited immensely from upholding best-in-class financial standards and regulations. If these standards are lowered, US economic achievements, all things equal, might be undermined as well. ■

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Monetisation: do not panic

The response to the COVID-19 shock have raised fears that major inflation could follow. Olivier Blanchard and Jean Pisani-Ferry clarify the discussion

The extraordinary operations that are under way in most countries in response to the COVID-19 shock have raised fears that large-scale monetisation will result in a major inflation episode. This column argues that so far, there is no evidence that central banks have given up, or are preparing to give up, on their price stability mandate. While there are obviously some reasons to worry, central banks are doing the right thing and the authors see no reason to panic.

In response to the sanitary crisis, extraordinary operations are under way in most countries (Baldwin and Weder di Mauro 2020). Exceptionally large, often open-ended fiscal support programmes have been launched and they are being coupled with exceptionally large purchases of government bonds. In the UK, the Treasury and the Bank of England have just announced the temporary reactivation of a scheme that makes it possible for the central bank to finance public spending directly.

These developments have raised fears that large-scale monetisation will result in a major inflation episode. Yet, other commentators would like the central banks to do even more and embark on some form of 'helicopter money' (eg. Galí 2020). This column is an attempt to clarify what we see as a confused discussion.

Let us start with the easy part. Governments everywhere are channelling funds to companies and households to protect them from the fallout of the economic contraction. In a way, they are practicing what the proponents of helicopter money asked for – but in a much more targeted way than anything central banks could ever do.

As a result (and because of the drop in government revenues), fiscal deficits are exploding. At the same time, central banks have initiated new, large-scale government bond purchase programmes. The question is no longer whether monetary institutions will embark on direct transfers, as supporters of helicopter money had asked for, but whether

we are seeing in effect the equivalent – namely, large-scale monetisation of the deficits – and if so, what the future implications will be.

What is monetisation?

Monetisation is an ambiguous concept. Evidently, not all central bank purchases of government bonds qualify as such. In the US, the Fed buys and sells government bonds all the time so as to achieve an interest rate consistent with its mandate of low inflation and full employment.

The central banks are doing the right thing. Their actions are sustainable. And they have not tied their hands to the inflation mast

In the euro area, the traditional modus operandi of the ECB was to repo government bonds, which equally affects the market equilibrium. The influence of centrals banks on the government bond market has been magnified since they have embarked on quantitative easing (QE). Their aim has been to broaden the set of interest rates that they are able to influence and thereby to flatten the yield curve, even when the policy rate is at, or below, zero. Sustained, large-scale government bonds purchases have become part of the toolbox of central banks, irrespective of the fiscal policy stance.

So, worries cannot be about the principle of central banks buying government bonds. They must be about them buying too many of them and for the wrong reasons – what one might call excess monetisation, motivated by public finance sustainability objectives rather than price or macroeconomic stability objectives.

What would then be the consequences? To think about the potential effects of excess monetisation, it is useful to start with a simple proposition.

To a first approximation, when interest rates are equal to zero, the purchase of bonds by the central bank in exchange for money – that is, the degree to which public debt is monetised – does not affect public debt dynamics.

The reason is simple: it just replaces a zero interest rate asset, called debt, by another one, called money. This is true whether none of the deficit, some of the deficit, or all the deficit is financed by issuing money.

If this were the end of the argument, it would be hard to see why central banks would ever embark on such monetisation. And, indeed, the proposition must be refined in at least three ways.

First, the eventual impact of central bank purchases of government bonds depends on what will happen in the future when economic activity and inflation are such that the central bank will want to increase interest rates. Monetisation today may affect expectations of what will happen then.

Second, when there is one central bank, many national treasuries, and different rates for different sovereign bonds (as in the case of the euro area), monetisation does affect the distribution of risk across countries.

Third, when markets becoming dysfunctional, or become potentially subject to multiple equilibria, monetisation – or even the threat of monetisation – can improve market functioning and avoid the convergence of expectations on 'bad equilibria'.

Monetisation and future central bank behaviour

Our earlier proposition was that, so long as interest rates are close to zero, whether the liabilities of the consolidated government are debt or money does not matter. But what about the point in the future when economic activity warrants an increase in the monetary policy rate?[1] The central bank then has two options.

The first option is to pay interest on money – the way, for example, the Fed did before this crisis by paying a positive interest on excess reserves held by banks. The consolidated government has now two types of debt: regular debt and interest-paying money. Neglecting the impact of term premia (ie. the effects of QE if the central bank buys long maturity bonds), the total interest rate burden is the same whatever the composition of the debt is between the two.

The second option is to keep the interest rate at zero. If, however, the economic situation warrants a positive interest rate, keeping it at zero will lead to overheating, and eventually to higher inflation. One of the implications

of higher inflation will be a decrease in the real value of nominal debt, alleviating the debt burden. What matters therefore is what the central bank, which may have a large balance sheet by then, will do when it needs to increase interest rates to achieve its mandate. If monetisation today is a signal that it will keep a large balance and not pay interest rate, then indeed there are reasons to worry about inflation.

Should, then, current large-scale purchases by central banks of government securities indeed be interpreted as a signal that, when the time comes, they will not pay interest on the large money stock and thus allow for overheating, inflation, and a reduction in the real value of government debt? It is true that the larger the portfolio of government bonds held by the central bank, the stronger the effect of its policy on debt sustainability. Large purchases do increase the risk of fiscal dominance.

None of the central banks has hinted, however, at such future behaviour[2], and past experience is reassuring. The Fed and the Bank of England, among others, paid interest on reserves when they increased their policy rates in 2017-2018. The ECB did not, but because of the persistently low level of inflation expectations, not because of its government bond holdings.

Should central banks be clearer, emphasise that monetary dominance will remain unchallenged and commit to not allow for inflation when the time comes? We think not. Central banks face a familiar trade-off. On the one hand, having the ability to decrease the real value of the debt if things are exceptionally bad is clearly a useful option to have.

If the virus crisis lasts for long and imposes such a debt burden on governments that they cannot repay their debt, they will be bound to choose between inflation, debt restructuring, financial repression and wealth expropriation, and there is no a priori reason to pretend that they must rule out inflation.

But, on the other hand, fuelling the anticipation by investors that the central bank may have recourse to inflation in the future will increase nominal rates on longer maturity bonds today, and increase the cost of debt finance today.

There is no simple answer as to whether the trade-off is favourable, and remaining silent about what will be done in the future may indeed be the best policy today.

Monetisation in the euro area: the basics

So far, we have assumed that there is only one government and one central bank. What about monetisation by the ECB, in a common currency zone where interest rates on sovereign bonds differ?

Again, we can think of monetisation in this case as governments sending checks to households, issuing bonds to finance them, and the bonds being purchased by the ECB in exchange for euros.

Assume that the euro area consists of just two countries: a low-debt country that issues safe debt, and a high-debt country whose bonds carry a positive premium, reflecting the perception by investors of a (small) probability of default. Assume also that the safe rate, the rate on the low debt is equal to zero, and the rate on the high debt is higher, and therefore positive.

Now suppose that both governments run deficits and issue bonds, and that the ECB buys the bonds in exchange for euros, thus increasing central bank money. From the point of view of the consolidated government of the euro area (that is, putting together all the treasuries and the ECB), this is just an internal transfer of risk from the holders of securities issued by the high debt country to the shareholders of the ECB – ultimately national governments – with no implication for the total debt held by the public. But now, there is an implicit transfer of risk across euro members. Thus, monetisation in this case has an effect: it leads to some risk sharing across euro members[3].

Whether or not this is the best way to achieve some risk sharing among euro area members is questionable. Other mechanisms (expenditure sharing, a dedicated credit line) would help lower the burden on the ECB and alleviate fears of monetization. Mutualisation is a political choice and it is advisable to practice it in a transparent way.

Monetisation in the euro area: the good and bad equilibria

If monetisation has no obvious implication for debt dynamics, and risk sharing is not its main purpose, why has the ECB announced a large purchase programme, the *"pandemic emergency purchase programme"* (PEPP), with an envelope of €750 billion, which allows it to buy sovereign bonds without necessarily adhering to the capital key? The answer is multiple equilibria and disrupted markets.

Sovereign bond markets are potentially subject to multiple equilibria. At a low interest rate, the probability that the debt is sustainable is high, justifying the low rate. Think of this as the good equilibrium. But there may well be another one, in which investors get worried, ask for a higher premium, increase debt service, and in so doing make their worries self-fulfilling and make debt unsustainable. Call it the bad equilibrium. Multiple equilibria can emerge nearly at any time, but they are more likely in the current circumstances when investors are edgy[4].

In this case, the central bank can play a crucial role: by committing to buy if the investors sell, it can eliminate the bad equilibrium. One way to do this is to do what the Bank of Japan has been doing, which is to commit to maintaining a given low interest rate, a strategy called yield curve control.

The ECB mandate does not allow it to adopt such a strategy, but it has made clear that, were rates to increase beyond what is justified by fundamentals, it will intervene and buy the bonds that investors are selling. Standing ready to purchase bonds in this context is not an attempt to monetise the debt.

Indeed, if the strategy is successful, it actually deters investors from selling, and may achieve its purpose with little or no intervention, little or no monetization, and little or no cost to the other governments[5]. In this case, the insurance that it provides to the high-debt country has no cost to the low-debt country. It may even benefit it by preventing a debt crisis and its cross-border spillovers.

This role is not limited to the euro area or to government bonds. Markets everywhere can become dysfunctional. Some investors have to sell to get liquidity. Others may not have the liquidity to take the other side. Or there can be multiple equilibria.

In recent years, and again in this crisis, we have seen examples of both. When markets become dysfunctional, the central bank can take the other side until investors return, or others come in.

Conclusions

So far, there is no evidence that central banks have given up, or are preparing to give up, on their price stability mandate. It may eventually happen, if the fiscal cost of the crisis proves to be unbearable, but the size of the current public bond purchases should not be regarded as indicative of future excess monetisation.

In the specific case of the euro area, the ECB's bond-buying purchase programme can evidently serve as a channel for mutualising the cost of the crisis. This is in part by default: we see good reasons why part of the burden of fighting the pandemic should be mutualised among EU members, but it would be more appropriate to do so in a more transparent way through explicit budgetary and financial channels.

So far, no agreement has been reached on such schemes, and this is unfortunate. But this is no reason to interpret ECB actions as mainly distributional. The PEPP is not a hidden budgetary mechanism. At a time when investors are

prone to nervousness, its main purpose is to prevent the convergence of expectations on a bad, self-fulfilling crisis equilibrium. Such action serves the interest of all the members of the eurozone.

In short, there are obviously some reasons to worry, but we see no reason to panic. The central banks are doing the right thing. Their actions are sustainable. And they have not tied their hands to the inflation mast. ■

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Endnotes

1. This may be far in the future, but it will happen one day.

2. The joint press release by the BoE and HM Treasury of 9 April explicitly states that any use of the direct financing scheme will be short-term and temporary.

3. As the interest paid on the bonds held by the ECB is redistributed to its shareholders, it also involves a transfer from the high debt country to the low debt country, which can be regarded as a remuneration for the risk transfer.

4. We do not discuss here the risk of redenomination of the public debt following an exit from the euro area. It only strengthens the argument.

5. To be clear, this is not a strategy without risks. Distinguishing between the emergence of a bad equilibrium, and a justified increase in the rate in the good equilibrium is not easy, and the central bank may find itself taking credit risk.

References
Baldwin, R and B Weder di Mauro (2020), Mitigating the COVID Economic Crisis: Act Fast and Do Whatever It Takes, a VoxEU.org eBook, CEPR Press.
Galí, J (2020), "Helicopter money: The time is now", voxEU.org, 17 March.

