

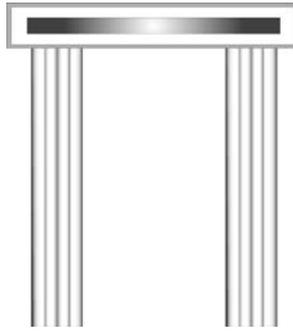
**Barnabas Reynolds  
David Blake  
Robert Lyddon**

**Managing Euro Risk**

**Saving Investors  
from Systemic Risk**

**POLITEIA**

**A FORUM FOR SOCIAL AND ECONOMIC THINKING**



## POLITEIA

A Forum for Social and Economic Thinking

Politeia commissions and publishes discussions by specialists about social and economic ideas and policies. It aims to encourage public discussion on the relationship between the state and the people.

Its aim is not to influence people to support any given political party, candidates for election, or position in a referendum, but to inform public discussion of policy.

The forum is independently funded, and the publications do not express a corporate opinion, but the views of their individual authors.

**[www.politeia.co.uk](http://www.politeia.co.uk)**

# **Managing Euro Risk**

## **Saving Investors from Systemic Risk**

Barnabas Reynolds

David Blake

Robert Lyddon

**POLITEIA**

2020

First published in 2020  
by Politeia  
14a Eccleston Street  
London  
SW1W 9LT  
Tel: 020 7799 5034

E-mail: [secretary@politeia.co.uk](mailto:secretary@politeia.co.uk)  
Website: [www.politeia.co.uk](http://www.politeia.co.uk)

© Politeia 2020

ISBN 978-1-9163575-1-8

Cover design by John Marenbon

Politeia gratefully acknowledges support for this publication from  
**The Foundation for Social and Economic Thinking (FSET)**

Printed in the United Kingdom by:  
**Millnet Limited**  
6-7 Princes Court  
11 Wapping Lane  
London E1W 2D

# PREFACE

## Competing for the Future

Sheila Lawlor\*

As Brussels begins its trade talks with the UK, it seems intent on fighting the last war, not the next. In particular it demands that the UK must align with EU level playing field laws for an EU-UK trade deal. Having failed to keep the UK in its bloc, it hopes to bind sections of this country's economy to its jurisdiction, subverting economic independence and restricting their performance. For the EU, the UK is 'a competitor on the doorstep', and the competitive edge must be knocked off the rival economy, through the system it has perfected of command and control.<sup>i</sup>

This preface will touch on the wider context of such differences and the approach of each model, the EU's and the UK's. It will explain that the EU's way of doing things is incompatible with and antipathetic to the UK's, and that the case, constitutional, economic and political, for separate laws, is overwhelming, especially for financial services, the subject of the analysis and proposals for future trade which follow.

### A tale of two economies – the EU economy v the UK economy<sup>ii</sup>

The EU's predecessors, going back to the first European Coal and Steel Community, reflected the thinking of its French co-founder. France had developed a centrally directed, protected and controlled economic system, perfected over three centuries to serve the political, economic and military aims of the Hexagon's rulers. It was inevitable that the project of Robert Schuman in the late 1940s and early 1950s, which aimed to bind the renascent German economy with its coal fields and steel plants and draw a line under three German invasions since the 1870s, would follow such a system. The cooperative joint venture led by France aimed to rehabilitate Germany into the family of Europe's western nations – at that stage France, the Benelux countries and Italy - by binding its economic and military power into a controlled system.

For France, the EU was and remains a defining project of post-war governments. Each generation of French leaders inherited the plan, and today, with 27 member states, for the two founder powers the imperative remains consolidation and survival. Other aspects of the economic model are inevitably reflected in its protégé project: a model in which the state historically picked winners, favoured sectors, swallowed up or drove out smaller challengers and competitors, while national giants, often with a degree of state ownership, came to dominate.

The system is underwritten by, and has developed under, an ever more extensive and expansive system of law, which seems to reach into every nook and cranny of economic action under the jurisdiction of the EU Court of Justice. The legal framework developed in line with the project to promote and protect political and economic integration, with a 'more is best' approach, to legislate for and anticipate every eventuality with EU law and the Court underwriting the workings of the economy, though sometimes with derogation or neglect of the rules.

By contrast, Britain's economy, by and large, is based on encouraging competition, entrepreneurship, incentive and markets under the wider context of protecting liberty under the law. Unlike the EU regime, the UK system is essentially a permissive system. Everything is permitted that is not expressly prohibited by law. Activities are legal unless otherwise ordered. This is the common law. There is a sparing attitude to the use of laws, an attitude of 'less being better' because it can be more effective – informed, targeted with clear aims; efficient because it is informed and obeyed; and in the hands of an

---

\* Sheila Lawlor is the Director of Politeia.

<sup>i</sup> Angela Merkel's response to the UK election result, 13 December 2019.

<sup>ii</sup> For further discussion of these points, see my *Now or Never. Countering the Coup against Britain's Democracy* (2019).

intellectually able, extremely knowledgeable and competitive, legal profession and the supervision of a politically independent, incorruptible and experienced judiciary.

### **The EU's demands and the trade talks**

Now, in the UK-EU battle over whose laws govern future trade, the EU demands that the UK align with EU 'level playing field' laws, and will, almost certainly, seek to insist on the primacy of EU jurisdiction for other sectors. Competition is the problem for the bloc, because its economy, as explained, is founded on a system of centralised control which owes much to the model designated by its co-founding French fathers. It is therefore hardly surprising that the first reaction of the bloc to the competitive potential of post-Brexit Britain is to control it. To Brussels and its French overlords, the Anglo-Saxon economy seems like one giant and hostile 'gig' economy – competitive, flexible, with challengers jostling to take their place. But it is not only an anathema, it is feared as a threat to the economic and political cohesion of the fragile bloc, a threat to the controlled arrangements imperative for the bloc's very survival. Michel Barnier, the EU's Brexit negotiator and former French minister, whose distinguished career in Paris was exchanged for one in Brussels, will therefore play his cards for a trade deal that clips the wings of 'the competitor at the door' (by rule alignment).

He may dangle in exchange the prospect of replacing the Northern Ireland Protocol, which keeps Northern Ireland in the EU Customs Union (as well as in the UK's internal union), with such a trade deal. Or he may deploy its potential for Brussels in the future to exert some control over UK-wide economic policy on state aid, an uncertain course given the likely UK legal challenge. He could, with greater confidence and the support of the French President, Emmanuel Macron, use the tactic of financial sector trade.

Emmanuel Macron will call many of the shots. His aims are more ambitious than control and command. While he too wants to tie the UK economy into EU law, he also has other plans, for the realisation of which he recognises the value of an ally like Britain, of Anglo-French common interests with a historic friendship and peace time alliance, and of Britain as a potential ally and friend as he pursues the EU leadership on which he is intent after Angela Merkel bows out, and seeks to promote France's global role in a revitalised project. Macron is clever enough to recognise he has met his match in Boris Johnson. He may consider some trade-offs in the talks, juxtaposing his wish list as the EU's next leader and that to lead France on the world stage.

But for now the focus will be on beating down the British as rivals, rather than allies. Michel Barnier will promote French and EU interests by seeking to retain the EU's ultimate control over the UK's environmental and labour standards and state aid; he will aim to strengthen his hand by demanding UK financial businesses trading with the EU do so under EU law or management, linking a deal on those terms to demands for fishing and other rights and the right deal for financial services trade.

Although Barnier envisaged as long ago as 10 July 2018 that EU-UK financial services trade could be on the basis of equivalence, the EU will not concede at this stage the enhanced equivalence the UK proposes, an agreement to cover the fuller range of activities on a permanent or time-fixed basis. As matters stand, EU equivalence regimes tend to cover some financial activities, but not, for example, basic banking, and they lack certainty because Brussels can end access with thirty days' notice. Brussels now suggests the EU should have the upper hand, determining which UK sectors are equivalent, and for its own regulators to supervise UK rule alignment to those in the bloc. It refuses a period of permanence; and it appears hostile to independent dispute resolution and neutral arbitration, and opposes 'common' management, even were the UK to be interested in that. Speaking to the European Parliament in Strasbourg on 11 February, M. Barnier said 'There will be no general, global, permanent equivalence' with Britain, adding that the EU will maintain control of this and would decide alone whether to grant or withdraw equivalences; and also 'There will be no common management.'<sup>iii</sup>

---

<sup>iii</sup> Reported by Reuters, <https://www.reuters.com/article/britain-eu-commission-barnier-idUSB5N27Y03J>

Whether, however, these tactics will hold, is another matter. Barnier's clock is ticking. It will be for the EU to meet the UK on UK ground and to do so rapidly, for the transition, as Boris Johnson's deadline ends on New Year's Eve. The price must now be paid by the EU for having overplayed its hand by imposing its hated 'May' deal and Theresa May's fall. That price is a new British leader, with a country and parliament rejuvenated and a rallying cry that would do Henry Vth proud.

### **The UK position**

The UK has now left the EU and, when this year's transition ends, it will end EU law and jurisdiction. Boris Johnson, who in July 2019 became Prime Minister, set out the new UK position for the then EU Council President, Donald Tusk, the following month. The UK's laws would potentially diverge from the EU's: that, he reminded Tusk, was 'the point of Brexit'.

Johnson had inherited an anarchic Parliament that had, contrary to the 2016 referendum decision, obstructed and prevented the UK leaving the EU. This is not the place to outline the political and constitutional chaos orchestrated by adherents of 'remain' in the wake of the leave vote, as they sought to obstruct the democratic decision of the majority. But it set the scene for Johnson's historic victory on 12 December to take back control, backed by the electorate who voted to despatch the most autocratic Parliament in decades, returning Johnson to power on a pledge to end EU law after the transition. Sovereignty will be fully restored after the transition, control of law-making will be returned to Westminster, and, with it, the accountability of parliament to the people, in whose name the UK's laws will be made.

When the electorate voted in December, it underlined its commitment to that goal by returning Johnson with an 80-seat majority. The electors, no less than the Prime Minister, understood that with political and constitutional freedom goes economic freedom. There could be no alignment with EU 'level playing field' laws, on labour market and environmental standards and state aid, for these would be under UK law and subject to the jurisdiction of the Courts of this country.

There are overwhelming constitutional and political reasons for the UK to refuse the EU's demands. There are also economic reasons for the economies to diverge given the very different nature of each. When the UK starts formal trade talks, there will therefore be no surprises to add to Boris Johnson's public statements since becoming Prime Minister about the UK's aims and his government's policy. These make clear that after the transition EU law will end and the UK proposes a Canada plus trade deal, with zero tariffs and quotas. As for Canada, there will be no UK 'rule alignment' to EU 'level playing field' laws and no subjection of the UK or its economy to EU law. Moreover, though the UK will start life after the transition with identical laws to the EU, these laws may potentially diverge. That policy is supported by the country, by Parliament and by the Cabinet. The EU should therefore concentrate on the future, to secure the deal that will work best for both parties.

### **The financial services sector**

For the financial services sector, there are especially strong reasons to insist on such a course, as the authors of this volume will explain. Barnabas Reynolds, whose proposal in 2016 for an Enhanced Equivalence agreement to replace the passport became the basis for the UK government's policy, explains the Eurozone's legal underpinnings for the sector and their shortcomings. The international Basel Rules, designed to protect the financial system from systemic risk, have been circumvented, with member states' borrowings not being backed by normal sovereign powers to meet their liability. He and his co-authors, David Blake and Robert Lyddon, consider and explain a worrying spiral of over-indebtedness and inadequate collateral, and warn of the grave threat this poses of systemic risk affecting the UK and global system, businesses, savers and investors. Whereas the UK has helped to manage the risk by applying its own controls to the businesses it regulates, after the transition much will depend on whose laws govern the sector's trade.

The first step must be for the Eurozone to follow the Basel Rules and for member states to adopt joint-and-several liability for each other's debts. But ultimately, the UK, with the US, will be responsible for stopping contagion from spreading to the world's system. It can only do so under its own laws. For that reason, it must insist on future financial services trade being on an Enhanced Equivalence basis with UK trade under UK law. If the EU refuses, the UK must ensure that UK-based firms or their subsidiaries avoid meaningful exposures to unmanaged Eurozone risk, so as to prevent this country being embroiled in its potentially systemic contaminations.