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Doing more with less

The COVID-19 pandemic has sparked fears of a next wave of emerging market debt crises. Tobias Krahnke considers how the IMF should respond to an emerging markets crisis

Fears of a next wave of emerging market debt crises recently sparked a renewed debate about the adequacy of IMF resources and its toolkit. This column argues that the issue is not whether the IMF has sufficient resources for large-scale financial assistance to all of its members in need, but that such assistance would ultimately be counterproductive and could, in fact, exacerbate the risk of liquidity crises morphing into solvency crises.

One of the reasons is that large-scale IMF financial assistance coupled with the IMF's preferred creditor status can lead to a crowding-out of private investors by increasing their expected loss in the event of default. This underlines the need for all elements of the international monetary and financial system to assume their full responsibility, including the private sector.

The COVID-19 pandemic and a sharp deterioration of the economic outlook have triggered an unprecedented pullback of non-resident portfolio flows from emerging markets (Levy Yeyati 2020). Given that the room for fiscal and monetary manoeuvring is constrained, it is likely that many countries will have to look for outside assistance (Dabrowski and Domínguez-Jiménez 2020).

Against this background, a lively debate has emerged on which role the IMF can and should play in this regard. Commentators' proposals range from increasing the Fund's overall resource envelope, over allocating Special Drawing Rights (SDRs) to all its members, to backing central bank swap lines with large-scale precautionary Fund arrangements.

While many of the merits and drawbacks of these options have been discussed, one important aspect has so far received little attention, namely, a possible crowding-out of private capital inflows caused by excessive amounts of IMF financial assistance that are provided through its lending facilities. This aspect might be of growing importance

as calls for higher access limits to IMF resources (Berglöf *et al*. 2020) and greater reliance on large-scale IMF facilities are already starting to emerge.

The catalytic function of IMF lending and the role of programme size

The success of any IMF programme hinges to a large extent on its catalytic effect – that is, increasing the propensity of private investors to hold financial assets in the country concerned by providing a signal that a country's economic policies are on the right track (Giannini and Cottarelli 2002).

... large IMF financial assistance coupled with the IMF's preferred creditor status can lead to a crowding-out of private investors by increasing their expected loss in the event of default

The Fund usually sees itself as meeting only a small portion of a country's external financing requirements and works on the assumption that its involvement will encourage others to lend. However, over the last decades – and in particular following the Global Financial Crisis – the average size of IMF arrangements has increased and larger arrangements have been agreed more frequently (see Figure 1).

At the same time, the IMF's effectiveness in helping countries to overcome balance of payments problems has frequently fallen short of expectations (IMF 2019).

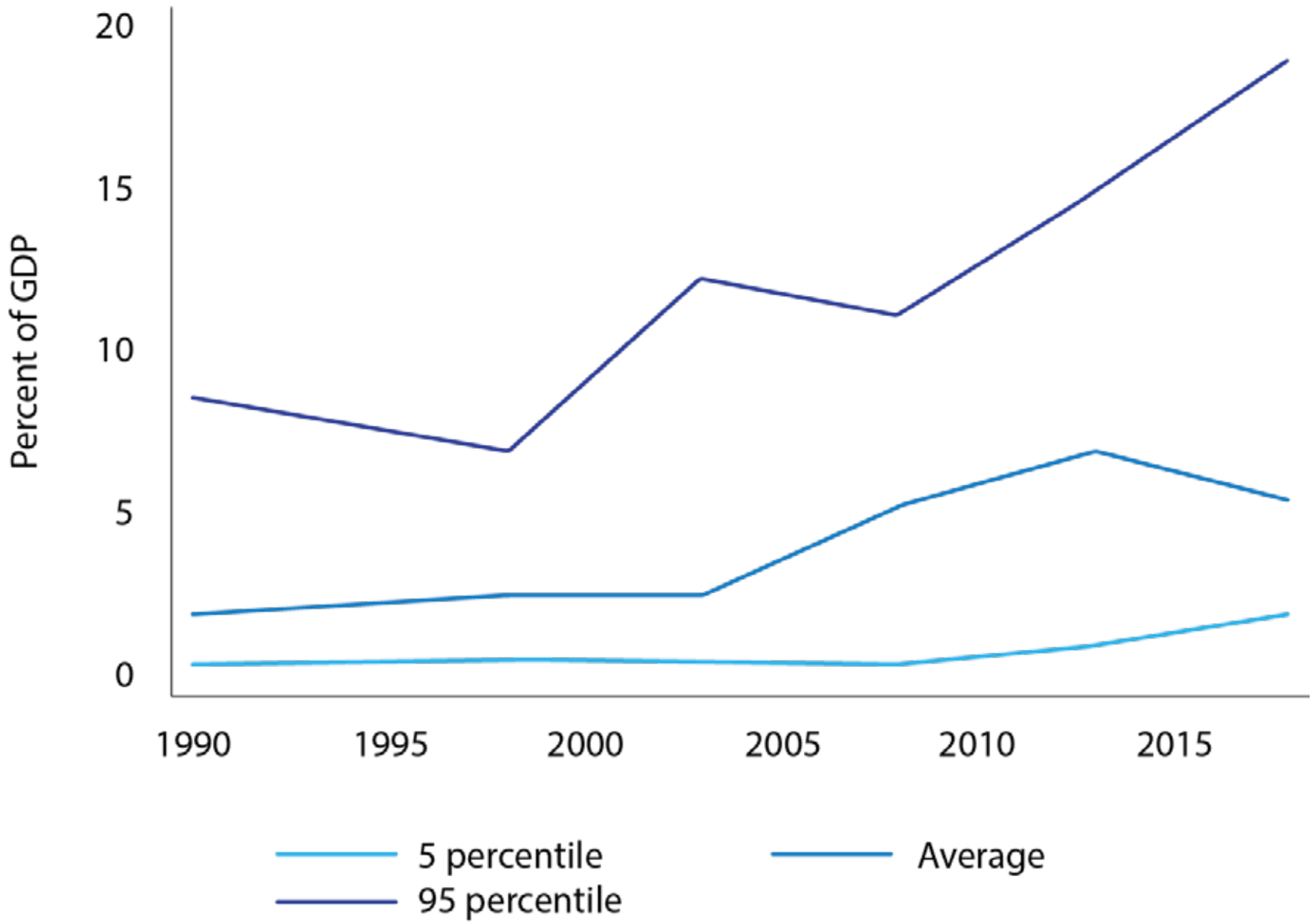
In a recent paper, I argue that there are several mechanisms through which large programmes can potentially weaken the catalytic function of IMF lending, thereby also decreasing the chance that member countries durably solve their balance of payments crises over the course of the program (Krahnke 2020).

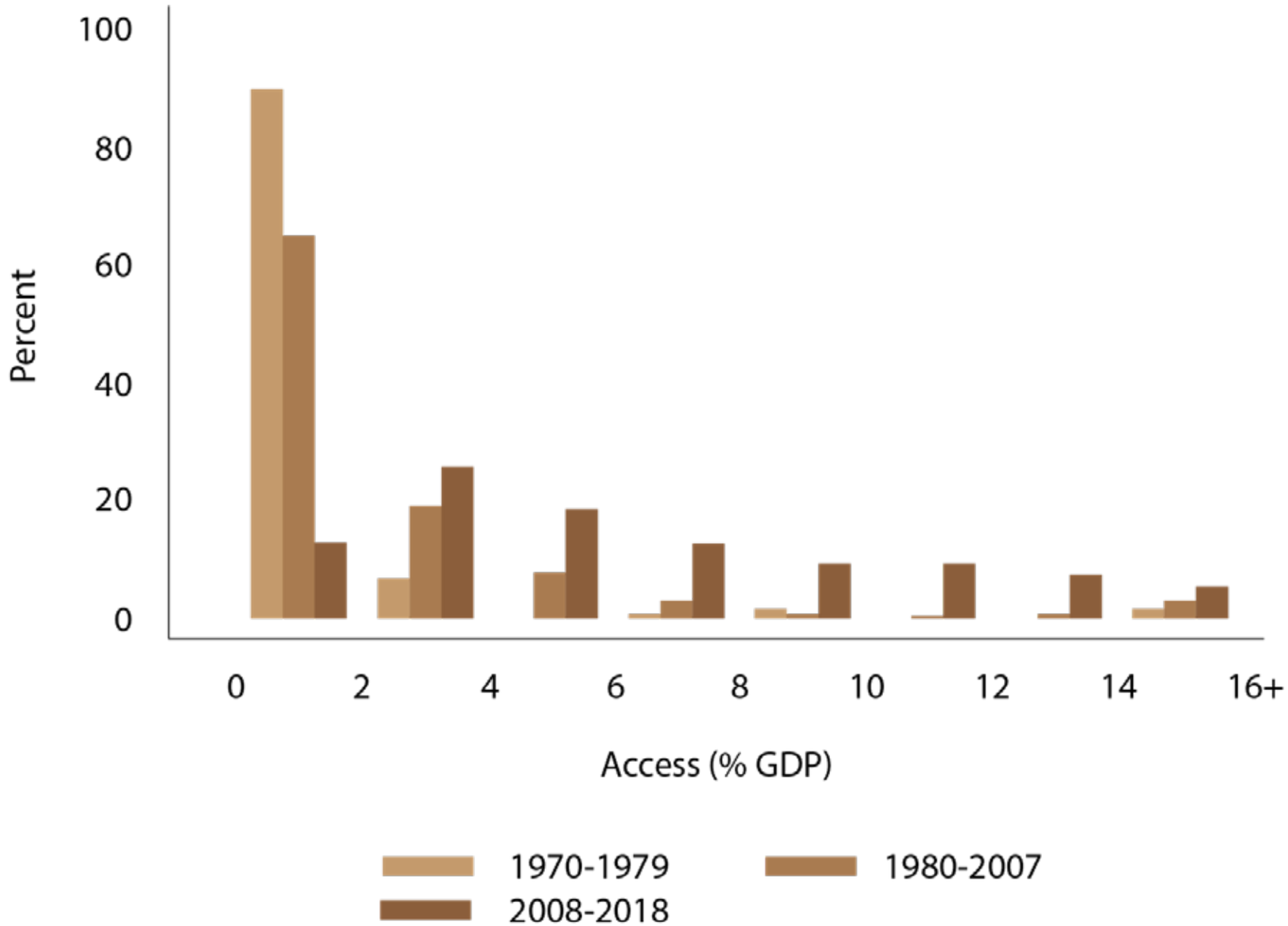
First, while IMF-supported economic adjustment and favourable terms of financing reduce the probability of default by strengthening the country's balance of payments position and its future capacity to repay external liabilities, the IMF's preferred creditor status can cause it to crowd out the claims of other creditors by increasing the loss given default of these claims, since they are considered junior to those of the Fund.

Second, in the presence of fiscal sustainability concerns large financing packages from the IMF, even paid out relatively up-front, offer a welcome opportunity for private creditors to exit. In this case, official debt replaces private debt with the result that it is much harder to restructure.

Third, IMF staff projections at programme approval often turned out too optimistic, in particular for very large Fund-supported arrangements that involve 'exceptional access' (Committeri *et al*. 2019). Against this background, private investors might be more likely to adopt a wait and see attitude in these cases.

Figure 1. Distribution of IMF arrangement sizes





Notes: Average size of IMF arrangements (left) and the distribution of IMF arrangement sizes (right). Program size is measured in percentage of recipient countries' GDP. Data on IMF arrangements (including their respective size) is taken from the IMF website and program documents. The nominal GDP data is taken from the World Bank's World Development Indicators (WDI).

In the current circumstances, most of these effects will tend to be even more pronounced given that the IMF would have to design a Fund-supported adjustment programme in the midst of enormous uncertainty. Therefore, a positive catalytic effect is more likely to be observed for smaller programmes where the IMF's share in the overall external financing envelope is more limited.

In my paper, I study the catalytic effect in the context of gross capital inflows using a comprehensive data set spanning the years 1990-2018. I provide empirical evidence that the catalytic effect of IMF financial assistance is indeed weakened – and potentially reversed – if the size of an IMF programme exceeds a certain level.

According to the estimates, a generally positive catalytic effect on private capital flows would be reversed once the amount of IMF financing is above 5% of GDP. This figure broadly corresponds to the upper quartile of the actual distribution of programs approved over the last decades.

I show that the negative effect of programme size is mostly driven by a reduction of debt-type capital inflows of foreign residents. This finding suggests that large IMF financial assistance coupled with the IMF's preferred creditor status can lead to a crowding-out of private investors by increasing their expected loss in the event of default[1].

Policy implications

Hence, the issue is not whether the IMF has sufficient resources to provide very large-scale financial assistance to all of its members in need, but that the latter would ultimately be counterproductive, also from the borrowing countries' point of view. It would rather create the risk of letting liquidity crises morph into solvency crises further down the road.

By contrast, providing international liquidity through a major allocation of SDRs (as also done during the 2008 financial crisis) would not suffer from the aforementioned negative side effects. However, such a liquidity injection would not be well targeted to the countries most in need and might also face resistance from some of the IMF's major shareholders (Sobel 2020).

Against this background, it will be of the essence for all elements of the international monetary and financial system to assume their full responsibility. This might also include the private financial sector, for instance by means of a framework (potentially steered by the IMF) that follows the example of the Vienna Initiative.

Should the private sector choose to disengage in defiance of such an appeal, countries might have to resort to some kind of temporary capital controls. In any case, ample IMF resources alone would not be able to compensate for destabilising capital outflows.

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Author's note: The views expressed here are those of the author and do not necessarily represent those of the institutions with which he is affiliated.

Endnotes

1. Note that the de facto preferred creditor status is a crucial (and non-negotiable) feature for the institutional design of

the IMF, as it allows its members to treat the resources provided to the Fund as reserves on their central bank's balance sheet.

References

Berglöf, E, G Brown and J Farrar (2020), "Letter to governments of the G20 nations", VoxEU.org, 07 April.
Committeri, M et al. (2019), "Conditionality and design of IMF-supported programmes", Occasional Paper Series 235, European Central Bank.
Dabrowski, M and M Domínguez-Jiménez (2020), "Is COVID-19 triggering a new emerging-market crisis?", Bruegel Blog Post, 30 March.
Giannini, C and C Cottarelli (2002), "Bedfellows, Hostages, or Perfect Strangers? Global Capital Markets and the Catalytic Effect of IMF Crisis Lending", IMF Working Papers 02/193, International Monetary Fund.
Krahnke, T (2020), "Doing more with less: the catalytic function of IMF lending and the role of program size", Bundesbank Discussion Paper No 18/2020.
IMF (2019), "2018 Review of Program Design and Conditionality", Washington D.C.
Levy Yeyati, E (2020), "COVID, Fed swaps and the IMF as lender of last resort", VoxEU.org, 31 March.
Sobel, M (2020), "Corona virus SDR allocation not the answer", OMFIF Commentary, 23 March.

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Globalisation and financial contagion: a history

Olivier Accominotti et al suggest that the COVID-19 pandemic could lead to a revaluation of the international trade and finance system

For many years, globalisation was on the march, bringing with it the increased risk of financial contagion effects. The Global Crisis reversed this expansion and highlighted the vulnerabilities intrinsic to the globalised international economy. This column takes a historical approach to the debate, analysing how patterns of globalisation and contagion have changed over time. The patterns also suggest that the ongoing COVID-19 pandemic is likely to cause another enormous 'stress test' for globalisation, forcing firms and nations to limit traveling and trade, perhaps leading to a reevaluation of the international system.

In 2007 globalisation reached its peak with global cross-border capital flows amounting to approximately $11.8 trillion. However, the financial crisis that followed contributed to a reversal in this trend, with markets showing the first signs of 'deglobalisation' as a result.

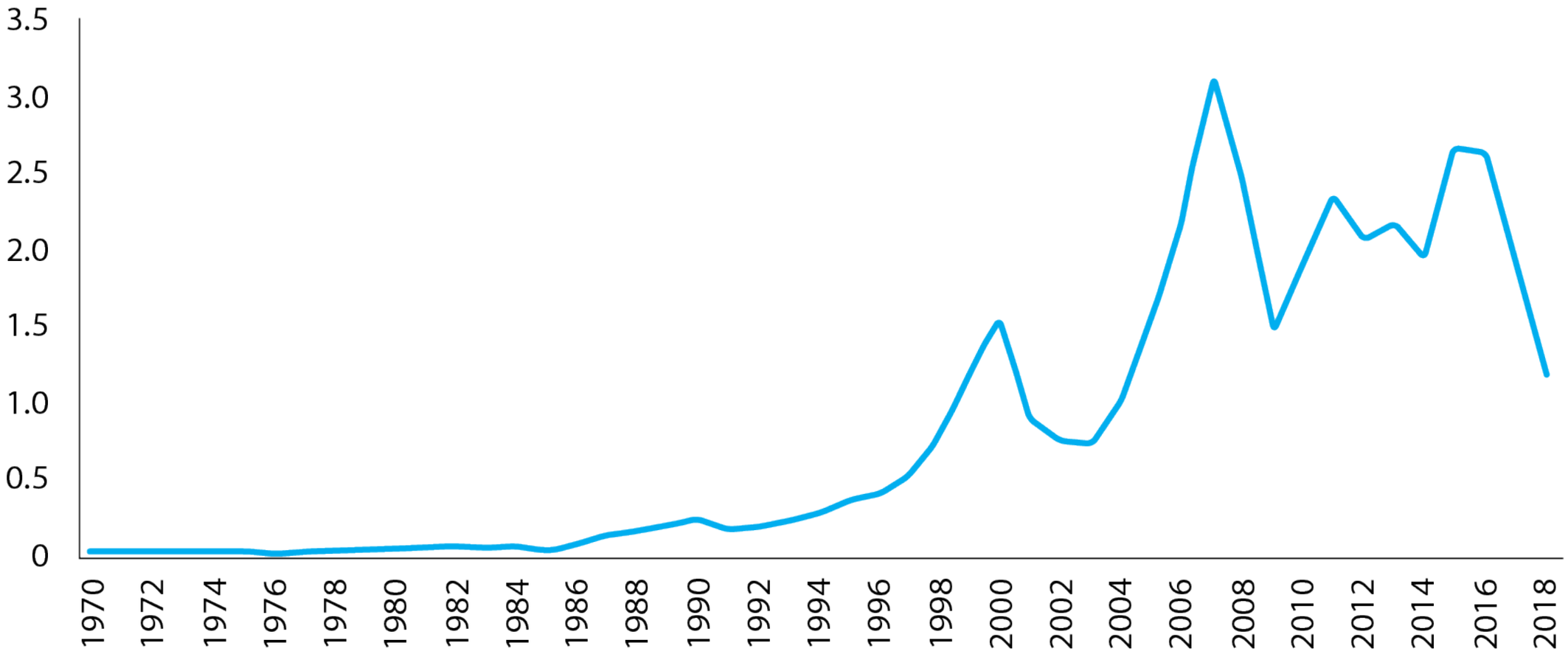
The recent COVID-19 pandemic is likely to cause another enormous stress test for globalisation, forcing firms and nations to limit traveling and trade, perhaps leading to a reevaluation of the interconnected global economy.

Figure 1 shows the evolution of foreign direct investment (FDI) since 1970. FDI has decreased by 60% since its peak in 2007, with cross-border financial flows experiencing a similar trend (Bordo 2017). Deglobalisation could have severe consequences for investors looking for diversification opportunities since it entails more segmented markets, leading to an increase in idiosyncratic risks, as well as in transaction costs.

Financial globalisation, financial contagion and portfolio diversification

Financial globalisation is not a linear or irreversible process. Researchers have shown that international capital market integration was significantly more pronounced in the 1880-1914 and post-1971 eras, in comparison to the interwar (1918-1940) and Bretton Woods (1944-1971) periods (Mauro *et al*. 2002, Goetzmann *et al*. 2005, Rangvid *et al*. 2016).

Figure 1. Foreign direct investment, net inflows (Balance of Payment, current Trillion US$)



Source: International Monetary Fund, Balance of Payment database, supplemented by data from the United Nations Conference on Trade and Development and official national sources

Bekaert and Mehl (2019) study global stock market integration over the 1880-2014 period. They show that, although international stock markets were significantly integrated during the first era of global finance (1880-1914), integration was at its highest in the post-Bretton Woods era. Hence, financial globalisation between 1880 and 2014 followed a 'swoosh' pattern (Bekaert and Mehl 2019). However, the authors find no evidence of deglobalisation following the financial crisis.

By definition, globalisation is crisis-insensitive and refers to a general increase in correlations within asset classes, spanning across geographical areas (Berben and Jansen 2005). However, during financial crisis episodes, we frequently observe a significant increase in cross-market linkages which goes beyond what the 'fundamentals' can explain (Forbes and Rigobon 2002).

... financial contagion might become a significant problem for investors if financial markets return to a more moderate level of globalisation in the near future

This phenomenon, often referred to as 'contagion', has important implications for investors. Investors are often searching for the benefits of diversification strategies. However, in the presence of contagion across countries, geographical diversification becomes less powerful during crises. This, in turn, makes investors that are already struggling with low returns even worse off.

Financial contagion in the long run

In a recent paper (Accominotti *et al*. 2020), we revisit the issue of financial contagion during globalised periods in a long historical perspective (1880-2014). More precisely, we investigate how the level of financial globalisation affects the risk of international financial contagion.

Considering the period between 1880 and 2014 allows us to distinguish between four sub-periods with different levels of financial market integration. These sub-periods are as follows:

- The 1880-1914 classical gold standard era, when financial markets were globalised but international stock market integration was more moderate than in the most recent period
- The 1918-1940 years, which first saw a short revival in cross-border capital flows followed by deglobalisation
- The 1946-1971 Bretton Woods period, when stock markets were poorly integrated as most countries implemented capital controls
- The 1972-2014 post-Bretton Woods era, when global stock market integration reached its highest level ever

To overcome the problem of disentangling globalisation from contagion, we follow a sequential process. First, we use an 'International Capital Asset Pricing Model' to assess globalisation in the equity market of 17 countries, identifying excess returns over the four stated sub-periods with respect to the international market portfolio.

Next, we analyse correlations between monthly equity excess returns, comparing correlation matrices by using the tests proposed by Goetzmann *et al*. (2005). In sum, we allow for the possibility of globalisation associated with the systematic source of return variation. We then consider overlying contagion.

We show that the intensity of stock market contagion varies with the degree of financial market globalisation, but in a nonlinear fashion. Intuitively, in a globalised world (that is, in a world with high cross-market correlations) the scope for an increase in correlations following a crisis should be more limited than in a world with limited (or no) globalisation whatsoever.

Our findings suggest that the phenomenon of financial contagion was absent from stock markets during both the period of deglobalisation of 1918-1971, and during the era of intense globalisation of 1972-2014.

However, we do find some evidence of stock market contagion during the classical gold standard period of 1880-1914, when stock market integration was high but more moderate compared to the most recent period. Capital controls and market segmentation implemented from the 1930s to the Bretton Woods years may explain the absence of stock market contagion during the 1918-1939 and 1946-1971 periods.

However, although the 1880-1914 and 1972-2014 eras were both marked by significant capital market integration, contagion was only present in the former period.

Figure 2 illustrates the relationship between financial globalisation and financial contagion. The figure reports cross-country correlations between the monthly stock market returns for Germany, the US, and the UK across the four sub-periods from 1880 to 1914.

It also shows the average increase in stock market return correlations between these three countries during identified crisis episodes. As is apparent, international contagion within stock markets only appears to have been a significant problem in the era of 'moderate' globalisation in 1880-1914 but was a much less severe challenge in the era of 'intense' financial globalisation in 1972-2014.