Not only is London a leading global financial centre, rivalled only by New York. It also continues to develop as a global hub for business and investment from the world over, a magnet for capital, liquidity and expertise. The diversity of professional knowledge and experience developed over generations in a range of services, the certainties of English law, the stability of the UK's democratic system and the independence of its judiciary, all strengthen the attractions of London as a secure place to invest, seek advice and conduct business. If anything, these attractions will increase when the UK is free to make its own laws and potentially to diverge from the often ineffective, untargeted and bureaucratic EU regime which is unsuited to the nimble entrepreneurial businesses that have made London a byword for success.

Sheila Lawlor,

Director, Politeia

24 February 2020

## THE AUTHORS

**Barnabas Reynolds** is an international financial services and regulatory lawyer. He is a London-based partner at Shearman & Sterling LLP, where he leads the global financial institutions practice and specialises in UK and EU law and financial regulation. He has been a member of the group of lawyers advising MPs on Brexit, having originated and developed the UK's proposed model for financial services trade with the EU after Brexit, in *A Template for Enhanced Equivalence: Creating a Lasting Relationship in Financial Services between the EU and the UK* (Politeia, 2017). He set out many of the legal structures now in use across all industry sectors in the City for no-deal Brexit planning, in *The Art of the No Deal: How Best to Navigate Brexit for Financial Services* (Politeia, 2017).

Other publications proposing and developing the options for the financial sector industry after Brexit include *A Blueprint for Brexit: The Future of Global Financial Services and Markets in the UK* (Politeia, 2016); *Free Trade in UK-EU Financial Services – How Best to Structure a Brexit Free Trade Deal* (Politeia, 2018); *EU-UK Financial Services After Brexit – Enhanced Equivalence: A Win-Win Proposition* (New Direction-Politeia, 2018). Reynolds co-edits Sweet & Maxwell's *Journal of International Banking Law and Regulation*.

**David Blake** is a Professor of Finance at Cass Business School, part of City, University of London and has led the financial economics stream. He has served as an adviser to HM Treasury, the Bank of England, the OECD, the International Monetary Fund and the World Bank.

He is the author of *Financial Market Analysis* (Wiley, 1999) and he contributes to academic journals including: *Journal of Finance*, *Review of Finance*, *Journal of Financial and Quantitative Analysis*, *Journal of Banking and Finance*, *Journal of Risk and Insurance*, *Journal of Investment Management*, *Journal of Asset Management*, and *Journal of Financial Economics*.

**Robert Lyddon**, bank accounting and financial analyst, is a management consultant in international banking both privately and with PwC, with a career in international banking spanning 17 years. His writing focuses on the Eurozone financial system, the European Investment Bank, the TARGET2 system and EU budgetary mechanisms. He is the author of the *Brexit Papers* (2016, Global Britain) and the *Brexit Flashcards*. His recent papers include *Why the Eurozone's Fate Makes an Immediate Brexit Vital: How huge financial liabilities require a quick clean Brexit* (2019) and *The Irish Economic Miracle – Fact or Fiction: How Brexit will expose Ireland's phantom economy and boost the UK's tax revenues in the process* (2019) (both for Global Britain).

In his earlier career he served in the European branch network of Lloyds Bank International in Amsterdam, Zurich and Antwerp. He has been general secretary of the IBOS international banking alliance (2003-2016); has managed a number of programmes to coincide with the introduction of the Euro with PwC; designed the "Connector" payments network (for Bank Boston); and arranged loans and derivatives transactions (for Chemical Bank/Manufacturers Hanover).

*Each author has led this work on their own area of expertise, and they are particularly grateful to Thomas Donegan, Oliver Linch, Wilf Odgers, Simon Dodds, James Webber, Paul Yowell, Robert Brown, Julian Adams, Paul Swann, Elizabeth King, Kevin Dowd, Barbara Minto, John Whittaker and Patrick Clancy for their comments on an earlier version of this paper. The usual caveat applies.*



# Table of Contents

Preface            Sheila Lawlor

Controlling Eurozone Risk by Law ..... 1

Technical Analysis..... 18

Glossary of Terms Used..... 134



## Controlling Eurozone Risk by Law\*

The bonds issued by the 19 European Union member states of the Eurozone present a major risk to the global financial market. And this risk will become significantly greater after 31 December 2020 unless some very major actions are taken – either in cooperation with the EU or, if that cooperation is not forthcoming, by the UK and other global financial centres such as the US.

These remarks will come as a big surprise to many people. After all, Eurozone members operate in the financial market in the same way as other participants, making loans and borrowing money through issuing debt, generally in the form of bonds held by banks and other investors worldwide. However, Eurozone national central banks (NCBs) differ from other state central banks in a critical way. They are dependent on the European Central Bank (ECB) for the currency required to cover their country's individual debts. These countries cannot authorise their own central banks to issue currency (i.e., "print money") in the way that genuine sovereign states do.

Thus, the debt of Eurozone member states is not riskless sovereign debt. The problem is that EU regulatory procedures – that dictate regulatory capital and collateral requirements throughout the entire Eurozone financial system – ignore this reality and consider risky member state debt as akin to riskless sovereign debt. Furthermore, EU rules prevent joint-and-several liability amongst Eurozone member states and the ECB. This leads to a major risk that, should any one significant Eurozone member state default on its borrowings, all the other member states are implicated by connection, and the consequences could spread outside the Eurozone through a domino effect to the global financial system itself. We witnessed how unmanaged financial risk, arising principally from Californian sub-prime loans, triggered the global financial crisis in 2007-8.

Global markets have been willing to take the risk of continuing to deal with Eurozone member states largely because they have confidence that a significant amount of Eurozone risk is *de facto* mitigated by the UK within EU law. This is because the UK, while it is an EU member, can supervise much of the EU banking system by imposing discretionary capital charges, monitoring systemic risk, and applying capital buffer charges to each bank incorporated in London. These actions have at least since the 1970s helped to protect the international system from the risk of contagion arising from a financial meltdown in Europe.

Unfortunately, the UK's protection of the global market from Eurozone risk will disappear after the UK leaves the EU legal and regulatory framework at the end of 2020. This is because the EU requires non-EU financial firms wishing to continue doing business in the EU to establish a physical presence there, operating under EU law and supervision. The level of inherent EU risk will then expand in lockstep with the volume of business of these companies, while the UK's ability to mitigate, let alone manage, the risks from London will diminish. The chances of a small spark in a minor Eurozone bank setting off a meltdown reaching the whole global system will be correspondingly increased.

Consequently, this paper argues that taking action to deal with the future of the EU banking system is urgent and essential both to the EU's future and to the safety of the global financial market. The analysis of the nature of the risk confronting the global financial system and how this risk can be managed is explained as follows:

- Inadequacies of the EU's current monetary, fiscal and political architecture have created huge financial and economic risks, extending well beyond the EU's geographical borders.

---

\* We are grateful to Sheila Lawlor and Edgar Miller for their comments on this section.

- While UK regulation has been able to mitigate this risk, following Brexit it no longer will be possible to do and internal EU solutions have not been forthcoming.
- The concept of Enhanced Equivalence would enable the EU to deal with the relevant structural banking and financial problems the EU faces, and would assist the UK in continuing to protect the global financial system from Eurozone financial risk.
- If the EU does not agree to Enhanced Equivalence, regulators in the UK and other global financial centres, such as the US, will need to control this unmanaged risk jointly.

A detailed Technical Analysis follows (pages 18-133), but these four issues will now be discussed in sequence.

## **I. EU STRUCTURAL WEAKNESSES HAVE CREATED HUGE FINANCIAL RISK FOR THE GLOBAL FINANCIAL SYSTEM**

The global Basel Rules on regulatory capital, first adopted in 1988, have evolved to protect the financial system from the risks arising from increasingly complex and varied markets. Whilst non-binding, the Rules are implemented in broad terms by signatory states. They require banks to issue loss-absorbing capital in the form of equity and subordinated debt that can be written down to cover any (reasonably foreseeable) losses as they arise.

The Rules have two main elements for the determination of bank capital levels: (1) a non-discretionary element (Pillar 1), and (2) a discretionary element applied by a bank's regulators (Pillar 2). They also govern the use of collateral, as well as the holding of sufficient liquid assets to cover firms' exposures. In addition, the Rules require institutions to issue additional capital to cover exposures arising between individual firms, thereby protecting the system as a whole.

### **Sovereign Debt: Foundation of the Global Financial Regulatory System**

Sovereign-quality debt is held by many financial institutions for investment, collateral and liquidity purposes, in part because of its unique riskless characteristic. Debt in the domestic currency of a sovereign issuer is treated under Pillar 1 of the Basel Rules (the non-discretionary element) as risk-free.

This is because the sovereign country has powers available to it that ensure it need never default – i.e., the sovereign country is able to instruct its central bank to print more money to repay its debts. If sovereign debt is issued in a foreign currency (e.g., Argentine government debt denominated in US dollars), it is considered as having some risk (generally considered low-level) because of the foreign exchange risk.

Accordingly, under Basel Rules, sovereign debt is given the highest credit rating of any form of debt and is not required to be matched by loss-absorbing capital. Other forms of debt are risk-weighted under Basel Rules and such holdings must be matched by a certain proportion of loss-absorbing capital. The same concept applies to collateral, whereby debt is normally given a discount or "haircut" according to how much risk it is seen to contain – but sovereign bonds can be taken as collateral without any haircut. In addition, sovereign bonds are treated as the most liquid form of asset, capable of being sold for full value at any time and therefore relied upon by financial institutions in their cash flows and as a ready source of cash.

Consequently, sovereign debt has become a key foundation of the global financial regulatory system under Basel Rules and is widely held. Even firms that do not hold sovereign debt themselves tend to be exposed to it indirectly through their dealings with other institutions across the financial system.

## **Eurozone member state debt is not sovereign**

Eurozone member states<sup>2</sup> fund themselves through the issuance of debt in addition to levying taxes. Their debt is widely held. However, a particular problem arises with regard to Eurozone issuers of government debt.

Crucially, the Eurozone's 19 member states cannot individually control the ECB upon which they depend for their currency. The legal construction of the Eurozone splits sovereignty amongst the issuer of its currency, the ECB, and the member states. Member states, individually, have no power to control the ECB, so lack one of the defining features of sovereignty, namely the ability to control further issuances of their currency.

The result is that no member state is fully sovereign with regard to repaying its debts. Nor is there joint-or-several liability amongst the 19 Eurozone members. Therefore, because each member state would need the agreement of all the others for the ECB to print more euros, each state relies on its domestic tax base to pay for its expenditure or repay its debts, a reliance that can falter in times of financial and economic crisis. Should there be such a crisis, the individual states as well as the financial markets would be left dependent on a hoped-for collaboration between what are, in fact, disconnected entities. Any such collaboration is far from a foregone conclusion – as Germany, in particular, has made clear.

This means, unlike normal sovereign countries, Eurozone member states are at permanent risk of defaulting on their borrowings and cannot raise debt finance as if they were sovereign. The justification for treating their debts as risk-free does not apply.

## **EU Regulation ignores Basel Rules by treating member state debt as sovereign**

A proper application of the Basel Rules must take into account the underlying legal structures. It is ultimately those structures that underpin where liabilities actually fall. The EU legal structures do not oblige Eurozone member states to stand together behind each other's debts, thereby preserving the balance sheets of financial institutions through member states' collective guarantee and collective control over the ECB.

Furthermore, within the EU, the Basel Rules are not properly applied. In particular, EU regulatory rules applicable to financial institutions treat member state euro debts as debts in a sovereign currency controlled by each individual Eurozone member state. Member state debt is treated the same as debt from OECD countries that have full control over the printing of their own currency (such as UK Gilts and US Treasuries) as if the member state debt represented top-quality collateral.