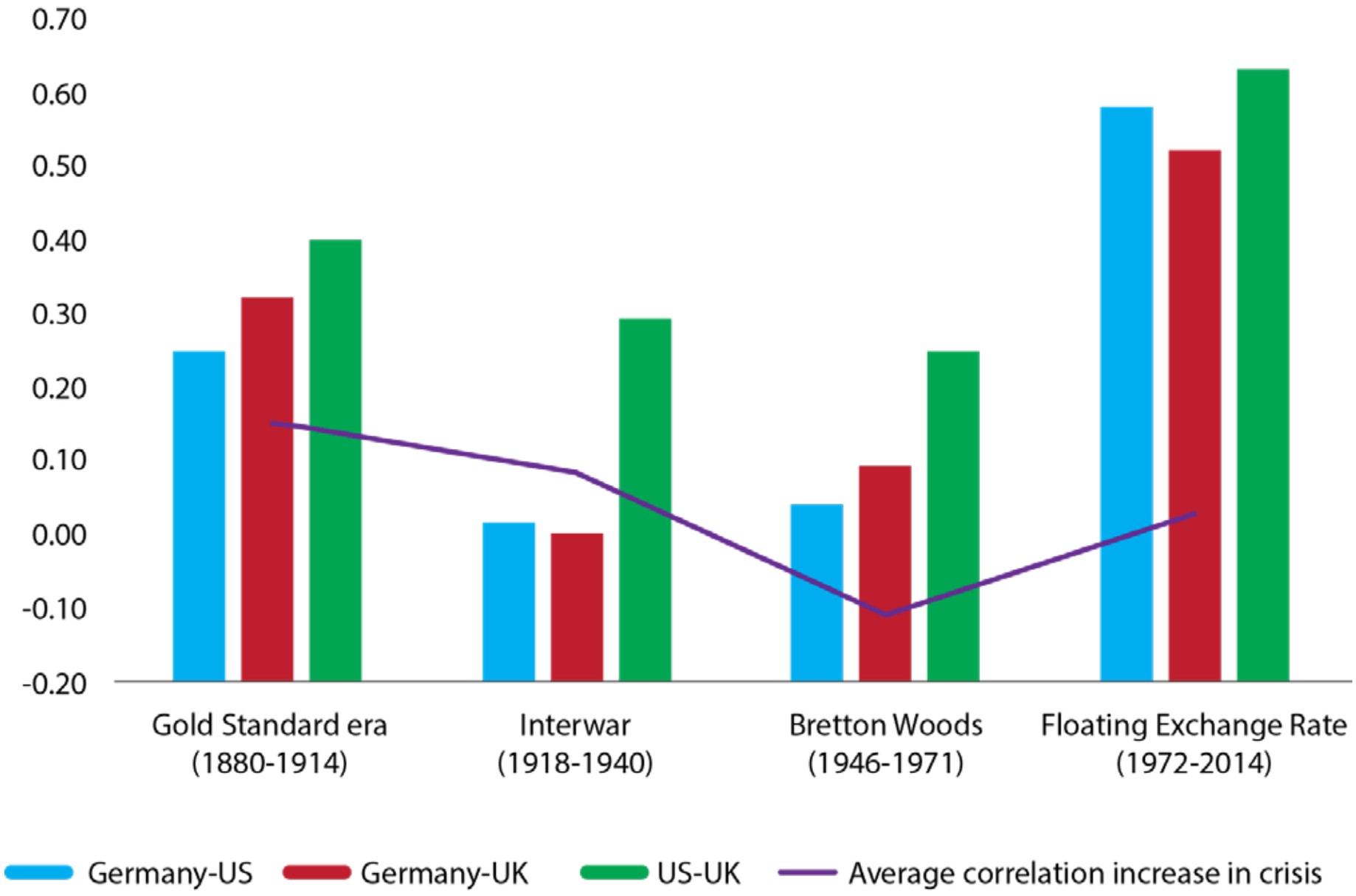
For contagion effects to occur, markets have to be at least somewhat integrated. When connections between markets are minimal, contagion cannot appear. As a result, short of globalisation, contagion is impossible because it requires some permeability between financial markets located in different countries.

Once markets are more integrated, contagion becomes plausible during crises. During the 1880-1914 classical gold standard era, globalisation was reasonably high, highlighting the presence of contagion. However, with peaking levels of globalisation (as in the 1972-2014 period), contagion is doomed to disappear. When stock return correlations are very high, there is little room left for any increase following a shock.

Conclusion

Overall, contagion is more likely to occur when globalisation levels are in the middle range. Our findings are consistent with an 'inverted U-shaped' relationship between contagion and globalisation. If cross-market correlations are too high, globalisation can kill contagion. As such, financial contagion might become a significant problem for investors if financial markets return to a more moderate level of globalisation in the near future.

Figure 2. Cross-country correlations and average correlation increase during crises, Germany, UK and US



Source: GFD, author's calculations

Heightened contagion in a less globalised financial system could reduce the benefits of portfolio diversification, making the effects of crises even more dramatic for investors. ■

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References

Accominotti, O, M Brière, A Burietz, K Oosterlinck and A Szafarz (2020), "Did Globalization Kill Contagion?", CEPR Discussion Paper No. 14395.

Bekaert, G and A Mehl (2019), "On the global financial market integration "swoosh" and the trilemma", Journal of International Money and Finance, forthcoming.

Berben, RP and WJ Jansen (2005), "Comovement in international equity markets: A sectoral view", Journal of International Money and Finance 24(5): 832-857.

Bordo, MD (2017), "The second era of globalization is not yet over: An historical perspective", NBER Working Paper No. w23786.

Forbes, KJ and R Rigobon (2002), "No contagion, only interdependence: Measuring stock market co-movements", Journal of Finance 57(5): 2223-2261.

Goetzmann, WN, L Li and KG Rouwenhorst (2005), "Long-term global market correlations", Journal of Business 78(1): 1-38.

Mauro, P, N Sussman and Y Yafeh (2002), "Emerging market spreads: Then versus now", Quarterly Journal of Economics 117: 695-733.
Rangvid, J, P Santa-Clara and M Schmeling (2016), "Capital market integration and consumption risk sharing over the long run", Journal of International Economics 103: 27-43.

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Watching out for the third pandemic: a massive debt-crisis...

COVID-19 is having a profound affect on the global economy. Deepanshu Mohan considers the consequences of increasing debt on countries such as India

In a recent column noted American economist Robert Shiller argued that the global economy is currently witnessing two pandemics advancing across nations at the same time. The first is a healthcare pandemic from COVID-19 virus spreading across continents, and the second, is the anxiety pandemic that is causing financial markets, commodity markets, economic activity to fall-off from a cliff in an I-shaped vertical curve.

This is unprecedented in modern economic crises history, as one often uses a reference of a U or V shaped curves in explaining the decline of economic activity within crisis scenarios, and then a rise after appropriate economic policy responses take effect. Right now, economic activity has just frozen across the nation(s).

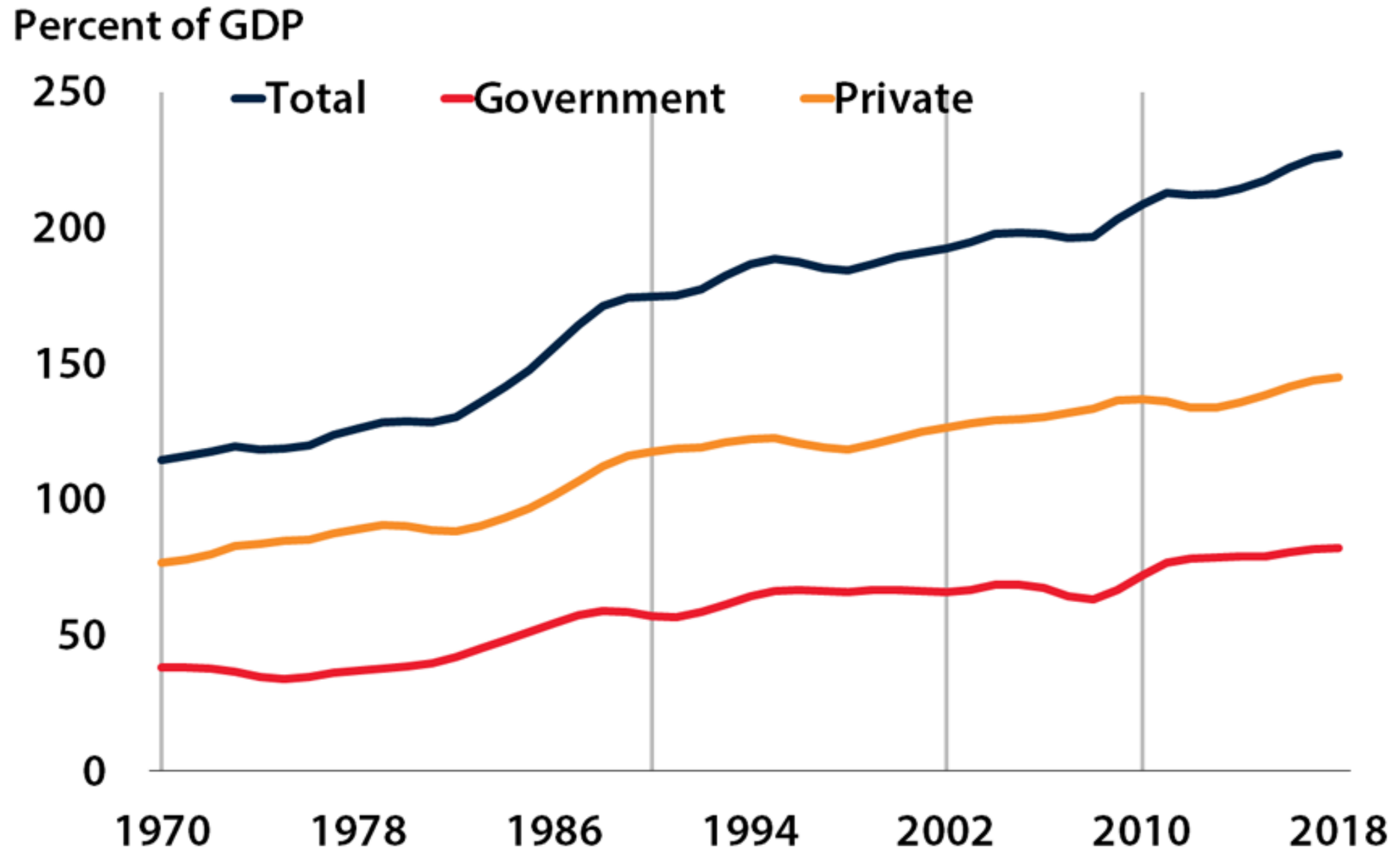
The pandemic of anxiety is particularly troubling for longer-term psychological changes in societies. *"When people are emotionally upset because of a tragic event, they tend to react with fear even in circumstances where there is no reason to fear."*

This is the *"affect heuristic"* - a concept developed by psychologist Paul Slovic, and discussed by Shiller in explaining how the (financial) anxiety pandemic isn't gripping the economy and stock markets of United States alone but in nations world over. Also, both these pandemics, the survival anxiety surfacing from the health pandemic, and the financial/livelihood anxiety emerging from the former may look different but are actually inseparable.

But, for many developing and developed countries (especially those in Europe), there is a third pandemic that may hit affected nations, once the other two begin to subside. This is likely to be shape itself in form of a massive-debt crisis that can potentially grip highly-levered countries for years to come.

Earlier this year, the World Bank released a detailed study warning against a massive debt wave that has been emerging across the world (as seen in Figure 1) for some time now. When debt accumulation is high, any external

Figure 1. Global Debt Accumulation



Source: International Monetary Fund Database

(or exogenous) or endogenous (internal) shock may trigger a debt-crisis. While, it was difficult to speculate what exact shock might trigger such a debt-crisis, the COVID-19 pandemic, might be just that trigger element (as it seems now).