In fact, in the context of Basel Rules, Eurozone member state debt is "sub-sovereign", akin to debt issued by public sector entities (e.g., municipal bonds in the US). Such entities sit immediately below a sovereign. On the other hand, Eurozone member state debt is of higher quality than a typical corporate bond, in as much as member states have tax-raising and limited fund-raising powers. *But, in law, EU member state debt is not sovereign debt.*

The EU's false elevation of sub-sovereign instruments to sovereign status has wider implications, as shown below. Each level of debt issuer below the sovereign is treated one level higher than it should be in the true hierarchy of creditworthiness. Thus, the EU gives undue stature to its public sector entities and other member state-connected debt issuers on the presumption that those entities and issuers have sovereign backing. Moreover, the same flawed EU approach applies at the level of many individual Eurozone bank and corporate issuers, on the basis that the risks of those institutions depend, in part, on

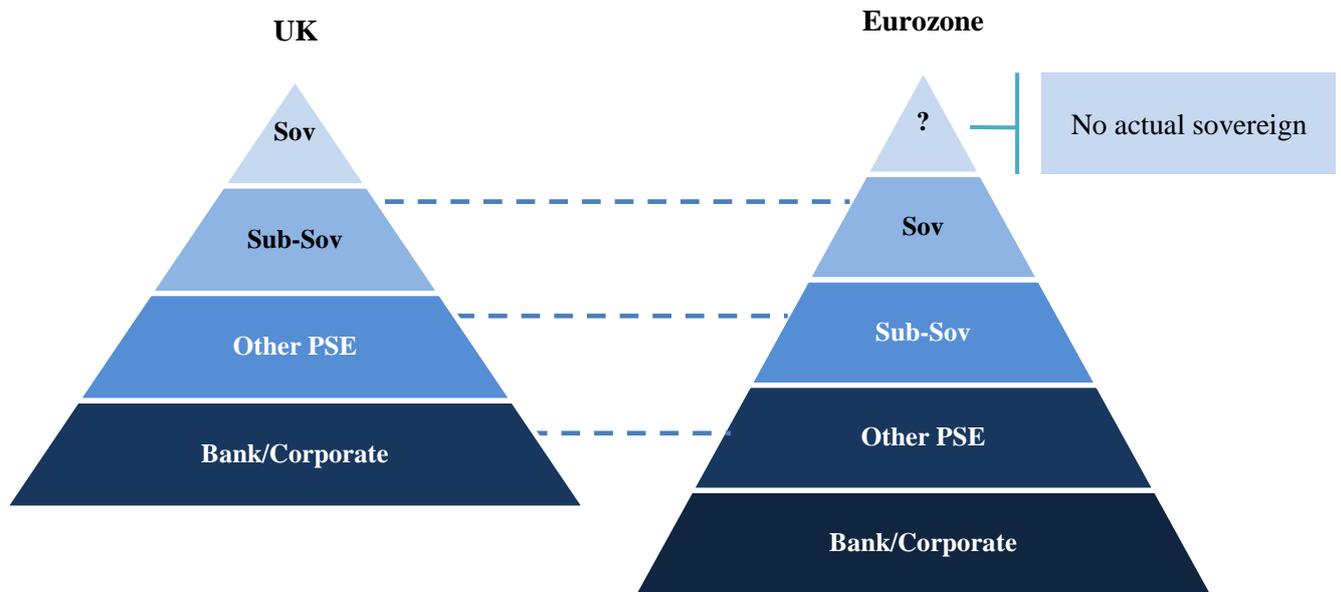
---

<sup>2</sup> 19 of the 27 current EU member states are in the Eurozone: Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia Slovenia and Spain. Denmark has opted out, as had the UK before it left the EU. Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania and Sweden are not in the Eurozone.

the creditworthiness of the sovereign under which they sit. The notion is that their access to emergency funding can turn on the ability of their home member state to provide that funding.

Figure 1 makes clear there is no actual sovereign debt, as contemplated in the Basel Rules, at the apex of the Euro system debt pyramid. Thus, an entire risk-free tranche of debt is missing from the system, creating additional risk that is not normally present in the currency zone of a unitary or federal state.

*Figure 1: Comparison of the Creditworthiness Hierarchy in the UK and the Eurozone – No Actual Sovereign at Apex of Euro-Pyramid*



The inherent contradictions in this structure can be seen from the fact that independent credit rating agencies simultaneously assign relatively high risk ratings (for an OECD member government) to certain EU member state debt, while at the same time accepting that, for regulatory purposes, banks assign zero risk to the same debt. Thus, for example, the debts of Italy and Portugal are both rated by Standard & Poor/Moody as BBB/Baa3, Cyprus is rated BBB-/Baa2 and Greece is rated BB-/B1. In contrast, if this debt were to be rated as true sovereign debt, it would need to have a rating of AAA–AA- in Standard & Poor's (S&P's) system and Aaa–Aa3 in the Moody's system.

**Systemic under-capitalisation/under-collateralisation/illiquidity creates huge global risk**

The gap between the reality and the EU's misrepresentation represents a huge source of unmanaged risk as Eurozone member state government debt enters the EU and global financial system.

It might be argued that at least some (sophisticated) investors holding such debt would be aware of this reality and, consequently, would have taken it into account in their overall investment portfolio risk considerations. If so, this might suggest that market mechanisms deal effectively with the problem. However, such an argument does not take into account the way exposure to EU sub-sovereign debt is spread opaquely throughout the Eurozone financial system.

This EU regulatory misrepresentation of all Eurozone debt (i.e., treating individual countries as sovereign when they do not have sovereign status) extends well beyond the primary holders of Eurozone

bonds and has created a systemic problem throughout all of the EU's financial sector and financial institutions. The effects are many:

- *Under-capitalisation across financial sectors.* This misrepresentation applies across several sectors of the EU's financial market – e.g., it applies to the regulatory capital requirements for insurance companies and the EU has considered extending it to EU pension funds.
- *Collateral and liquidity.* EU debt at every level in the debt hierarchy is used by the Eurosystem as collateral for which it is given a value as security, which in each case is one level higher in the hierarchy than it should be. Instead of the collateral being subject to a haircut, reflecting its true risk, it is given a haircut as though it were one level less risky than it actually is. In addition, EU banks are allowed to hold these same lines of bonds for liquidity purposes, with haircuts that are again too low.
- *Eurozone institutions – the ECB, the EIB, the ESM.* The same issue affects the EU institutions that sit above the "sovereign" countries – the "supra-sovereigns" – namely the EU itself, the ECB, the European Investment Bank (EIB) and the European Stability Mechanism (ESM). Each is backed by the same member state sovereign obligations that are not genuine sovereign obligations, meaning that the supra-sovereigns should be rated lower than they in fact are. These entities are thus under-capitalised based on their estimated exposure to their overvalued member state backers.
- Further, the supra-sovereign institutions have acquired member debt at levels that place the same mistaken, systemic (over-)reliance on member states' individual and collective ability to repay:
  - The EIB is heavily invested in member state debt.
  - The ECB, in seeking to provide liquidity to and stimulating growth in the Eurozone through its Quantitative Easing (QE) programme, has purchased €4.65 trillion of member state debt, as well as debt of member state public sector entities, banks and corporates, all based on the same over-valuation of creditworthiness.
  - The Eurosystem accepts member state bonds that are eligible as collateral for its monetary and payment operations.
  - Eurozone member states' NCBs can borrow from one another in the ECB's TARGET2<sup>3</sup> system based on this collateral.
  - Eurozone banks also can borrow from their central banks on such a basis.

As a result, the Eurosystem,<sup>4</sup> the Eurozone system<sup>5</sup> and the EU's financial institutions are under-capitalised, under-collateralised, and its regulated firms are less liquid than is generally recognised. In addition, the systemic risk oversight of the EU system as a whole – designed to protect against an event affecting multiple institutions simultaneously – underestimates the level of overall risk.

The overall level of risk injected into the EU financial system by these measures is vast and approximates to the very significant under-capitalised and under-collateralised exposures, based on the large pool of eligible bonds available to be used under this system – which are overvalued. This includes

---

<sup>3</sup> TARGET2 is the high-value real-time gross settlement payment system for the euro, comprising the national high-value payment systems of the 19 Eurozone member states, the euro-denominated high-value payment systems in five non-Eurozone EU member states, and the arrangements between TARGET2-participating central banks and the ECB to make cross-border payments.

<sup>4</sup> The Eurosystem, short for the Euro System of Central Banks, is a collective term for the European Central Bank (ECB) and the national central banks (NCBs) of the Eurozone member states. The Eurosystem is not a legal person and cannot acquire assets and liabilities. "Eurosystem assets and liabilities" are held either by the ECB or by one of the NCBs.

<sup>5</sup> The EU itself, the ECB, the EIB and the ESM.

the total amount of all Eurozone member state liabilities through direct bond issuances, TARGET2, the QE programme and the EIB.

The effect of these treatments has been to incentivise individual member states to raise more debt than would otherwise be warranted and which they potentially cannot stand behind.

### **EU Accounting Practices Mask Size of the Problem**

Furthermore, the Eurozone adopts misleading accounting practices that lead to additional risk. For example:

- *Non-standard NPL treatments.* Contrary to normal accounting treatments around the world, the rump of non-performing loans (NPLs)—such as business loans, mortgage lending to consumers or consumer credit—are discounted and then treated as performing. Treating them as performing debt is premised on the borrower achieving partial repayment despite evidence that the non-rump portion of the debt will not be recovered and despite no adjustment being agreed to the amount owed by the borrower.
- *Accounting practices that leverage the sovereign assumption.* The EU has permitted banks to securitise NPLs and repackage them, with guarantees by the relevant Eurozone member state where the borrowers are located. It then permits EU banks to hold the resulting securitised NPLs at a level reflecting a sovereign treatment of the EU member state guarantee. This has an alarming similarity with the repackaging of US sub-prime mortgages into supposedly "prime" segments that sparked the Global Financial Crisis.
- *Opaque accounts.* Eurosystem accounts are opaque. They do not list all public debt in the manner of other developed countries, such as the UK or US. The system runs four different sets of accounts, but, when consolidated, it assumes the amounts owing between NCBs and the ECB can be netted, thereby disregarding the intrasystem gross exposures. It is unclear whether this assumption is legitimate even under EU law.

There are also questions about whether the accounting treatment of member state public sector entity debt supplied by the EIB or controlled as collateral by the Eurosystem is properly applied. For instance, the European Investment Fund, part of the EIB Group, has committed itself to high-risk financings, of which up to €26 bn could in law fall back on the EU taxpayer. This will have given rise to over €500 bn of loans by the end of 2020, on which the debt service (capital and interest) is to be drawn from public sector entities. None of this debt is accounted for in the EU accounts relied upon by S&P's and Moody's for their credit ratings.

The Annex on page 17 of this paper quantifies, at a high level, the scale of the problem. The Technical Analysis that follows provides the further detail.

## **II. AFTER BREXIT, UK REGULATION CAN NO LONGER MITIGATE THE PROBLEM WITHIN THE EU AND INTERNAL EU SOLUTIONS ARE UNLIKELY**

Given this huge potential risk facing the global financial system, why have capital markets continued to function and fund Eurozone member states?

### **UK Regulation Currently Mitigates the Problem**

The answer is that the UK, as the host of the global financial market located in the European time zone, supervises financial institutions located in the UK. This reflects the fact that much of the Eurozone market is hosted in the UK and supervised by UK regulators. Because the UK is not in the Eurozone and UK regulators are not subject to Eurozone oversight, it has been able to offset the assumptions

embedded in EU law as well as the practices followed by Eurozone financial institutions, thereby protecting the global financial market. The UK's regulators operate under EU law, but they are not subject to EU control in all respects. Thus, they are able to use their supervisory discretions to counteract the effects of the EU's assumption that EU member state debt is of sovereign quality.

As part of this supervision, the Bank of England conducts annual stress tests across UK-incorporated financial institutions to identify and manage risks in the financial system and to protect the portion of the global financial market hosted in the UK. Its stress tests seek to mitigate the risks created by the Eurozone for financial institutions based in the UK by requiring banks to raise additional capital. The additional capital is required under Basel Pillar 2, which is a discretionary segment of capital that global regulators are allowed to require of banks, providing an extra layer of security over and above the capital automatically required through the Pillar 1 chapter of the Basel Rules.

Currently, it is possible for the UK's actions to mitigate risk in the EU and Eurozone because the EU's financial services "passport" allows businesses to operate from the UK cross-border across the EU, with the EU relying on home state regulation and supervision. This set-up means that UK-based businesses can service the EU27 cross-border business. It avoids the pointless cost of duplicative regulation, supervision and market fragmentation and minimises the cost of capital for growth and investment across the EU.

It also means the UK's regulators are largely in control of the interaction between financial risk arising from the Eurozone and the segment of the global financial market that is hosted by the UK. However, these actions affect solely the global market located in the UK and the institutions incorporated there. They do not affect institutions incorporated in other EU27 states. For example, the European Banking Authority (EBA), located in Paris, seeks to coordinate proper regulation and the application of the Basel Rules across the EU as a whole. But it has not sought to ensure that the bank stress tests conducted in the EU are used to counteract the EU's misappropriate application of Pillar 1 rules. Neither has the division of the ECB – the Single Supervisory Mechanism (SSM) – that regulates systemically important (and hence risky) Eurozone banks.<sup>6</sup>

This is unsurprising. Given that the EU has created these rules in the context of the Eurozone, it would be odd if the Eurozone or Eurozone-connected supervisors were allowed to overrule them.