In the last fifty years the global economy has suffered from four waves of massive debt accumulation. The first three waves ended up in a subsequent series of financial crises surfacing in the 1980s (Latin America), and 1990s (South America, East Asia). The fourth wave, surfacing from 2010 (ie. after the subprime crisis in the US) has appeared to be the largest, fastest and most broad-based increase in debt across most economies.

In emerging countries like India, Mexico, Colombia, Brazil, Argentina the freezing of economic activity from COVID-19 pandemic-induced shutdowns has ... render[ed] millions of workers jobless

The total debt has risen by 54 percentage points of GDP to a historic peak of almost 170 percent of GDP in 2018. Emerging economies alone have amassed a record debt-to-GDP ratio of 170%, and are most vulnerable to a debt-crisis now (see Figure 2 (a) (b) for the debt composition of emerging market economies).

In emerging countries like India, Mexico, Colombia, Brazil, Argentina the freezing of economic activity from COVID-19 pandemic-induced shutdowns has almost destroyed their large organized and unorganized, informal segments of the economy, rendering millions of workers jobless with little fiscal support available on offer from the state.

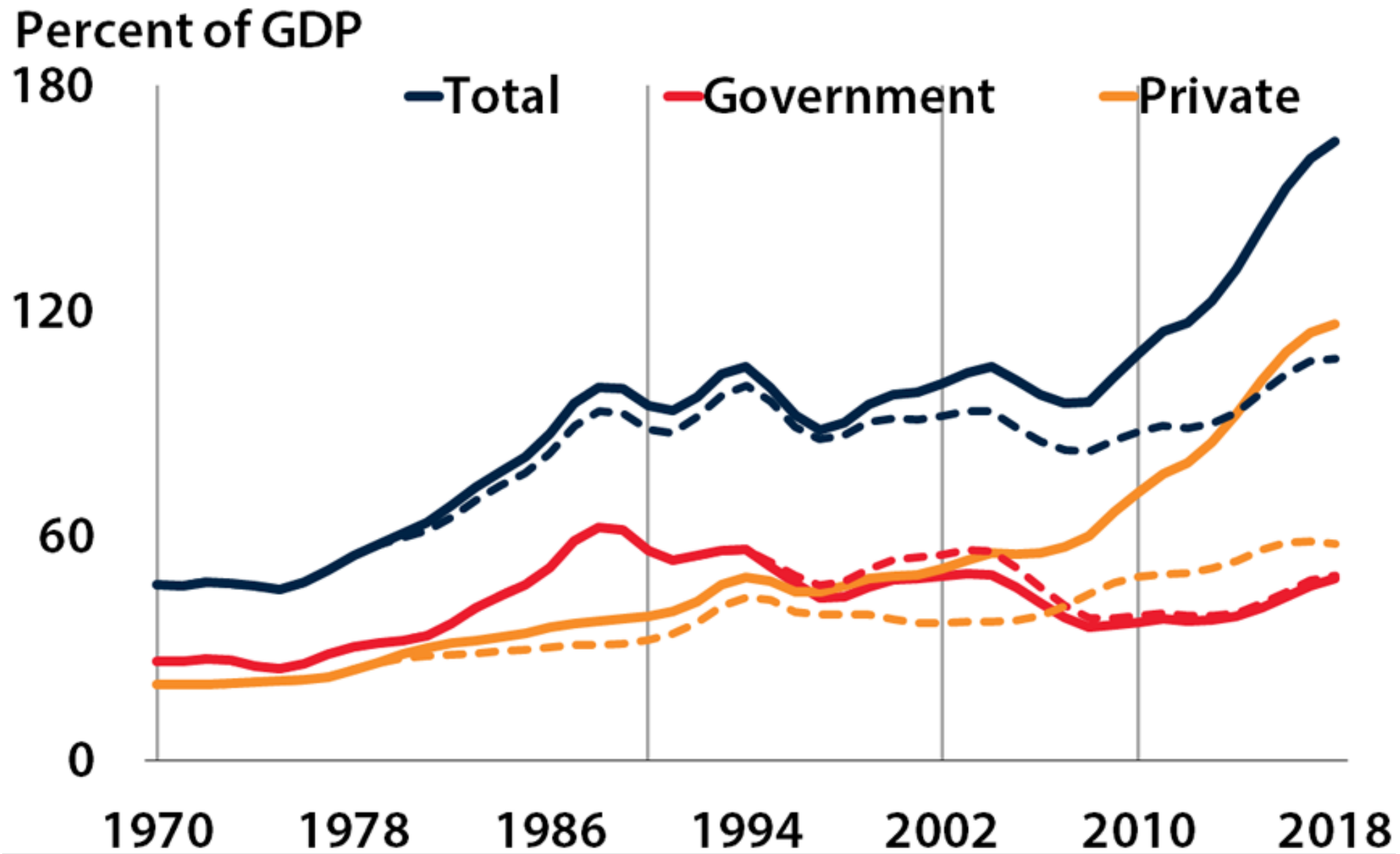
The economic situation has already forced many of these nations to expand their fiscal borrowing capacity in contingency (via internal and external means), that is critical for providing immediate relief to workers, firms and then to help restore confidence in the economy to aid a path to recovery. States are likely to do much more in addressing both the health pandemic and the anxiety pandemic to restore consumer and investor confidence to aid recovery.

Similarly, other high debt ridden developed nations like Italy, Spain, Portugal etc., even since the eurozone sovereign debt crisis had high leverage accumulating across their private, public and household segments of the economy (as seen in Figure 3 below).

How did this accumulation of debt happen at such a large scale?

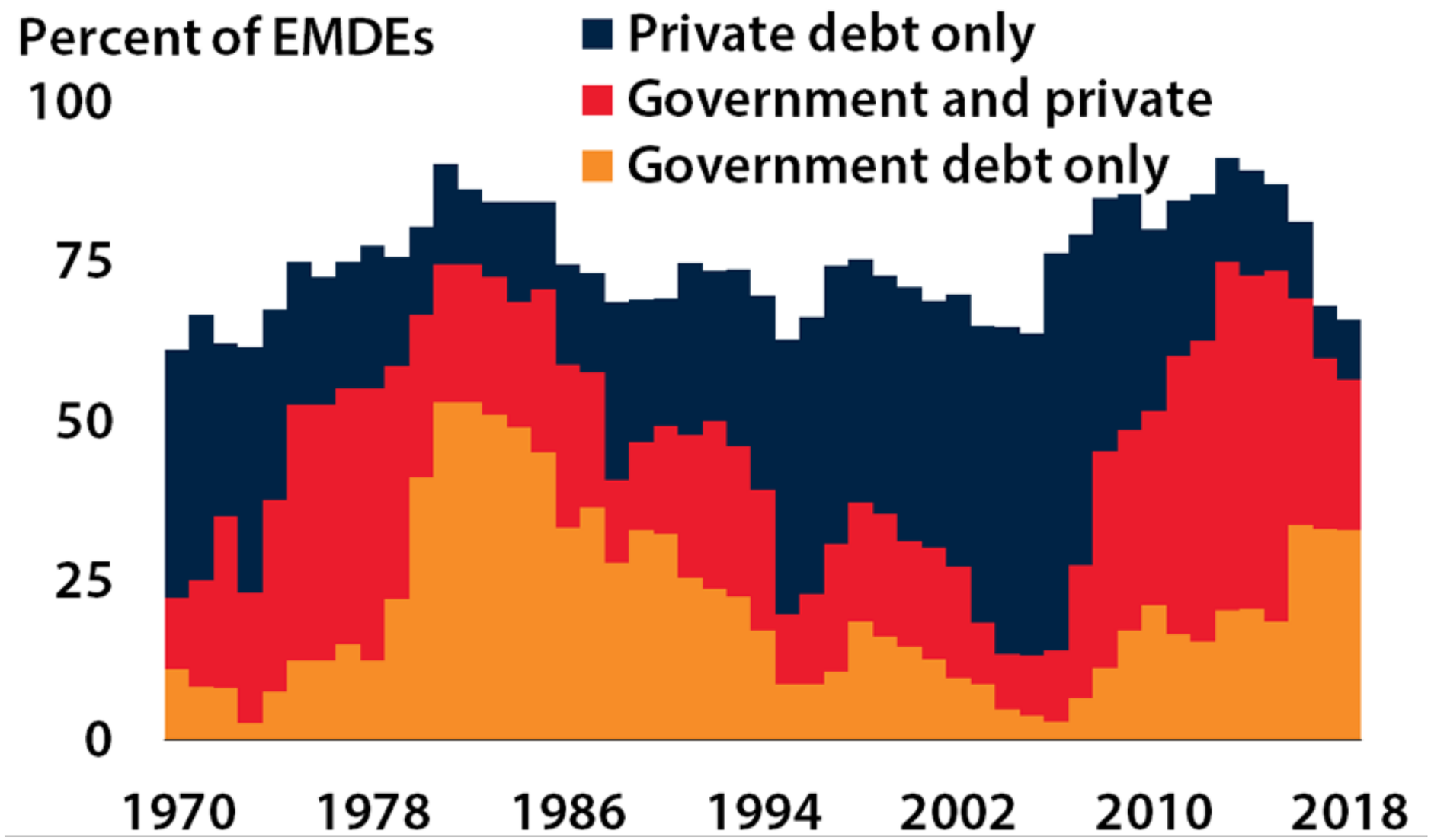
Economists with expertise in crises diagnosis - from Kenneth Rogoff, Maurice Obstfeld, Raghuram Rajan to Gita Gopinath - have been cautioning against a gradual formation of a massive debt-bubble that has been fuelled by cycles of slow growth and low long term interest rates (reducing the cost for borrowing) in many nations (see Figure 4 (a) (b) below).

Figure 2 (a). Emerging Market Developing Economies



Source: International Monetary Fund Database

Figure 2 (b). Share of Debt of Emerging Market Developing Economies in Debt Accumulation Waves



Source: International Monetary Fund Database

Figure 3. Region-Wise Distribution of Government Debt to GDP (%)

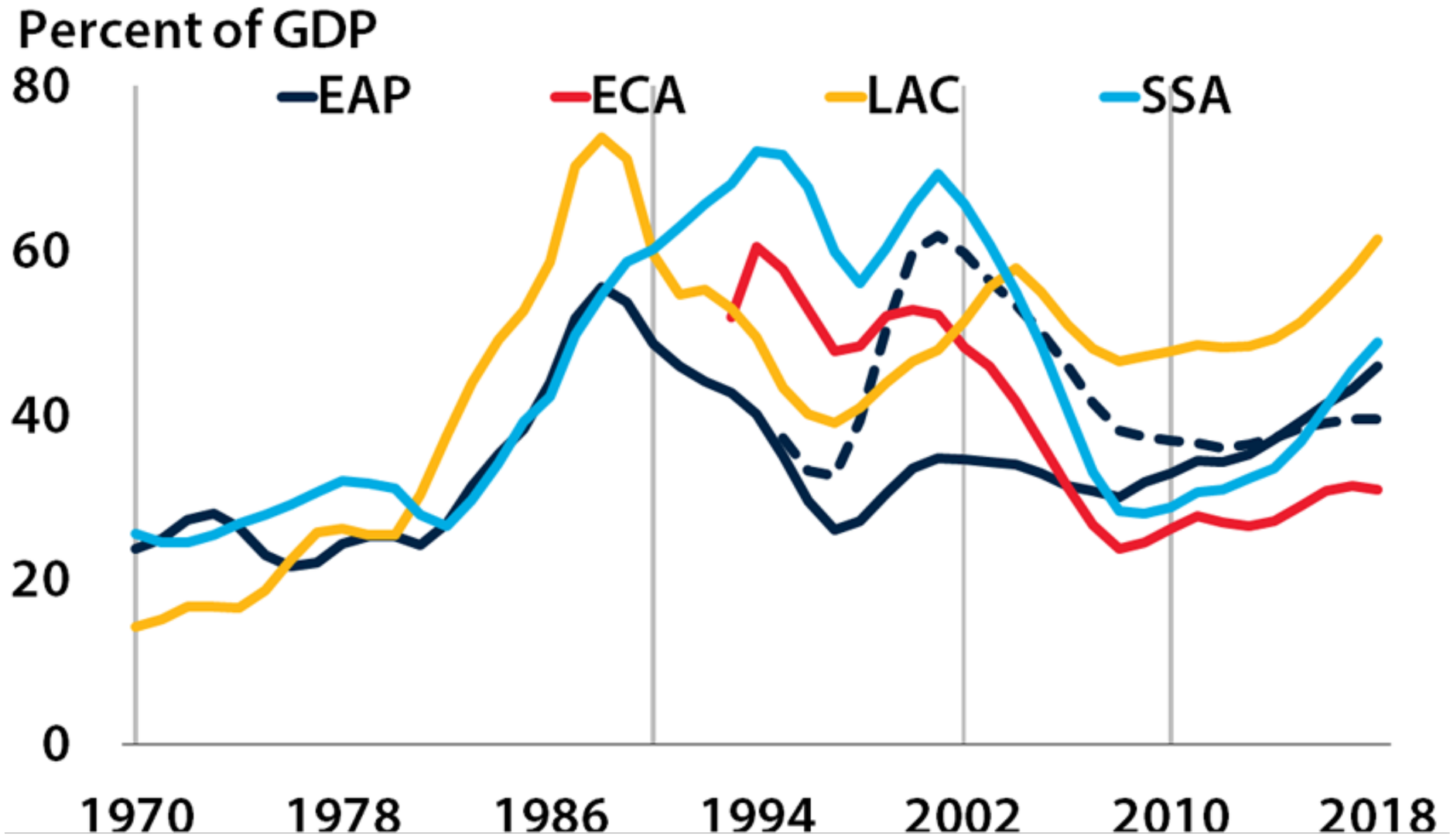
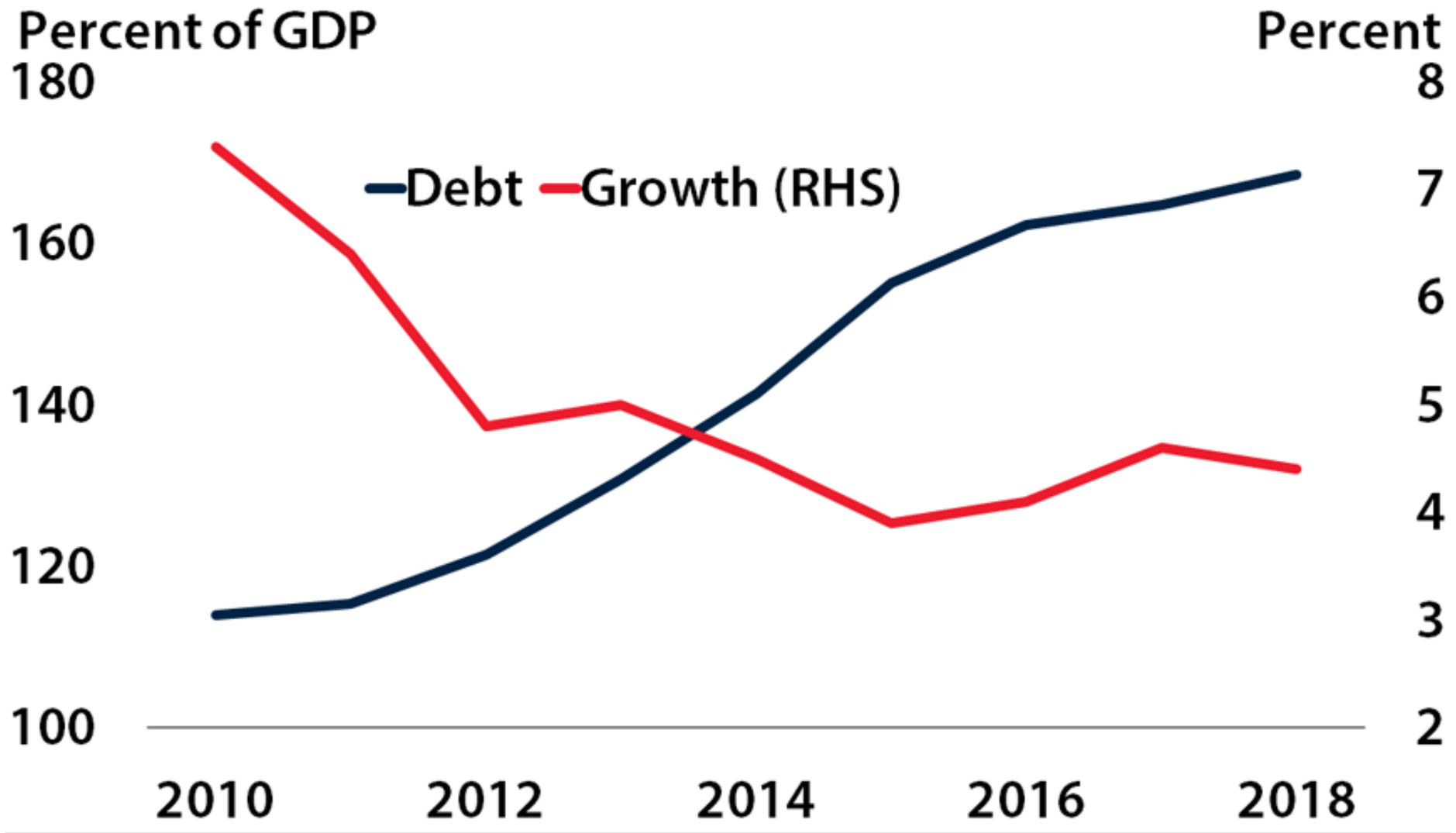
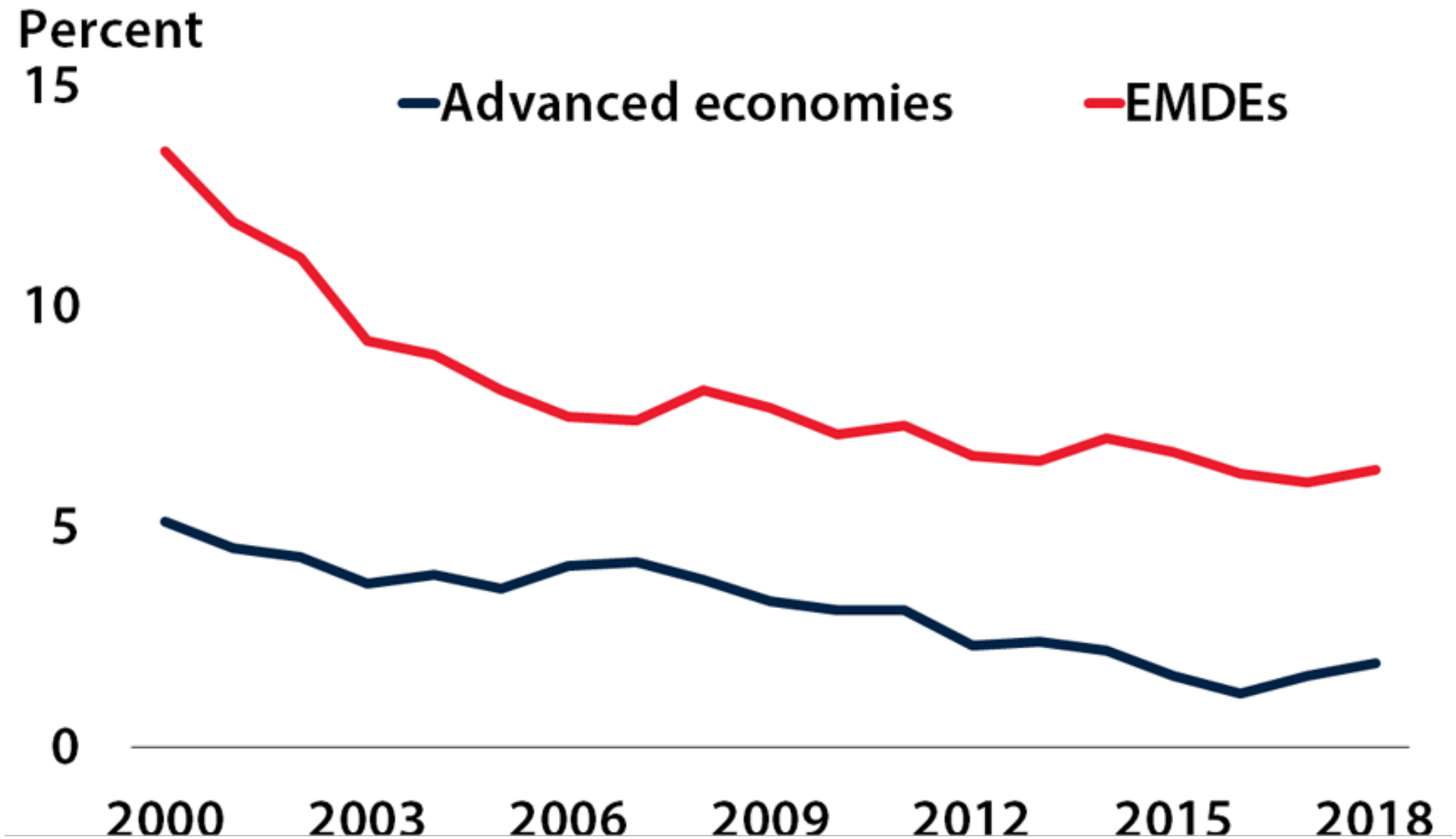


Figure 4 (a). Debt vs. Growth



Source: International Monetary Fund Database

Figure 4 (b). Long-Term Interest Rate



Source: International Monetary Fund Database

This has been down to incentivize higher borrowing capacity for firms and households in low-growth countries, which have further a greater degree of risk to macro-financial stability with more leverage and debt accumulation.

Now, with a shock like COVID-19, massive fiscal stimulus plans; high government borrowings; central banks using helicopter money to inject more cash into the system to both commercial and non-banking financial institutions, with banks and government likely to engaging in massive bond-selling spree (externally and internally), a cascading effect triggering crises in form of debt, currency crashes are likely to surface.

A currency crash for a given set of emerging markets will hyper-inflate the value of short-term external debt in hours. In crises terminology, these culminate as twin-crisis, and if banks have high debt-accumulated as well and consumer confidence in banks drop, then the twin crisis may result in a triple (currency + debt + banking).

India's context is particularly important here. It's economy -even before COVID-19, was performing at its worst level in the last 30 years or so, with low private investment, high unemployment, close to zero export growth, declining consumption, and a crippling financial sector banked with high proportion of Non-Performing Assets (NPAs). Not to mention, the deeply polarized political environment that has aided in quarters of weak investor confidence across sectors.

The actual level of limited growth - for whatever it was - remained strongly dependent on the volume of government spending and consumption (and there are limits to that now). In a pandemic-induced lockdown, when most businesses (in manufacturing and services) have shut-shop due to a lockdown, and unemployment has tripled up to 23% and may only rise in weeks ahead, the Union government's ability to use an expansionary fiscal capacity to assist in a short to medium term economic recovery plan will come at a huge debt-explosion risk.

It is also important to note that States in India are already cash strapped and their revenue-generating capacity is extremely weak in a post-GST fiscal landscape.

It is imperative that, at this stage itself, the Government of India considers creating a parallel National Economic-Recovery Task-Force (as a peer-task force to COVID-19) that develops a collaborative strategy between both private and public sectors with support of State governments, and streamline a set of fiscal incentives (provided in form of tax reliefs and waivers to labour intensive firms) with periodic monetary incentives (similar to what RBI has tried to ensure to maintain enough liquidity in the financial system), and help firms and workers without borrowing excessively.

Any comprehensive economic recovery plan must be planned in conjunction with an economic support plan that aims to provide temporal relief to workers and firms. But this has to be done in a manner that doesn't cause India's gross debt-situation and external borrowing situation to worsen drastically (some changes and compromises are inevitable given the magnitude of our crisis).