### **UK mitigation not possible post-Brexit**

Now that the UK has left the EU, it will no longer be possible for the UK to continue to play its mitigating role in the way it does now. This is because the arrangements currently enabling the UK to mitigate the risk within the EU will disappear after Brexit – a consequence of the EU passport falling away.

After Brexit, UK businesses will no longer operate under the EU regime. The conventional assumption is that financial businesses will need to locate business in the EU27, which is the standard way in which EU financial business is conducted. Because the UK will be outside the EU, UK financial businesses will be obliged to follow standard EU rules and practices when conducting EU business.

Critically, in a post-Brexit environment, the UK, as an independent sovereign power, could never agree to apply EU-made law in the UK. Not only would this law be written by foreign powers with no UK involvement, UK regulators would not be able to operate autonomously under such a system. Indeed,

---

<sup>6</sup> The ECB directly supervises systemically significant Eurozone banks in conjunction with local member state regulators, who are needed to invoke local law and use the local court system. Local regulators supervise non-systemic banks with oversight from the ECB under harmonised standards set by EU laws and guidance from the EBA. In practice, the views and decisions of local regulators are important and are subject to considerable autonomy. Even if the ECB operates in an apolitical manner in its supervisory role, there is a risk that supervisory practices may be constrained because of the conflicts of interest faced by the local authorities located in the member state where the relevant financial institution is incorporated and whose assistance is necessary for supervision and enforcement.

the dangers for the UK of agreeing to follow EU law – as the EU is attempting to get the UK to do as part of the future trading relationship with the EU – are not theoretical. They were clearly evidenced when the EU sought to remove the UK's ability to adjust for risk uncaptured by the EU regulatory framework by attempting to block the UK's power to impose additional discretionary capital requirements on UK-incorporated firms under Basel Pillar 2.<sup>7</sup> The intention was for regulatory capital to be centrally controlled at an EU level. This would have removed the UK's ability to mitigate Eurozone risk. The UK successfully resisted this idea but the hazards now are much greater.

The UK also sought, with difficulty, in the attempted renegotiation of the UK's relationship with the EU by Prime Minister David Cameron in February 2016, to establish that the UK and sterling were independent of, equal to, and ring-fenced from the Eurozone and the euro. However, that amendment to the EU's architecture has fallen away with the UK Brexit Referendum and, in any event, would have resolved only part of the problem for the UK under EU law in a post-Brexit environment.<sup>8</sup>

So, unless other arrangements are made, EU law will require some financial business currently conducted in the UK to be conducted onshore in the EU. Thus, the post-Brexit situation will give rise to increased risk for the global financial system. Global financial institutions that have EU27 affiliates will need to stand behind them. They cannot allow those subsidiaries to become insolvent, while continuing with their business elsewhere in the world – due to reputational risk, as well as political pressures. Moreover, EU financial institutions that deal regularly with other firms around the world could trigger financial contagion outside the EU.

The Eurozone has shown that it is neither willing nor able properly to manage this risk itself, not least because much of it remains hidden due to the system's extraordinary lack of transparency. Not all of the Eurozone risk is easily observable on the balance sheets of individual EU financial institutions. So, post-Brexit, conducting business-as-usual under EU27 or Eurozone supervision could unwittingly introduce risk into the global system – a risk which is not being managed by the EU27, by the Eurozone, or by the market itself.

In this environment, global regulatory capital and accounting standards that exist to protect against such risk would not be properly applied. Therefore, the under-capitalised, under-collateralised and insufficiently liquid Eurosystem and EU financial institutions—coupled with the Eurosystem operating non-transparent accounting practices—is a matter of concern to the global financial system.

<sup>7</sup> "To the delight of European banks – and the consternation of Whitehall – the Commission [and Michel Barnier, internal market Commissioner] in July [2011] proposed a limit on how much capital national regulators could force banks to hold. British ministers think this was deliberately aimed at undermining the flagship recommendation of the Vickers commission, which advocated ringfencing UK retail operations behind a higher capital buffer", Barker, A., "Barnier vs the Brits: Financial regulation - UK's battle with Brussels is intensifying", Financial Times, 8 November 2011: <https://www.ft.com/content/5471afde-096a-11e1-a20c-00144feabdc0>.

Similarly, "The bad-tempered exchanges at a late-night meeting of European finance ministers risked scuppering agreement on a 600-page law to implement the Basel III international accord on bank capital. When some British demands to toughen up the text were rejected, Mr Osborne bluntly accused the European commission of offering concessions to French and German banks that breached the global agreement. 'We are not implementing the Basel agreement, as anyone who will look at this text will be able to tell you,' Mr Osborne told his stunned counterparts. 'I'm not prepared to go out there and say something that will make me an idiot five minutes later.' His sharp attack reflects the deep distrust marring relations between Brussels and London over regulation of the City... The 'polemic' drew an angry response from Michel Barnier, the French EU Commissioner overseeing financial services, who insisted his rules complied with Basel while taking account of European 'specificities'. Another flashpoint is the British and Swedish insistence that national regulators have the freedom to impose tougher rules on banks without EU approval – a move that Mr Barnier says will imperil the single market", Barker, A., "UK in furious rejection of EU bank plan - Britain's poisonous relations with Brussels erupted on Wednesday as George Osborne, the chancellor, refused to defend watered-down EU bank rules that would make him 'look like an idiot'", Financial Times, 2 May 2012; <https://www.ft.com/content/82eab320-949c-11e1-bb0d-00144feab49a>.

<sup>8</sup> Letter by President Donald Tusk to the Members of the European Council on his proposal for a new settlement for the United Kingdom within the European Union, European Council, 2 February 2016, and David Cameron's statement on EU renegotiation: 3 February 2016.

**Internal EU solutions possible, but unlikely**

There are two ways the EU potentially could eliminate the problem, requiring major changes in its internal *modus operandi*. However, it is unlikely that either one would be implemented.

*Apply Basel Rules Properly.* The best way of dealing with the problem would be for the EU to eliminate its underlying cause – by applying the Basel Rules properly. However, doing so would be highly problematical for the EU to implement; consequently, such an outcome is unlikely. Why so?

Removing this risk would require the EU to make a fundamental adjustment to its capital, collateral and liquidity rules. Unfortunately, changing the rules and restructuring such levels of risk cannot be achieved easily. The adjustment would require vast amounts of new capital, collateral and liquidity to be injected into the Eurozone and would require an immediate and fundamental reorganisation of the Eurozone's internal structures relating to the mutualisation of EU member state debt.

Unsurprisingly, there is little political will to execute such a plan, especially in Germany. Furthermore, because the loss-absorption buffer in the system is much lower than it is made to appear, and the system relies on sub-sovereign bonds for collateral and liquidity, the requisite amount of capital could not easily be conjured up from within the system.

*Share Member State Liability.* Member states potentially could introduce joint-and-several Eurozone sovereignty and stand collectively behind each other's debt issuances. This means member states would benefit from each other's creditworthiness and collectively would effectively constitute a sovereign debt issuer that could exercise control over the ECB as the issuer of the euro currency.

However, such a step would involve taxpayers in northern Europe accepting a level of political, economic and fiscal integration with the South and East that, so far, they have not been willing to accept. The German Finance Minister, Olaf Scholz, recently made relatively minor suggestions for integration – i.e., a Eurozone scheme to reinsure member state bank deposit guarantee schemes. Unfortunately, even his small suggestion (which in any case would have been only a minor fix) has been strongly resisted, not least in Germany itself.

It is clear that the EU will not voluntarily subject itself to the measures needed to address Eurozone risk outlined in the previous section.<sup>9</sup>

### III. AN ENHANCED EQUIVALENCE AGREEMENT COULD ADDRESS THE PROBLEM IN FULL

A potential solution in the form of a post-Brexit Enhanced Equivalence deal in financial services, involving mutual UK-EU recognition of each other's Basel-driven high-level standards, would preserve the *status quo*. It would allow UK law to be applied to UK businesses – and EU law to be applied to EU businesses.

**The Enhanced Equivalence concept**

Instead of having firms set up costly subsidiaries in the EU, it would be possible after Brexit for UK businesses to remain based in the UK continuing to service their EU27 customers from the UK, where Eurozone risk is currently mitigated as part of the UK's management of global market risk. A new arrangement, properly formed, would allow the UK to mitigate Eurozone risk openly where it has only been able to mitigate this risk covertly under existing EU law arrangements which require it to pay

<sup>9</sup> See, e.g., Statement by Michel Barnier at the presentation of the Commission's proposal for a Council recommendation on directives for the negotiation of a new partnership with the UK, Brussels, 3 February 2020; [https://ec.europa.eu/commission/presscorner/detail/en/speech\\_20\\_185](https://ec.europa.eu/commission/presscorner/detail/en/speech_20_185).

deference to the ineffectual approaches of fellow EU regulators. This would require the EU to agree to a financial services arrangement based on an enhanced version of its existing concept of equivalence contained in EU law. That is, the EU would allow UK financial businesses to trade in the EU, but under UK law, so long as UK law achieves similar standards as EU law, principally by reference to the Basel Rules.

The legal text for such an arrangement has already been drafted and is ready to be finalised and signed.<sup>10</sup> An Enhanced Equivalence deal would allow, in the manner of the passport, businesses based in the UK to continue to service EU27 customers based on UK financial regulation and supervision.

An Enhanced Equivalence deal would also minimise disruption to existing customer service models. It would enable mutual recognition of each other's regulations and avoid duplicative regulation. Existing UK business models would continue undisturbed and the UK would manage Eurozone risk sensitively, protecting the global market in the process.

In addition, such an arrangement would benefit the EU27 by helping avoid the unnecessary additional costs created by UK financial firms operating through separately capitalised EU27 subsidiaries. This is a cost that would have to be passed back to EU27 businesses and consumers, increasing their cost of capital and lowering growth. It would also allow EU banks and investment firms to operate in the UK's global market without also having to set up separately capitalised and collateralised subsidiaries, whilst retaining the false assumption in their domestic market that Eurozone bonds are sovereign. This would put EU institutions at a competitive advantage to global ones, but is a price the global financial system should consider paying – and a risk worth taking – to help it manage its way through the present dangers arising from the incomplete euro project.

The EU27 and especially the Eurozone need minimal friction and minimum cost access to global markets for growth, particularly while the Eurozone continues to become fully established. The Eurozone also needs access to the secondary markets in the UK, especially for illiquid instruments, like certain types of national public sector debt.

The greatest liquidity, best pricing and smallest price spreads will remain in London, as it is the sole global financial centre in the European time zone, operating in multiple currencies and benefitting from the ability to net exposures and reduce risk through its concentrated management.

### **Key elements of the deal**

There are some practical and political elements of a new Enhanced Equivalence deal that need agreement before it could be implemented. Nevertheless, we believe Enhanced Equivalence is the best way forward and we see no fundamental reason why such agreements could not be forthcoming.

These required agreements are:

- *Introduce durability, predictability and data sharing.* Certain amendments to the existing EU equivalence regime would need to be agreed, given (1) the greater interconnectivity between the UK and EU than with other jurisdictions and (2) the already apparent EU threats to remove equivalence recognition at very short notice if the UK were to enact laws the EU deems to be inappropriate. Such amendments would need to be durable and predictable and subject to independent adjudication. In order to continue mitigating Eurozone risk effectively, the UK would also need certain, real-time access to full and accurate Eurozone data, including information from the main EU financial

---

<sup>10</sup> See the Treaty and legislative text in *A Template for Enhanced Equivalence: Creating a Lasting relationship in financial Services between the UK and the EU*, Reynolds B., Politeia, 10 July 2017, which provides for the arrangement to be achieved partly by Treaty text and partly by regulation; or *Free Trade in UK-EU Financial Services: How Best to Structure a Brexit Free Trade Deal*, Reynolds B., Politeia, 17 October 2018, which does the same but entirely through Treaty text, which it sets out in full.

institutions engaged in cross-border and global business (e.g., having access to the resolution plans for those institutions).

- *Expand existing scope.* The existing equivalence framework would need to be expanded. As things stand, the EU has a hodgepodge of equivalence measures that cover only part of the financial sector—not, for example, commercial banking and insurance. In order to continue managing Eurozone risk, the UK would need to have sight of and control all levers across its financial sector, through lawmaking as well as supervision.
- *Align UK and US practices.* The UK and the US—as the other main global financial centre—would need to agree a joint *modus operandi*. Between the UK and US, it is the UK that needs to step up to mitigate most Eurozone risk following Brexit since financial business is most easily conducted and managed in the time zone of the customer.

The US would continue its current approach domestically, as the US system is designed for, and works well with regard to, the markets run out of the US—which, of course, helps with the management of global risk. Employing the US system to mitigate global systemic risk originating in Europe would not be practicable. For example, adopting in the Eurozone the US approach to disclosure and litigation and employing its use of punitive fines and damages (given the Eurozone's deliberately misleading regulatory capital and accounting treatments) would introduce additional systemic risk and magnify the effects of any crisis in an unpredictable manner. Such effects could run on long after the crisis and hang over market participants for years.

- *Hold the line on outcomes-based Enhanced Equivalence.* Currently, the EU is not favouring such a binding and wide-ranging arrangement. Enhanced Equivalence would require the EU to recognise the UK's sovereignty in making laws and in supervision, which is contrary to some recent EU statements.

"Equivalence"—expressed as "providing for recognition of another country's laws and jurisdiction based on high level outcomes"—was supported by Michel Barnier when, as European internal market Commissioner, he was promoting the concept to the US in 2013.<sup>11</sup> This sensible interpretation for the US allows both parties to achieve recognition so long as they meet international standards where possible, rather than imposing any arbitrary line-by-line list of specific requirements that are unnecessary to operate the regime safely. Only two underlying criteria need to be observed: (1) the prevention of systemic risk in the other's market and (2) the protection of the other's retail consumers under locally stipulated standards. So long as this is the case, each party should be able to legislate and regulate as it sees fit. Such a system is already in use by the EU with tens of countries around the world.<sup>12</sup>

If the EU does not agree to Enhanced Equivalence, UK and US regulators will need to mitigate this risk jointly.

---

<sup>11</sup> European Commission, "The European Commission and the CFTC reach a Common Path Forward on Derivatives", 11 July 2013.

<sup>12</sup> A summary of the regime can be found in *A Blueprint for Brexit: The Future of Global Financial Services and Markets in the U.K.*, Reynolds B., Politeia, 3 November 2016.

#### IV. UK/US REGULATORS MUST MITIGATE RISK JOINTLY IF NO AGREEMENT ON ENHANCED EQUIVALENCE

If the EU refuses to agree an Enhanced Equivalence regime, it will have created an unacceptable situation for the global financial system, which will have to address this risk itself.

##### **Post-Brexit regulation by the EU: risk-prone, conflicted, unreliable, and costly**

Following Brexit—without any internal changes to the Eurosystem or without a UK-EU financial services deal in place—UK-based financial businesses currently providing services and products cross-border to EU27 customers would not be able to continue operating as they do today.

If the UK were to agree to EU demands that UK businesses operating in the EU be subject to EU regulations, UK businesses would be exposed to unacceptable levels of Eurozone financial risk. This cannot be allowed to happen so, in the circumstances, convention would require non-EU banks and other financial institutions wishing to continue doing business in the EU to operate from a physical presence there. Financial businesses would be required to operate some aspects of their business from EU27-incorporated entities, acting as counterparties facing EU27 customers. They would be subject not only to EU law, but also to EU supervision, without the counterbalancing measures applied by the UK.

These requirements have major implications for both capital and collateral, as they would trap newly acquired capital and collateral in the EU27 entities. In order to minimise the resulting costs, typically these entities would offload the risk they take on back to their affiliates in the UK, where it could be managed in the same time zone. However, the pan-EU supervisory authorities that oversee the application of the EU financial services regime – i.e., the European Supervisory Authorities (ESAs) – have stated that EU-based entities must retain meaningful risk on their books and have on-the-ground managers of that risk, supervised by the EU regulators.

If that were to happen, the level of EU financial risk would magnify and the chances of a small spark in a minor bank setting off a meltdown of the whole global system would be substantially increased. Having created an umbrella of rules, accounting approaches and opaque practices to facilitate the emerging construction of the euro, EU regulators are conflicted when it comes to reversing the position at a supervisory level. For example:

- The EBA applies its stress tests on the presumption that the Eurozone is an integrated whole.
- Proposals for a pan-EU bank deposit guarantee scheme, which would mutualise the risk of local NPLs, have not been adopted.
- No pan-Eurozone bank mergers and acquisitions market has developed, enabling financial institutions in one member state to acquire failing institutions in another, in large part because the local contributors to the deposit guarantee scheme of the acquiring member state would then be exposed to NPLs of the target's member state.
- Regulations have been introduced for credit rating agencies to enable EU regulators to allay member state concerns and control the ratings of member states that are not deemed fair by the EU. The new regulation was introduced in 2013, shortly after a very public and disputed ratings downgrade for France.
- A new regulation has been introduced that enables EU regulators to remove recognition from foreign clearing houses (also called central counterparties, or CCPs) that clear in euros and, in so doing, value member state government collateral in a manner the EU does not accept. This was in response to actions of the London Clearing House in 2011 and 2012 when Italian and Spanish member state

debt was subjected to a haircut to reflect market perceptions of its reduced creditworthiness.<sup>13</sup> The EU wishes to control any such haircut adjustments in the future.

- EU authorities have circumvented EU rules for the writing down of shareholder equity and a subset of creditor liabilities that are designed to keep failing banks in operation and avoid disruption to the EU financial system. The way the rules have been applied has protected domestic investors and depositors in member states at the expense of the global market, thereby introducing further risk into it.

It is clear that EU and Eurozone regulators have a fundamental conflict of interest between the need to maintain a safe financial system and the need to keep the Eurozone project on the road pending full integration into a proper, currency-issuing state. They cannot afford to undo through supervision the problems they have created through their rules and practices.

Thus, EU27 regulators cannot be relied upon to manage Eurozone risk safely.

### **Mitigating unmanaged post-Brexit Eurozone risk**

The global financial market cannot allow the situation described above to continue. Eurozone risk needs to be managed effectively and by non-conflicted supervisors.

Otherwise, global financial resources could be misdirected to address the problems associated with the Eurozone's incomplete structure, putting business capital at risk of loss. Individual citizens around the world could also be exposed to significant losses through their pension funds and other investments.

So, in the face of the EU refusing either to make fundamental internal changes or agree to Enhanced Equivalence, as well as insisting on financial businesses operating where required through EU27 subsidiaries, it will be necessary to neutralise the exposures created by EU27 law and supervision so that they do not contaminate the global market.

This will require the following actions:

1. *Bypassing EU financial institutions.* The UK and US will need to require UK and US financial firms where possible to deal with EU27 customers directly and not through EU27 affiliates. Such a requirement can be met under various existing EU laws, most notably when EU customers reach outside the EU at their own instigation to acquire services from the UK or US (reverse solicitation).<sup>14</sup>
2. *Helping EU customers.* UK and US firms can help their EU27 customers come to the financial market by setting up low-cost presences in the UK or US from which to acquire their financial services, in the same way that other customers do from all over the world. Indeed, this was the principal method of delivery of financial services to businesses across the EU before the beginnings of the financial services passport in 1995.<sup>15</sup> The UK Government could assist with this endeavour. A contractor could be appointed to help EU27 clients sign a short document to authorise the contractor to establish and maintain a presence on their behalf.

<sup>13</sup> A. Aguiar, D.Y. Kennett, R. Bookstaber and T Wipf, *A Map of Collateral Uses and Flows*, Working Paper, Office of Financial Research, 26 May 2016.

<sup>14</sup> *The Art of the No Deal: How Best to Navigate Brexit for Financial Services*, Reynolds B., Politeia, 29 November, 2017.

<sup>15</sup> With the Investment Services Directive (Council Directive 93/22/EEC). This provided for the mutual recognition of home state prudential rules for investment firms. A similar regime was introduced for banking (Council Directive 93/6/EEC and Directive 2000/12/EC). Full recognition of prudential and conduct of business rules was introduced in 2007 with the Markets in Financial Instruments Directive (Commission Directive 2004/39/EC) and also for banking (Directive 2006/49/EC and Directive 2006/48/EC) and insurance (Solvency II – Directive 2009/138/EC; Insurance Mediation Directive II – Directive 2016/97/EC).

3. *Ensuring transparent data and remote management of risk.* For any residual category of business that global financial institutions need to operate with EU27 customers through an EU27 subsidiary, the UK and US can require the UK and US affiliates to supervise the taking on of any Eurozone risk:
  - a. This would require full and accurate data to be obtained and assessed in the UK or US headquarters, and for that risk to be managed from the UK or US.
  - b. EU27 presences could be required to be minimised and all material Eurozone risk could be transferred out through back-to-back trades (with full necessary information) to the UK or US affiliate where it could, in turn, be managed and collateralised.
  - c. UK and US firms could chaperone all deals proposed by their EU27 subsidiaries and actively manage the risk arising from those subsidiaries through position limits and pre-authorising trades.

These requirements might conflict with the ESAs' pronouncements about necessary local EU27 presences, but the wider world must avoid the risk that would be created by relying on EU27 supervision.

4. *Establishing stringent conditions for financial institutions' Eurozone exposures.* UK and US firms could be required to manage their risk arising directly or indirectly from EU27 counterparties and customers in a new way:
  - a. Treat Eurozone member state debt on the correct basis of sub-sovereign quality and all public sector entity debt within that member state as sub-sub-sovereign, matching the true unmanaged exposures introduced into the market by that debt.
  - b. Consider requiring firms, under UK and US rules, to analyse exposures to EU27 counterparties and subsidiaries on the basis of the financial position of those entities having applied the correct regulatory capital and accounting treatments to their exposures. Similar adjustments would have to be made for collateral emanating from the Eurozone and Eurosystem, and also for the misleading EU27 approach to liquidity.
  - c. Where proper data on the effects of the counterparty's under-capitalisation, under-collateralisation or overestimation of liquidity are unavailable, position limits would need to be established to protect against uncaptured systemic risk.

In all cases, information would be key. The UK and US would need to insist on access to full data from EU27 and Eurozone entities, their regulators, central banks, and other authorities. The information would need to cover all Eurozone sub-sovereign and sub-sub-sovereign exposures, direct and indirect. This way, any trades relying on this data and exposed to conflicted supervisory oversight could be undertaken directly or indirectly from the UK or US where the risk can be properly managed, netted and reliably collateralised.

In such a way, without either internal EU changes or a proper Enhanced Equivalence deal, the UK and US can protect themselves and the global market from the risks identified above. Yet, the very statement of these steps shows how detrimental it would be for the EU to refuse Enhanced Equivalence – forcing the UK and US to mitigate the resulting increased Eurozone risk, on a fully arm's-length and detached basis.

### **Negative impact on EU**

A UK/US joint initiative preventing material risk being transmitted to the global markets means they cannot place any reliance on EU legal and regulatory risk management – which, in turn, means that the relocation of meaningful financial services jobs to the EU would need to be kept to a minimum. This,

alone, flies in the face of one of the EU's post-Brexit objectives of attracting London-based businesses to the EU.

Furthermore, taking the actions outlined above would make clear that the EU would be unable to reap the full benefits from the assumption embedded throughout its regime that member states have sovereign status. A key benefit of this assumption is that the EU has created the euro currency on the cheap by requiring the rest of the world to bear the costs and risks of investment losses. This cannot be allowed unchecked and the risk must be properly mitigated.

Thus, joint UK/US actions would seek to neutralise those unfair benefits and impose full freight costs concomitant with the realities of the riskiness of the EU's financial system. The combined magnitude of these costs could potentially prove terminal to some EU-based businesses. These measures would handicap EU banks and other financial institutions in accessing global capital flows to fund their local activities and highlight to the world the structural flaw in the Eurozone's design. Those EU member states, such as France, that are hoping to use Brexit as leverage to relocate London-based financial services to Paris under French-led management, would be thwarted.<sup>16</sup>

In the face of such a large potential negative impact, it would be highly irrational for the EU not to respond to an offer of an Enhanced Equivalence arrangement – not least because of the (current) strong political will within the EU to "do whatever it takes" to preserve the euro. Agreeing for the UK to continue mitigating and indeed managing Eurozone risk in the integrated, sensitive and collaborative way it does at present would be far cheaper for EU businesses and consumers, and would facilitate economic growth. If rational thought prevails, global financial services firms would be able to benefit from continuing to operate as they do now, from London, under a new Enhanced Equivalence arrangement. This would allow them to service their customers across Europe without the unnecessary costs of duplicative, often ill-fitting and heavy-handed regulation. Such an outcome is the only fair one for world consumers, businesses, the global market, the UK and US.