One idea, as suggested earlier, is to introduce a retrospective wealth tax of 2-3% on the top 5% income/wealth class. All unproductive government expenditure must be postponed and direct transfers to boost aggregate demand of labour-intensive sectors (and products) need greater prioritisation. That's critical for employment and also for increasing consumption.

Sectors like infrastructure, travel and tourism, hotel and accommodation, textiles, big manufacturing, and other services, will particularly require major support in the months to come after witnessing a vertical I fall in business and economy activity. But these support measures must feature more creative, cooperative solutions between the private and public sector as against a solution that relies solely on the government.

The 'I' curve in economic performance can bend into a 'U' or a 'V' form if pre-emptive measures are taken to tackle all three pandemics in tandem - as against one after the other. ■

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The ESM can finance the COVID fight now

EU member states are debating how to finance the fight against COVID-19. Aitor Erce, Antonio Garcia Pascual and Ramon Marimon argue that using the ESM to provide the funds needed is a workable way forward

Member states are currently debating how to finance the fight against COVID-19. As time is pressing, practical and readily implementable solutions are needed now. Using the ESM to provide the funds needed is a reasonable and workable way forward. Italy, Spain and other states would benefit from using the ESM access to AAA funding to reinforce their debt dynamics: a combination of loan size, maturity and interest rates would strengthen debt sustainability.

This column shows the stabilisation power of an ESM-ECB intervention, using existing instruments and the just announced ESM Rapid Financing Instrument, showing the case of Italy as an example. Combing ECB support with ESM funds would deliver a more resilient euro area, better placed to engage in a post-virus economic recovery. The announced EIB guarantees and the SURE unemployment re-insurance will also help countries. However, these measures are not a supplement, but a complement, to the already feasible ESM financing discussed.

The COVID-19 pandemic outbreak is creating severe health and economic emergencies for Italy and other EU member states. Gathering all the necessary financial resources to fight it without the support from Europe not only would be inefficient, but a social risky bet.

Why will some European countries be able to confront the crisis on their own while others will not? Focusing on the case of Italy, the fundamental reason is pre-existing vulnerabilities, which limit fiscal space and magnify the impact of the economic sudden stop.

1. High public debt. As COVID-19 hit Italy, public debt, d, stood at 136% of GDP, the second highest in the euro area after Greece. Italy's debt dynamics were already on a knife-edge, stabilising at levels such that even small changes in growth or interest rates could make Italian debt unsustainable.

2. Low growth. In 2019, Italy's growth rate, g, was 1.2% and prior to the outbreak, the IMF projected Italian growth to be the lowest in the EU over the next five years, with estimated potential growth at just 0.5% (IMF 2020: Art IV consultation).

3. High financing costs and needs. In 2019, Italy's 'effective' interest rate, r, was 2.7%, the highest among the medium and large euro area countries, reflecting the fact that Italy is BBB-rated largely as a result of its high debt, d, and low growth, g. A direct implication is that Italy's financing costs and needs are very high. Italy's annual financing costs amount to 3.6% of GDP and its annual gross financing needs (GFNs) are over 25% of GDP[1].

Support will take different forms and use different instruments, with a common goal: to avoid that coronavirus overburdening any European country or region

These three elements – high *d* and *r*, and low *g* – are the key to Italy's economic weaknesses. Before the COVID crisis, Italy was the only country of the euro area with (*r-g*)>0. Hence, its debt will not decrease with time, as it would with (*r-g*)<0, but must be reduced to arrive to a stable debt/GDP ratio, *d**, and a primary balance *pb** (the fiscal balance before interest payments) satisfying the public-debt equation: $pb^* \approx (r-g)\, d^*$

Other factors should also be accounted for, as either weaknesses or strengths of the Italian economy, such as the following:

- **A high primary balance is a strength.** Italy has historically had high primary balances (1.7% of GDP in 2019). However, political fragmentation may be an obstacle to maintain a primary balance above 1% of GDP in the future (it should be noted that EU support may be key to maintain the historical Italian consensus). Cautiously, the IMF projects over the medium term a primary balance of 0.9% of GDP.

- **More committed investors now compared to the sovereign debt crisis.** The ownership of debt remains to a large extent domestic. The good side of this is that domestic investors are less footloose than international investors. Nonresident investors now account for (just under) 30%. In addition, the ECB holds about 28% of Italian debt, it will increase over time, and it will be reinvested for the foreseeable future. This means that the so-called capitulation risk, while present, may be lower than in 2010-13.

- **Vulnerable banks.** While banks have built sizeable capital and liquidity buffers, many still suffer from low profitability, excess capacity, and high NPLs. The ability of banks to support the economic recovery may be more limited than in other regions.

Baseline scenario: debt sustainable with risks

In our baseline scenario there is no COVID-19 crisis. We adopt the same medium-term macroeconomic scenario as the IMF (March 2020, IMF Art.IV). As described in Table 1, we only depart from the IMF's assumptions on the interest rate path, we project medium-term interest rates based on the benign market conditions prevailing pre-COVID shock. Under these assumptions, Italy's public debt was sustainable but vulnerable to macroeconomic and market shocks.

In addition to the large public debt, debt rollover risk was high, since debt maturities alone over the next four years amounted to €1.83 trillion, roughly the size of Italy's GDP (Table 2 shows key summary statistics from a debt sustainability under the baseline, COVID-19 stress, and alternative ESM funding scenarios).

Table 1. Macroeconomic and financial scenarios

Macroeconomic variables

BASELINE	2020	2021	2022	2023	2024	2025-30
Real GDP growth, %	0.4	0.7	0.7	0.6	0.6	0.6
Inflation, y/y, in %	1.0	1.0	1.2	1.4	1.5	1.5
Primary balance, % GDP	0.9	0.9	0.9	0.9	0.9	0.9
COVID-19	**2020**	**2021**	**2022**	**2023**	**2024**	**2025-30**
Real GDP growth, %	-7.6	5.2	0.5	0.6	0.6	0.6
Inflation, y/y, in %	-0.2	0.7	1.0	1.2	1.4	1.5
Primary balance, % GDP	-7.5	-4.0	1.0	0.9	0.9	0.9

Interest rates

BASELINE	2025	2026	2027	2028	2029	2030
Italy 1y	0.0	0.0	0.0	0.6	1.1	1.4
Italy 3y	0.2	0.2	0.2	0.7	1.3	1.8
Italy 5y	0.6	0.6	0.6	1.1	1.8	2.3
Italy 10y	1.0	1.0	1.0	1.9	2.7	3.2
COVID-19	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Italy 1y	1.0	1.0	1.0	1.3	1.6	1.9
Italy 3y	1.5	1.5	1.5	1.7	1.9	2.3
Italy 5y	2.0	2.0	2.0	2.2	2.3	2.8
Italy 10y	3.0	3.0	3.0	3.1	3.2	3.7
COVID-19 + ESM + OMT	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Italy 1y	0.0	0.0	0.0	0.6	1.1	1.4
Italy 3y	0.2	0.2	0.2	0.7	1.3	1.8
Italy 5y	0.6	0.6	0.6	1.1	1.8	2.3
Italy 10y	1.0	1.0	1.0	1.9	2.7	3.2
COVID-19 + ESM + OMT aggressive	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Italy 1y	-0.7	-0.7	-0.7	0.6	1.1	1.4
Italy 3y	-0.6	-0.6	-0.6	0.7	1.3	1.8
Italy 5y	0.4	0.4	0.4	1.1	1.8	2.3
Italy 10y	1.0	1.0	1.0	1.9	2.7	3.2
ESM rates	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**
Italy 1y	-0.7	-0.7	-0.7	0.0	0.7	1.1
Italy 3y	-0.6	-0.6	-0.6	0.2	0.9	1.3
Italy 5y	-0.5	-0.5	-0.5	0.4	1.1	1.6
Italy 10y	-0.3	-0.3	-0.3	0.7	1.5	2.1

Source: ESM, Bloomberg and author's calculations

COVID-19 scenario: a very risky path

The Italian government announced in March a series of support measures amounting to €24.7 billion and guarantees amounting to €65 billion, and a second aid package of €25 billion to be approved in April (see Appendix for the details of the measures).

Table 1 shows our macroeconomic scenario under the COVID-19 shock. Real GDP contracts to almost -8% in 2020, bounces back in 2021 to +5%, and converges towards a medium-term growth of 0.6%. The primary deficit rises to 7% of GDP and, once recovered from the COVID shock, gradually improves towards a primary surplus of nearly 1% of GDP.

Table 2 shows that after the COVD-19 shock, public debt jumps to 162% and increases gradually towards 165% over the next ten years. We estimate the debt-stabilising primary balance at 1.3% of GDP over the coming years, up from 0.1% of GDP in the baseline — a very large increase in the required fiscal effort to ensure the sustainability of debt.

The annual gross financing needs (debt maturities, interest payments and primary balance) increase by over 10 percentage points of GDP per year to 36% of GDP. After the shock, the Italian Treasury would need to rollover an additional €670 billion of debt over the next four years.

On its own, Italy could stabilise its debt with a relatively high primary balance, as it has had in its recent history — Italy had sustained primary balances above 1.5% of GDP. However, such extra fiscal effort can be socially very costly in the aftermath of the COVID crisis and possibly endanger the recovery.

Instead, using euro area support Italy could put its debt in a clearly manageable path in the medium run, as we show in Table 2. Which form should the financial support of the euro area take?

Table 2. DSA scenarios: main results

Scenarios	ESM loan size (bn)	Debt 2020 (% GDP)	Debt 2030 (% GDP)	Cum. market funding 2020-24 (bn)	Avg. GFNs (% GDP)	Avg. PB* (% GDP)	Cum. interest payments 2020-30 (bn)
Baseline, pre-COVID	-	137	129	2.466	25	0.1	565
COVID	-	162	164	3.476	36	1.3	898
COVID + ESM_35 + OMT	35	162	153	2.927	29	0.1	669
COVID + ESM_35 + OMT aggressive	35	162	152	2.903	29	0.0	640
COVID + ESM_120 + OMT	120	162	153	2.767	29	0.1	666
COVID + ESM_120 + OMT aggressive	120	162	152	2.745	29	0.0	639
Euro group 03 April	45	162	153	2.970	30	0.1	670

Source: Author's calculations

ESM and ECB support: reinforces debt sustainability

It is critical that the euro area shows its determination, beyond the already expressed support by the ECB, as, fortunately, seems to be the case. A European Recovery Programme will require different instruments to address different needs (firms and workers in distress, health security, etc.)

However, there is a crucial need that must be confronted: to make sure that the effort that member states are making to fight, and recover from, the COVID-19 does not become an excessive debt burden or, even worst, another euro debt crisis. To address this, here we evaluate alternatives that combine COVID-related ESM loans and ECB support. We see this as the fastest way to provide low interest funding while the pandemic freezes economic activity.

We evaluate various scenarios (Table 2) which combine different intensities of support by the ESM and the ECB. On the ESM funds, we consider the following alternatives:

- **Loan size.** We consider two alternatives: a smaller and larger ESM loan of €35 billion (2% of GDP) and €120 billion (6.5% of GDP), respectively. The smaller loan is in line with the maximum size proposed by the Eurogroup. Both are well within the existing ESM funds of €410 billion.

- **Loan interest rate and maturity.** We assume a 12-year maturity with a 5-year grace period. We also assume that the ESM maintains a funding strategy with and average maturity between 2 and 3 years. We assume a 10 basis point spread charged on its standard loans (Table 1 shows the assumptions on the ESM funding rates).

In addition, we also assume that the ECB's asset purchase programmes continue as planned and that the ECB's OMT is activated. On the back of ESM support and ECB's asset purchases, we assume that Italian yields are brought back

to levels similar to the baseline (pre-COVID-19). In a separate scenario, we also consider a more aggressive OMT programme, where 1- to 3-year bond yields are compressed towards those of France.