In establishing the euro as it did, the EU created, as a by-product, phenomenal and unprecedented financial risk for the world, without its members properly underwriting that risk. The financial crisis of 2007-8 was only a taste of the damage such systemic risk can wreak. The EU's estimated share of global GDP in 2020 is 17.7%,<sup>17</sup> while its share of the global stock market was 14.1% in 2019.<sup>18</sup> A

<sup>16</sup> France, in particular, has ambitions to establish itself as a leading EU financial centre, in apparent disregard for the systemic risk implications and costs to EU businesses and consumers, based on the following narrative: "Until 1914, France was Europe's banker, even if London was the world's banker. Brexit is perceived as the best opportunity in a century to regain that pre-eminence, what a French Senate report called its 'age-old ambition'. ...The prospect of Paris dethroning London is perceived, on the other side of the Channel, as within France's grasp. It has snaffled the [EBA] on repatriation to the Eurozone from London in the wake of the Brexit Referendum, denying Frankfurt its natural home. Macron manoeuvred deftly to get Christine Lagarde, French former Centre-Right Finance Minister to replace Mario Draghi as head of the ECB". In a France Info radio interview on 27 January, France's highly ambitious and powerful Finance Minister, Bruno Le Maire, repeated the line that Paris was about to overtake London as Europe's prime financial centre. He went on to say that in the Brexit negotiations France can benefit 'if we are firm'" (Keiger, J., "Macron's new post-Brexit negotiating position", Briefings for Britain, 30 January 2020; <https://briefingsforbritain.co.uk/macrons-new-post-brexit-negotiating-position>). France has also tried to use long-term tax breaks to tempt UK-based bankers to move to Paris (Dawber, A., "Sarkozy woos City bankers with promise of Paris tax break", Independent, 23 August 2010; <https://www.independent.co.uk/news/business/news/sarkozy-woos-city-bankers-with-promise-of-paris-tax-break-2059472.html>).

<sup>17</sup> IMF World Economic Outlook 2019. This is down from 20% now that the UK has left the EU. In comparison, China's share of global GDP is 16.9%, up from 4.3% in 2003. At the time of writing, an outbreak of corona virus beginning in a small food market in Wuhan is spreading globally around the world. With an appropriate mitigation strategy involving isolating infected individuals, it may be contained, but it has already had a damaging effect on Chinese and global GDP, as it disrupts global supply chains. The virus will "derail the nascent industrial recovery" in the Eurozone and consign it to more poor first-quarter growth, according to Oxford Economics (Rees, T., and Uttley, H., "Eurozone growth hit by coronavirus", Daily Telegraph, 15 February, 2020). In a similar way, the failure a small bank in the Eurozone could spread contagiously to the rest of the world, with an even more damaging effect on global GDP, unless a similar mitigation strategy is put in place which isolates Eurozone financial risk from the rest of the world.

<sup>18</sup> MSCI All-Countries World Index; <https://www.msci.com/documents/10199/8d97d244-4685-4200-a24c-3e2942e3adeb>. This is down from 18.8% now that the UK has left the EU.

crash caused by unmanaged Eurozone risk could therefore cause a level of financial and economic damage that dwarfs what was experienced only 12 years ago. The world cannot allow this to happen.

### **THE UPSHOT – A CRITICAL FAILURE TO MANAGE RISK**

The issue at hand is the risk post-Brexit to the global system created by the incomplete Eurozone and the capital, collateral, liquidity and accounting treatments adopted by the EU that mask this fact and disguise the consequent financial and economic risk. This risk is a global problem and must be addressed by the UK and US as key hosts of the global financial system. It stems from the EU's attempt to create an EU-wide sovereign currency without addressing the consequent loss of member state sovereignty. The EU does not manage this risk in any meaningful sense. Because the political obstacles against allowing a simple, workable internal EU solution are too daunting, following Brexit it will not be safe for global investors to trade on the basis of EU27 supervision. By far the simplest and most attractive solution is for the UK to carry on managing the risk, as it has been doing, under an Enhanced Equivalence arrangement which is durable, covers the whole financial sector and recognises UK standards that achieve high level international outcomes. Such an arrangement could be executed swiftly so it could be in place before the end of 2020. If this is not permitted by the EU, the UK and US must manage the risk to protect the integrity of the global financial system – which is a practical alternative, but less attractive for the EU and for the world.

### Annex: Quantifying the scale of the unmanaged Eurozone risk – a summary

It is impossible to provide a single figure to quantify the scale of the whole problem. We can however provide estimates of the size of two key problems with the Eurozone: the size of Eurozone member state national debts and the size of NPLs in Eurozone banks.

Take as examples Italy and Spain, which have the highest liabilities in the Eurosystem. Their official national debts are 133% and 98% of their GDP, respectively. However, we estimate that the actual national debt to GDP ratios of Italy and Spain could be as high as 167% and 138%, respectively, which is significantly greater than would normally be expected, given their BBB and A credit ratings.

This is because their share of debts in the EIB amounts to 4–5% of their GDP, while the costs of the ECB's QE programme adds another 3%. The TARGET2 euro payment system adds either nothing (if the debts are secured on existing public sector bonds) or up to 25 – 32% of GDP (if the debts are unsecured or are secured on non-public sector bonds). So the volume of extra public sector debt is in the range of 8 – 40% of GDP for these countries – and this excludes all contingent liabilities.

A key problem is that official Eurostat statistics, which are used as the common reference point for assessing EU member state debt, do not provide a full picture of this debt. They omit the direct debts of public sector entities like transportation, power and water utilities, and the indirect debts of these entities through the EIB. They omit the extra public indebtedness caused by the QE programme and by the unsettled balances in TARGET2.

They also omit all contingent liabilities, especially those of the highest EU-level institutions, including the EU itself, the ECB, the ESM, and the EIB—all of which have low loss-absorption capacity of their own. They omit the liability of member state governments through their national bank deposit guarantee schemes, which are unfunded, and the liability of the Italian and Cypriot governments for the guarantees they have issued in connection with the securitisation of their banks' NPLs.

Accordingly, the risk of default on these debts is much higher than generally realised, first because the debts are higher, and secondly because the Eurozone sovereigns—which are ultimately liable for the debts of both EU-level institutions and public sector entities, as well as the contingent liabilities—are not genuine sovereigns, having surrendered many of the instruments of financial sovereignty to the EU-level institutions. In particular, they cannot ask their NCBs to print money to pay back their debts in a way that a genuine sovereign country can. Because the debt is greater and the risk of default is higher, the loss-absorption capacity within the Eurosystem is correspondingly lower than it appears.

The second issue is the size of NPLs. The official ECB estimate is €80 bn (or 3.8% of bank total loans), down from €1 trn (or 8%) in 2014. NPLs are very high in the southern states of the Eurozone. Italy has a quarter of the Eurozone's NPLs and they are in excess of 40% of total loans in both Cyprus and Greece.

But official estimates exclude the NPLs which have been hidden off-balance-sheet through securitisations and which the ECB treats as being reversed out of NPL status through "restructurings" and "forbearance". In reality, these loans can be categorised as "zombie" loans liable to fall back into NPL status at any time. Further, we argue that the 3.8% figure represents a potentially insufficient write-down on the face value of the loans that sit in NPL status, and Eurozone banks are using over-optimistic risk-weighted assets methodologies on all of their business lines.

The Eurozone banking system is currently able to meet its liabilities as they fall due only because of the ECB's QE programme of €2.9 trn and the Eurosystem's "hidden" lending to banks of €3.1 trn, totalling €6 trn of monetary support from the European authorities.

In total, the Eurosystem owns or controls as collateral an amount that equates to 64% of the "general government gross debt" of the 19 Eurozone countries.



# **TECHNICAL ANALYSIS**



# TECHNICAL ANALYSIS

## Contents

Key background – framing the problem .....	20
1. The problem: a fundamental flaw in the Eurozone's legal architecture, with zero-risk weighting of EU sub-sovereign bonds causing global systemic risk.....	22
2. How TARGET2, the QE programme, the EIB Group and bank NPLs augment the problem.....	37
3. The Eurozone's use of misleading accounting practices.....	42
4. Quantifying the scale of the problem.....	42
5. Exacerbating Factors .....	59
Factor 1: use of bank resolution to offload risk from member state retail (and other) depositors and investors into global markets.....	59
Factor 2: pressure to maintain local member state banks .....	61
Factor 3: central counterparties used to offload additional member state risk into global markets.....	62
Factor 4: use of securitisations in a manner that obscures member state bank risk.....	63
Factor 5: control of ratings of credit rating agencies .....	64
Factor 6: potential offloading of member state risk into global financial market through pan-EU deposit insurance .....	65
6. Risk transmission and exposure of the global financial system to potential contagion and a doom loop.....	66
7. How the UK currently mitigates Eurozone risk – and how the EU27 and US do not...	73
8. Can the EU fix the problem? .....	81
9. Enhanced Equivalence: a comprehensive solution for dealing with the EU's sovereignty problem .....	85
10. What is the fallback option for the UK and US if the EU does not cooperate in managing the risk it has created?.....	87
11. The UK and US, the UK's European Connectivity and the importance to the financial markets of the common law 'method' .....	88
Conclusions.....	91

Annex 1 : Shortcomings of Information and Areas of Enquiry into the Eurosystem .....	93
Annex 2 : The European Investment Fund .....	105
Annex 3 : The European Fund for Strategic Investments .....	111
Annex 4 : EBA Stress Tests .....	117
Annex 5 : ECB Supervisory Review and Evaluation Process (SREP) 2019 Outcome.....	127
Annex 6 : The Eurozone Liquidity Problem.....	130
Glossary of Terms Used.....	134

## TECHNICAL ANALYSIS

*The European Union has applied the Basel Rules to Eurozone member state government bonds and accounting treatments to the Eurosystem in a way that threatens to undermine the global financial system, particularly after Brexit. In the following Technical Analysis, we provide the evidence to support and quantify this assertion. We then propose a solution that will help the Eurozone, whilst preserving the integrity of the global financial markets.*

### **Key background – framing the problem**

From the 1970s, globalisation started to occur significantly in the financial markets. Ever-increasing demands by businesses all over the world for capital to fund their growth have been met by global financial institutions procuring that capital from beyond the specific jurisdictions where their clients are located. This globalisation has accelerated, particularly since the early 1990s. Meanwhile, given the increasing financial exposures generated by the cross-border provision of capital, there has been a significant effort by the major economies to agree and apply common rules to ensure the world's financial system is resilient. These rules have sought to manage financial risk arising from individual financial institutions and also systemically. An agreed framework for financial regulation started tentatively to be created with the formation of the Basel Committee on Banking Supervision (Basel Committee) as an international standard-setting forum for central banks and regulators at the end of 1974. In fits and starts, this produced common rules, beginning in 1988 with Basel I, then continuing in June 2004 with Basel II (which was not fully implemented in the US) and now, after the 2007-8 Global Financial Crisis, adopting Basel III. Basel III has achieved extensive harmonisation in financial regulation across the G20 and beyond. Its core rulemaking focus has necessarily been on banks. Banks are at the heart of the financial system, since their businesses maintain mismatched maturities between assets and liabilities and therefore need to hold sufficient liquid assets to meet deposit withdrawals, together with carefully calibrated amounts of loss-absorbing capital to withstand significant foreseeable losses and avoid contagion through the effects of a sudden loss of confidence (i.e., bank runs).

During this period, in 1999, the euro was created. This established a common currency between 11 of the then 15 member states of the European Union; and now 19 of the 27 members of the EU are in the Eurozone. In law, the Eurozone has been established within the EU's existing legal architecture, with limited separate legal personality, largely limited to the ECB, the EU's own central bank, which is controlled jointly – but not individually – by the participating member states. The Eurozone was not established as a legal state, so it did not issue debt or manage a Eurozone budget, nor is there a single sovereign behind the euro currency. Instead, Eurozone member states remain sovereign over the raising of the debt they need and, to a limited degree, over their budgets. However, there is no joint-and-several liability between member states for each other's debt, nor for the liabilities of the ECB. Amongst Eurozone member states, there is ongoing discussion concerning some level of fiscal consolidation, combined with a pan-Eurozone bank deposit guarantee arrangement, which would go some way towards achieving financial integration, but which would not achieve joint-and-several liability. Meanwhile, as discussions over consolidation take place, some Eurozone member states have taken on increasing and very significant levels of debt. For example, we estimate that the total national debts of Italy and Spain could be as high as 167% and 138%, respectively, of their GDP – that is 33% and 40% higher than the official measures. There is no legal infrastructure in place that guarantees that these debts will be repaid, despite the EU claiming that they have the status of sovereign debts. As debt levels continue to grow, the Eurozone itself becomes increasingly vulnerable. The resulting financial risk to the global financial markets, arising from Eurozone exposures, currently passes through and is currently supervised in the world's two global financial centres, the UK and US.

Brexit—the UK's departure as a member state of the EU on 31 January 2020—will require an adjustment in the global regulatory architecture, since the UK will no longer be part of pan-EU financial regulatory rulemaking and EU supervisory oversight. The UK will need to develop new ways of managing its financial markets and their exposure to Eurozone risk. With Brexit, the EU seeks to protect and enhance the Eurozone project by ensuring that any post-Brexit trade deal with the UK involves EU influence – if not control – over the UK's financial (and other) laws and regulations. This is being promoted as a necessary requirement for maintaining a "level playing field" after Brexit, but, in practice, it would mean that the UK becomes a "rule-taker" from Brussels on an ongoing basis. The EU also seeks continued access to the external finance needed to secure its long-term aim of full legal and fiscal consolidation. At the same time, some member states wish to seize the opportunity to encourage the relocation of financial business from the UK to their own states.

However, all this overlooks four points which, together, create a real danger for the world's financial markets by introducing huge risks into those markets and creating significant exposures for world economies. It fails to consider:

- The fundamental design flaw in the legal architecture underpinning the Eurozone, which treats both the Eurozone and its member states as sovereign, when this is mutually incompatible.
- The extent of existing Eurozone member state debt that is not jointly-and-severally guaranteed in law and which is not readily apparent from publicly available accounts.
- The fact that the true situation might be worse than is visibly apparent, given Eurozone accounting practices – and that it may be worse still, given the opacity of that accounting.
- The fact that EU and Eurozone regulators are not in a position to manage significant financial business effectively, since they are structurally unable to reconcile the conflicting need to maintain the viability of the Eurozone with the need to regulate for financial safety and soundness.<sup>19</sup>

Each of these factors is embedded in and a consequence of the Eurozone's very structure and cannot be resolved politically by the EU in the foreseeable future. Properly categorised, the Eurozone member states are in fact "sub-sovereign", lacking the full powers of a sovereign state. Each element of the Eurozone financial system is arguably only solvent because of the way it accounts for its business with the other elements. Take, for example, banks. Eurozone banks have significant holdings of Eurozone government bonds, which we argue are overvalued on the basis of the true credit risk they entail. Similarly, banks have systematically overvalued the NPLs of their commercial and retail customers—which exceed 40% of all bank loans in countries such as Greece and Cyprus—by discounting them but then treating the residual or rump loan as "performing" – a treatment premised on the borrower being able and willing to achieve partial repayment in spite of evidence that the other portion of the loan will not be recovered. The ECB estimated that the total value of NPLs in the Eurozone as of June 2019 amounted to €80 bn (or 3.8% of total loans).<sup>20,21</sup> These figures infer a nominal amount of loans of €15.26 trn, higher by €3.7 trn than the figure for total loans given in the ECB statistical database for the end of June 2019 of €11.91 trn. The level of NPLs is down from almost €1 trn (or 8% of total loans) in

<sup>19</sup> The "safety and soundness" of the European banking (and hence financial) system is one of the key aims of the EU's Single Supervisory Mechanism: <https://www.bankingsupervision.europa.eu/about/thessm/html/index.en.html>.

<sup>20</sup> "Non-performing loans in the euro area – where do we stand?", Speech by Andrea Enria, Chair of the Supervisory Board of the ECB, at the Conference "EDIS, NPLs, Sovereign Debt and Safe Assets" organised by the Institute for Law and Finance, Frankfurt, 14 June 2019. <https://www.bankingsupervision.europa.eu/press/speeches/date/2019/html/ssm.sp190614~bee1d0f29c.en.html>.

<sup>21</sup> We believe that there is systematic over-valuation of Eurozone bank assets. While the NPLs may have some realisable value, so the entire 3.8% may not constitute an unrealised loss, this figure excludes the NPLs which have been hidden off-balance-sheet through securitisations and which the ECB treats as being reversed out of NPL status through "restructurings" and "forbearance", whereas in reality these loans can be categorised as "zombie" loans liable to fall back into NPL status at any time. Further, we argue that the 3.8% figure represents a potentially insufficient write-down on the face value of the loans that sit in NPL status, and Eurozone banks are using over-optimistic RWA methodologies on all of their business lines.

2014, implying a nominal amount of loans of €12.50 trn. Eurozone banks do not have the regulatory capital (and hence loss-absorption capacity) in place to cover the credit risk involved and are, as a consequence, heavily under-capitalised.<sup>22</sup> By the same token, other financial institutions using Eurozone government bonds as collateral are heavily under-collateralised. The resulting risk is absorbed into the global markets and can no longer be accurately identified, isolated and managed by firms or their regulators. Rectifying the situation will be extremely costly, since it would require the issuance of considerable amounts of regulatory capital and a much-reduced utility for member state government bonds as collateral and as a form of liquid asset. This, in turn, will make it much more expensive for both companies and governments in the Eurozone to raise funds for investment and will have a negative impact on economic growth.

In view of this, the immediate solution is for financial business conducted in the UK to remain there and not to be lured into the EU or Eurozone. If the EU wishes to preserve the considerable financial benefits of its current unfettered access to the UK's global markets, it will need to enter into a new trading relationship with the UK that provides for certainty for the financial markets and accepts the UK's new, autonomous management of the entire financial sector as well as linked sectors, in the manner we outline in this paper. We analyse the different components of the Eurozone problem and explain why an Enhanced Equivalence-based trade arrangement in financial services after Brexit would be the optimum solution for the Eurozone, not only helping the Eurozone in its development process but also facilitating the evolution of effective regulation for the global financial system.

In essence, the EU has applied the Basel Rules to Eurozone member state government bonds and accounting treatments to the Eurosystem in a way that threatens to undermine the global financial system, particularly after Brexit. This is not well understood by governments, financial regulators, and financial institutions in the EU or globally – as well as the vast majority of financial journalists. We propose a solution that will help the Eurozone, whilst preserving the integrity of the global financial markets.

### **1. The problem: a fundamental flaw in the Eurozone's legal architecture, with zero-risk weighting of EU sub-sovereign bonds causing global systemic risk**

The core of the problem is the failure to recognise the sub-sovereign nature of Eurozone member state debt when applying the international Basel Rules on regulatory capital. In short, EU regulations have been crafted with a view to facilitating the construction of the Eurozone by allowing the continuing treatment of member states as sovereign, whilst transferring their individual powers to issue currency to the ECB. In so doing, they cut across the global Basel system of regulation, misleadingly treat Eurozone member state debt as "sovereign" for Basel regulatory capital purposes and mask the true underlying risks. None of the Eurozone member states has control over the central bank issuer of the currency, the ECB. The sovereignty underpinning the system is, in fact, dispersed between member states and the ECB, leaving no single entity with full sovereignty. This inherent weakness lies at the root of a flawed EU application of the Basel Rules across the entire Eurozone architecture. At its most basic, it enables debts issued by Eurozone member states to be held by EU member state banks as if they were risk-free investments, even where the member states involved have much weaker third-party credit ratings than the AAA/AA- (S&P's) or Aaa/Aa3 (Moody's) ratings that are deemed to be compatible with a genuine risk-free investment. However, it goes deeper than that by treating public sector entities and other member state-connected debt issuers as unduly creditworthy. As will be shown, this treatment of Eurozone-connected debt means the Eurosystem<sup>23</sup> and the Eurozone's financial

---

<sup>22</sup> There are those who think the global banking system as a whole is over-capitalised because the Basel Rules have required too much capital to be issued across the board. The point here is different. The Basel Rules have effectively been disapplied for a major source of risk, which leaves the Eurozone under-capitalised under the Basel system, however calibrated.

<sup>23</sup> The Eurosystem, short for the Euro System of Central Banks, is a collective term for the ECB and the NCBs of the Eurozone member states. The Eurosystem is not a legal person and cannot contract assets and liabilities of its own. "Eurosystem assets and liabilities" are held either by the ECB or by one of the NCBs.

institutions are under-capitalised and under-collateralised. The risks inherent in the debt are not offset by loss-bearing capital and the debt is at the same time being used as collateral within the system at levels which do not reflect the risk of non-repayment. It is also being used as a liquid asset when its creditworthiness means it cannot be treated as such.

### 1.1 The Basel Rules and how they should be applied

The Basel Rules provide for globally agreed regulatory capital standards. They are very detailed, particularly in light of the 2007-8 financial crisis and the introduction of the Basel III regime for bank capital adequacy. The specific problem is the EU's rules for the regulatory capital—essentially equity and subordinated debt—required to be issued by banks and investment firms (in this context, broker-dealers taking on significant credit risk) for their holdings of Eurozone member state government debts.<sup>24</sup> These EU regulatory capital requirements are purportedly in conformity with the Basel Rules but are, in fact, incorrect in their application.

*What do the Rules do?* The Basel Rules seek to ensure that banks cover all but the most extreme risks<sup>25</sup> they run by maintaining on their balance sheets adequate, internationally agreed amounts of capital capable of absorbing reasonably foreseeable losses. There are various different components to that risk. The principal ones identified by the Basel Rules are credit risk, market risk and operational risk. The issues discussed in this paper relate to credit risk, which is the risk of a counterparty defaulting or otherwise failing to perform on its obligations under a specific piece of business. For holders of debt<sup>26</sup> issued by governments or others, credit risk is the risk of default by the issuer on an obligation to pay interest or to repay the principal at the end of the debt's term. The ingredients of the credit risk are, first, the financial capacity of the issuer (counterparty risk) and, second, the risk implied by the terms for the specific piece of business agreed between the parties, such as the tenor<sup>27</sup> and any security offered to investors (facility risk). By requiring a bank to issue loss-absorbing capital to cover the credit risks the bank is running, the regulatory capital rules seek to reduce the consequences of a default on the repayment by the bank's borrowers, which, in turn, reduces the chances of the bank itself "failing or [becoming] likely to fail" as a result of the counterparty default.<sup>28</sup> The lack of a normalised application of the international standards to EU-based banks and investment firms in their holdings of Eurozone member state government debt gives rise to intra-EU systemic risk which, due to the interconnectivities of the financial markets, also creates systemic risk globally. The EU has applied the Basel Rules to Eurozone member state government debt in a way that introduces unmanaged risk<sup>29</sup> into the financial system. In other words, the EU is allowing banks registered in the Eurozone to operate with insufficient loss-absorbing capital to manage the credit risk associated with their holdings of Eurozone member state government debt.

*How do the Rules apply?* International bank regulatory capital rules are determined by the Basel Process, which arises through a forum for cooperation under the auspices of the Bank of International Settlements (BIS) aimed at achieving global monetary and financial stability.<sup>30</sup> The Basel Process sets out regulatory capital standards regarding the minimum capital required by banks supervised by BIS

<sup>24</sup> Eurozone member state government debts are taken on by these governments individually, and in the form of both loans and bonds. The term is often shortened to "Eurozone government bonds", which is misleading in two ways: it excludes loans and it infers there is a Eurozone government, when there is not.

<sup>25</sup> An extreme risk is defined as one that is likely to occur only once in 200 years.

<sup>26</sup> Debts or claims are terms that refer to both obligations based on loans that are borrowed and on bonds that are issued. When a bank owns debts of or claims on another party, they are accounted for as an asset in the bank's balance sheet and as a liability in the balance sheet of the other party.

<sup>27</sup> The length of time remaining before a financial contract expires.

<sup>28</sup> The "failing or likely to fail" test is set out in the EU's BRRD and it has replaced any member state national insolvency tests for banks. The determination of whether a bank is failing or likely to fail is made by the bank's prudential regulator, in consultation with the resolution authority. The resolution authority will decide whether the bank should be resolved under the BRRD or whether it should be wound down under the national insolvency rules of the bank's country of incorporation. In the Eurozone, the ECB is the prudential regulator for the largest banks and the SRB is the resolution authority for all Eurozone banks.

<sup>29</sup> An unmanaged risk is one that is not hedged or covered.