A note of caution. Our assumption regarding the prevailing market rates does not change in a scenario with a big or a small ESM loan; in both cases we use the no-stress, pre-COVID-19 rates. We could have assumed lower medium-term market rates in the scenario with bigger ESM loan. Needless to say, this would make the outcome of the debt sustainability analysis even more favourable toward the bigger size programme.

The upshot of these scenarios is that Italy's debt dynamics improve markedly and become sustainable and, in particular, that the reduction of gross financial needs and interest payments plays a crucial role.

- **Public debt on decreasing path.** Debt/GDP falls by 10 percentage points of GDP from its peak of 162% in 2020 to 152% in 2030. Extending our medium-term macroeconomic assumptions into the longer term would show a further reduction in Italy's debt/GDP.

- **Fiscal effort back to normal.** The annual fiscal effort needed to stabilise public debt is brought back to a level similar to the pre-COVID19 shock: the debt-stabilising primary balance (PB*) drops by 1.4 percentage points of GDP relative to the stress scenario without support.

- **GFNs considerably lower.** Annual gross financing needs drop by over 7 percentage points of GDP per year, relative to a scenario without European support.

- **Debt issuance at manageable levels for the Italian Treasury.** The cumulative market financing needs over the near term (2020-25) would drop by €730 billion (about 40% of GDP) relative to a scenario without ESM support. This massive improvement substantially reduces the costs of the Treasury monthly issuance.

- **Stronger ESM and ECB support is preferable.** There are differences among the level of ESM and ECB support. Comparing the most supportive scenario (€120 billion loan and aggressive ECB's OMT) to the least supportive (€35 billion loan and less aggressive ECB's OMT), the former delivers €182 billion (10% of GDP) less market funding needs than the latter.

- **Interest payments drop.** Under the most favourable scenario, with strong ESM and ECB support, the cumulative interest payments 2020-30 fall by about €260 billion, over 14 percentage points of (2019) GDP relative to a scenario without European support.

In addition to these results, we also analysed an ESM scenario based on the information leaked by the press on 3 April regarding the latest Eurogroup proposal (negotiations are ongoing). The proposal reported by the media would entail a €45 billion loan at 5-year maturity. The upshot of that scenario is that the results would be very broadly similar to the €35 billion scenario analysed here.

However, the cumulative market financing needs by the Treasury over the next years (2020-24) would increase by over €200 billion (12% of GDP) as the loan maturity considered in the Eurogroup proposal is only 5-year versus 12-year maturity and 5-year grace-period assumed in our scenarios.

What are the differences between Coronabonds, ESM loans and ECB purchases of sovereign bonds?

What shape could euro area coordinated fiscal support take? While following the last Eurogroup meeting, the use of

ESM resources appears to be the preferred alternative for northern European countries, a variety of alternatives are currently on the table.

In this section we explain what differentiates (and what does not differentiate) Coronabonds and similar forms of common issuance (ie. the European Recovery Fund) from an ESM loan and from maintaining the status quo, in which support is obtained using sovereign bond issuance and ECB purchases in secondary markets.

To facilitate the comparison, Table 3 summarises the main aspects of each funding alternative. First, ESM funding could be available rapidly. The ESM is already fully operational and has €410 of available funds, which (with political will) could be tapped without delays.

In contrast, Coronabonds, even if there would be political will, would require a process of design – including legal aspects – and ratification that could last for months. It should be noted that the ESM alternative involves only euro area countries, while SURE or measures involving the EIB would be at the EU level.

In addition, funding through the ESM presents some financial advantages. The ESM can pass on its low (AAA-rating) funding rates at an almost zero spread and it is more legally secure (Pröbstl 2020). Currently, even under the ECB's PEPP program, there is a 150 basis point spread between a 7-year BTP and a German Bund (7-year is roughly Italy's average debt maturity).

An alternative common issuance instrument is likely to have a strong rating. Whether it would reach the level of the ESM, where the capital structure includes committed capital from high rating stockholders covering the maximum lending capacity, would depend on the agreed guarantee structure.

Under a joint guarantee structure, the rating of the new instrument would be similar to AAA. Instead, guarantees according to the ECB capital key could imply a lower credit quality of the guarantee, and thus more expensive borrowing.

A new common instrument, even if designed to be AAA, would lack the liquidity of a well-established market of ESM bonds. This comparatively lower liquidity is likely to translate into more expensive and less effective financing terms.

Second, ESM loans perform a powerful maturity transformation for member states. The ESM funds itself on average between two and three years (at negative yields for an AAA-rated issuer) and provides long-term loans to member states (up to 35 years). The proposal currently under discussion by the Euro group foregoes this important benefit by proposing a maturity of the ESM loans not higher than five years.

Last, but not least, by replacing issuance by domestic DMOs, ESM loans reduce the risk of tensions on primary markets by making lighter the (already very heavy) debt issuance of Italian Treasury.

On the negative side, the conditionality accompanying an ESM loan can be a deterrent for governments, particularly if, as in the case of Italy, they are under political pressure. Against this argument, it seems that the Eurogroup is ready to agree on access to ESM without strings attached if the funding is for the COVID emergency[2].

The seniority of ESM loans is also seen by some as a potential problem. We believe this risk to be manageable for the three following reasons. First, the size of the ESM loan would be small relative to the stock of debt. Second, seniority could be waived, as with the ESM programme to Spain in 2012. Third, the long maturity of ESM loans dilutes/defers any market concern about seniority (Ghezzi 2012a).

Closely related to the seniority issue are the limits set by the ECB for its asset purchase programmes. In particular, the purchase of more ESM bonds and less national government bonds could be beneficial for member states and the euro area as a whole. Financing euro area countries through ESM bonds reduces the likelihood that the ECB will hit the capital key limit for the borrowing country[3].

Conclusions

COVID-19 has changed the lives of European citizens, at least temporarily, and there is widespread consensus that how this crisis is resolved will mark the evolution of the EU and the euro area. Member countries have taken individual initiatives first, but the virus has no nationality and European action is needed.

After the ECB took the lead, the European Commission and the other European institutions – in particular, the ESM and the EIB – are now reacting to the call, which hopefully will become *"our Marshall Plan"* as Mário Centeno, President of the Eurogroup, said (*El País*, 4 April 2020). Support will take different forms and use different instruments, with a common goal: to avoid that coronavirus overburdening any European country or region.

Preventing that the COVID-generated sovereign debt becomes an unnecessary – crisis-ridden – burden must be a central part of this programme. The announced EIB guarantees and the SURE unemployment re-insurance will also help countries.

However, these measures are not a supplement, but a complement, to the already feasible ESM financing discussed here. In this column we have exemplified how combinations of COVID-conditional ESM loans and ECB interventions can be used to support Italy, one of the most COVID-stressed euro area countries.

Table 3. Principal features of different funding strategies

	Sovereign bonds	ESM bonds a/	Corona/Euro bonds b/
Availability	Yes	Yes	No
Time to deploy	Readily available	Yes c/	Several months
Issuer	National DMO	ESM	Euro area institution
Beneficiary	Issuing country	Borrowing country	All (in Bofinger et al 2020 proportional to crisis costs)
Payer	Issuing country	Borrowing country	All (in Bofinger et al 2020 proportional to ECB capital key
Volume	Fiscal space	€410 billion	Crisis costs
Cost	Dependent on country rating	AAA	Depends on guarantee structure (almost AAA for joint and several)
Maturities	Varies by member state. OMT only up to three years	Borrowing 1-10 years Lending up to 35 years	Undetermined
Liquidity	Established market, depending on rating	Established market	Low (new instrument)
Seniority	Pari-passu, but ECB purchases can block CAC recourse	Senior, but 1) it can be waived and 2) long maturity defers seniority	Senior
Fiscal transfers	No	No	No (Giavazzi and Tabellini 2020), Yes (Bofinger et al 2020)
Guarantee structure	None	€700 billion in compromised capital	Multiple alternatives d/

a/ See Benassy-Quere et al (2020) or Erce et al (2020)
b/ See Bini Smaghi (2020), Giavazzi and Tabellini (2020) or Bofinger et al (2020)
c/ Requires the parliamentary approval of three member countries
d/ Alternatives that rely on joint and several guarantees (as in Giavazzi and Tabellini 2020 or Bofinger et al 2020) will be less affected by the credit quality of weaker guarantors

There is the view that the ESM intervention should be saved for a later day, in case that a debt crisis really emerges. However, the fact that the ESM was originally designed as crisis resolution mechanism, cannot mean that it should not be used as an effective crisis prevention mechanism, when it can.

In the same way that countries that have not been heavily hit with by the coronavirus should not procrastinate over their preventive testing, preventive economic measures should be resolute.

ESM and ECB support would reinforce Italy's public debt sustainability, support confidence, and fundamentally alleviate the market funding needs over the next years of the Italian Treasury. ■

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Endnotes

1. In recent years, the Italian Treasury increased the average duration of public debt to nearly 7.5 years. Although this reduces rollover needs, this positive effect was mitigated by higher interest payments.

2. Benassy-Quere et al. (2020) and Erce et al (2020) discuss how to design COVID-related light conditionality.

3. Euro area sovereign bonds contain two-limb aggregation clauses. ECB purchases can reduce their effectiveness by diluting the bonds for which purchases are relatively smaller. This could disrupt liquidity on primary markets at times of distress.

References
Bénassy-Quéré, A, A Boot, A Fatás, M Fratzscher, C Fuest, F Giavazzi, R Marimon, P Martin, J Pisani-Ferry, L Reichlin, D Schoenmaker, P Teles and B Weder di Mauro (2020), "COVID-19: A proposal for a Covid Credit Line", VoxEU.org, 11 March.
Bini Smaghi, L (2020), "Corona bonds – great idea but complicated in reality", VoxEU.org, 28 March.
Bofinger, P, S Dulline, G Felbermayr, M Huther, M Schularick, J Sudekum and C Trebesh (2020), "To avoid economic disaster, Europe must demonstrate financial solidarity", 21 March.
Erce, A, A García Pascual and T Roldan (2020)," The ESM must help against the pandemic: The case of Spain", VoxEU.org, 25 March.
Ghezzi, P (2012a), "Debt seniority and the Spanish bailout", VoxEU.org, 23 June 2012.
Ghezzi, P (2012b), "ECB limited and conditional lending is not 'what it takes'", VoxEU.org, 19 August.
Giavazzi, F and G Tabellini (2020), "Covid Perpetual Eurobonds: Jointly guaranteed and supported by the ECB", VoxEU.org, 24 March.
Pröbstl, J (2020), ESM loans and Coronabonds: A legal analysis from the German perspective", VoxEU.org, 4 April.

Appendix. Italian fiscal package
Here are the details of the Italian government fiscal support plan:

(i). Law Decree n. 9/2020 of 2nd March, containing measures for families, workers and business.
(ii). Law Decree n. 14/2020 of 9th March (strengthening the healthcare system and civil protection).
(iii). Law Decree n. 18/2020 of 17th of March ("Cura Italia" decree).
(iv). Additionally, various Decrees of the President of the Council of Ministers and Civil Protection ordinances were used to enact measures for the containment and management of the emergency.

From the summary presented by the Ministry of Finance on their webpage, the measures taken, presented along with the amounts of funding or guaranteeing involved, are the following:

- Strengthening the National Health Care System and the Civil Protection Department (3.2 billion)
- Preserving employment levels and incomes (10.3 billion)
- Pumping liquidity to help businesses and households (5.1 billion + 60.5 billion in guarantees).
- Suspending tax payments and providing tax incentives for workers and businesses (1.6 billion)
- Additional measures to support central and local public administrations, including municipalities, are worth €45.5 billion.

This adds to around €24.7 billion direct measures and above €60 billion in guarantees. In addition, new measures have been announced by PM Conte for April 2020, amounting to €25billion.

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