<sup>30</sup> For more information about the BIS, see the BIS Committees and Associations page: <https://www.bis.org/stability.htm>.

members,<sup>31</sup> with enhanced requirements for "global systemically important financial institutions" (GSIFIs). These standards are referred to as the Basel Rules. Countries participating in the Basel Process seek to implement the Basel Rules as a matter of domestic law. The EU seeks to implement the Basel Rules within the EU for all banks (including smaller banks) and investment firms that are incorporated in the EU.<sup>32</sup>

Under the Basel Rules, holdings by banks of different types of debt are required to be covered by different amounts of regulatory capital. In calculating a particular amount, a debt's principal value<sup>33</sup> is adjusted to reflect an assessment of the likelihood of the debt being repaid – its "risk-weighting". This takes account of both counterparty risk and facility risk. A risk-weighting of 80%, for instance, takes 80% of the principal value of a debt as the amount requiring to be assessed for regulatory capital purposes. A lower risk-weighting indicates a lower chance of issuer default.

The bank then has to issue the necessary fraction of this risk-weighted amount as regulatory capital. That fraction is determined through the two Pillars of the Basel framework. Pillar 1 ("minimum capital requirements") sets the minimum rules applicable in all jurisdictions, and Pillar 2 ("supervisory review") furnishes national financial regulators with discretionary tools for managing otherwise uncaptured risks such as systemic risk, concentration risk, reputational risk, and liquidity risk. Under Pillar 1, there is a minimum of 7% of so-called "Common Equity Tier 1" (CET1) capital. The minimum can be revised upwards in two ways. First, there is an extra loading of between 1% and 3.5% if the bank is a GSIFI. The Financial Stability Board<sup>34</sup> (FSB) issues an annual list of such banks,<sup>35</sup> each being allocated into one of the five levels that drive the amount of the extra loading<sup>36</sup>. Second, national regulators may from time to time impose their own extra loading on the banks within their purview, called the "counter-cyclical buffer", the aim of which is to increase the cost of credit to both banks and borrowers and thereby dampen down excessive expansion of credit.

In total, therefore, for a debt risk-weighted at X%, the associated regulatory capital is equal to the Nominal amount of debt  $\times$  X%  $\times$  the bank's currently applicable fraction of regulatory capital. The bank's applicable fraction will be 7%, raised by between 1% and 3.5% if the bank is a GSIFI, plus any current counter-cyclical buffer. If that fraction is currently, say, 8%, then a debt of nominal value €50 mn, which has a risk-weighting of 100%, must have €4 mn of capital set against it. If the risk-weighting is only 25%, then the required capital falls to €1 mn.

There are two methodologies which the Basel Rules permit banks to use in calculating their risk-weightings. First, the bank can apply the standardised weightings set out in detail in the Basel Rules, many of which are determined by reference to credit rating agency assessments. Second, they can

<sup>31</sup> Note that some banks are supervised by a regulatory authority other than the relevant BIS member. For example, banks in the US are supervised by the Office of the Comptroller of the Currency rather than the Federal Reserve.

<sup>32</sup> The EU implementation of the Basel Rules is through the Capital Requirements Regulation (Regulation (EU) 575/2013) and the Capital Requirements Directive (Directive 2013/36/EU). Both of these pieces of legislation have recently been amended, in part to implement the FSB's Total Loss Absorbing Capacity (TLAC) requirement. There are transitional provisions for certain aspects, but, in general, the revisions to CRR will apply directly across the EU from 28 June 2021. Subject to certain exceptions providing for later application dates, the revisions to the CRD must be transposed into member state law and applied from 29 December 2020.

<sup>33</sup> The principal value is the amount borrowed, as stated in the loan agreement or in a bond's trust indenture. "Nominal value" and "face value" are synonyms for "principal value".

<sup>34</sup> The FSB is an international body that monitors and makes recommendations about the global financial system. Its mandate is as follows: "The FSB promotes international financial stability; it does so by coordinating national financial authorities and international standard-setting bodies as they work toward developing strong regulatory, supervisory and other financial sector policies. It fosters a level playing field by encouraging coherent implementation of these policies across sectors and jurisdictions. The FSB, working through its members, seeks to strengthen financial systems and increase the stability of international financial markets. The policies developed in the pursuit of this agenda are implemented by jurisdictions and national authorities": <https://www.fsb.org/>.

<sup>35</sup> <https://www.fsb.org/2019/11/fsb-publishes-2019-g-sib-list/> accessed on 11/26/19 for the 2019 update.

<sup>36</sup> To simplify matters, we have not mentioned here the possibility of an institution having extra requirements placed upon it by dint of being nominated as a "domestic systemically important bank" (D-SIB) or as an "other systemically important institution" (O-SII). These requirements might also interplay with GSIFI requirements, since a GSIFI will normally be a DSIB/O-SII in one or more countries as well.

calculate their exposures using internal risk models, which are built using the banks' own historical loss data, supplemented or supported by externally-sourced data from data vendors. This latter method is referred to as the internal ratings-based (IRB) approach.<sup>37</sup>

The same issue of risk-weightings that are too low manifests itself in the valuation of collateral, where this is taken by one party to secure a debt owed to it by another. The collateral should be both liquid—meaning it will be a debt based on a bond (which is transferrable) and not a loan—and have a current value in excess of the debt. The size of this excess is customarily referred to as the "haircut" and is expressed as a percentage, meaning that the face value of the collateral, less the haircut, is the maximum amount that should be lent against the collateral. The haircut exists to take account of the possibility of a deterioration in the market's perception of the credit risk of the collateral, as well as of a rise in absolute interest rates or in the shape of the yield curve that increases the yield-to-maturity demanded by buyers in the secondary market. Given that the interest coupon on such a bond is fixed, an increase in yield-to-maturity is brought about by a fall in price. This is known as market risk and affects a lender when they attempt to sell repossessed collateral and find that the discount demanded from the face value by investors exceeds the haircut – even when there is no change in credit risk. Lenders are wise to apply haircuts of 15 – 20% on readily-marketable securities in order to mitigate this risk, and even higher haircuts if they are accepting collateral that is not readily-marketable, e.g., in the form of real estate, aircraft or ships. Within Eurozone financial markets, the prime manifestation of haircuts is in the Eurosystem eligible collateral list for monetary and payment operations. The list runs to 25,000+ bond issues, with a haircut stated against each one. These haircuts have been arrived at by applying the same principles as underlie the risk-weighting of debts owned by Eurozone banks.

## 1.2 How the Basel Rules treat the debts of genuine sovereigns and how the Eurozone bends the Rules

The standardised treatment under the Basel Rules for the risk-weighting for sovereign debts is that they are banded into categories according to the external credit rating of the sovereign. Debt issued by AAA to AA- rated sovereigns is 0% risk-weighted, requiring no loss-absorbing capital to be issued by banks in respect of such exposures. For sovereigns rated A+ to A-, only 20% of the principal amount of the bonds needs to be included in banks' regulatory capital calculations.<sup>38</sup> Exposures to the BIS, the International Monetary Fund, the European Union, the ECB, the ESM and the European Financial Stability Facility (EFSF) are permitted a 0% risk weight.<sup>39</sup>

However, there is an important dispensation permitted under the Basel Rules, whereby a claim on a sovereign in that sovereign's own currency can be accorded a 0% risk-weighting, regardless of the sovereign's external credit rating, and ignoring whether the currency involved—the sovereign's own—is truly a sovereign currency in the manner contemplated when this dispensation was drafted.

The Basel Committee itself notes that "in practice, all Committee members currently exercise this discretion and set a 0% risk weight".<sup>40</sup> *This is the root of the problem with the Eurozone: member states allow their banks to classify claims in euros on Eurozone member states as risk-free, even though*

<sup>37</sup> CRE 20.1 of the Basel Framework sets out two methodologies for banks calculating their risk exposures. The first option is a standardised approach that prescribes specific risk-weights for different exposures. The second option is an internal ratings-based (IRB) approach. Subject to de minimis conditions, banks that are permitted to do so by their regulator may use: (1) internal estimates of risk components and (2) prescribed formulae in order to calculate risk-weights (CRE 30.1-2 and Articles 143(1) and 153(1) of the CRR). The 0% risk-weight under the standardised approach acts as a benchmark for IRB calculations, incentivising and justifying banks in following an approach close to or at the 0% risk treatment. See also: <https://www.risk.net/definition/internal-ratings-based-irb-approach>.

<sup>38</sup> The risk-weights for the ratings are: AAA to AA-: 0%; A+ to A-: 20%; BBB+ to BBB-: 50%; BB+ to BB-: 100%; below B-: 150%; unrated: 100%. Different risk-weights are possible where a national regulator recognises the ratings of an Export Credit Agency. Basel Committee on Banking Supervision, Basel III: Finalising post-Crisis Reforms, December 2017.

<sup>39</sup> Basel Committee on Banking Supervision, Basel III: Finalising post-Crisis Reforms, December 2017.

<sup>40</sup> See fn 58 below. For more on the Basel Committee, see the European Parliament's Briefing Note *The Role of the Basel Committee on Banking Supervision*: [http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/587390/IPOL\\_BRI\(2017\)587390\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/587390/IPOL_BRI(2017)587390_EN.pdf).

*the Eurozone member state is not the sole user of the currency and does not control the currency in the way in which Japan controls the yen or the US controls the US dollar.* The counterparty risk component of credit risk is thus set at 0% for all business that banks conduct with that sovereign. With this component set at 0%, it does not matter at what level the facility risk component (taking account of tenor and security) is set. When counterparty risk and facility risk are multiplied together and the overall risk-weighting for credit risk is arrived at, since counterparty risk is weighted at 0%, the overall risk-weighting for the credit risk will be 0%.

### **1.3 *The Capital Problem: incorrect application of the Basel Rules, given the sub-sovereign status of Eurozone member states***

A problem with the legal construct of the Eurozone therefore arises from this application of the Basel Rules for Eurozone member state government debts. The EU permits the Basel treatment of high-quality sovereign debts and of central bank and global financial system debts to be extended to Eurozone member state government debts, without amendment. Under the Capital Requirements Regulation (CRR),<sup>41</sup> which is the regime by which the EU applies the Basel Rules within the EU, Eurozone member states are treated as sovereign in a manner that matches the treatment of any genuinely highly rated sovereign state, such as Japan or the US. However, the EU fails to discriminate among the bonds issued by the member states as to their creditworthiness and fails to take account of the incomplete legal framework behind the euro as a currency. For banks using the standardised approach to regulatory capital under the CRR, Eurozone member state government debts are risk-weighted at 0%, just like OECD sovereign debts of a country with the highest creditworthiness.<sup>42</sup> A similar approach is permitted for banks applying the IRB approach,<sup>43</sup> although the IRB approach, in principle, allows for upward adjustments. As a result, the EU treats these bonds as akin to risk-free cash.

The upshot is a system-wide overvaluation of assets, and a consequent shortfall in regulatory capital and loss-absorption capacity in the EU27's financial institutions sector.

### **1.4 *The Collateral Problem***

Collateral should be tradeable and liquid; hence it is likely to consist of bonds and not loans.<sup>44</sup> The lender should lend less than the face value of any collateral to take account of the possibility of a deterioration in the market's perception of the credit risk of the collateral, as well as market risk in the form of a rise in absolute interest rates or in the shape of the yield curve that increases the yield-to-maturity demanded by buyers in the secondary market, and hence reduces the realisable price of the collateral. Risk-weightings are expressed in a different manner when accepting the debt of an issuer as collateral – as a security margin or haircut. The result is an under-collateralisation across the EU27 financial institutions sector.

A similar treatment is given to Eurozone member state debts held by the ECB and by the NCBs of the Eurozone member states, both as collateral beneficiaries for loans extended to banks through the modules of the TARGET2 payment system and as owners under the QE programme.<sup>45</sup> This supra-sovereign aspect is explained further in section 1.8 below.

---

<sup>41</sup> Regulation (EU) No 2013/575/EU.

<sup>42</sup> See fn. 38 above. The permissive standardised approach to regulatory capital tends to be in use by the smaller banks in which risks to Eurozone debt may be most acutely concentrated. The standardised approach is mechanical in its application and does not take account of any data on the actual losses experienced by the bank. The multitudes of smaller banks, which tend to use this approach, are therefore particularly exposed.

<sup>43</sup> See fn. 37 above.

<sup>44</sup> Loans can be made tradeable through such devices as Transferable Loan Certificates, Assignment or Novation. However, these devices, rarely if, ever result in a financial instrument that is listed on an exchange, or for which there are active secondary market-makers. The financial instrument is therefore not liquid in a meaningful sense, in which case it is ineligible as collateral.

<sup>45</sup> TARGET2 is discussed in section 2.1 below, while the QE programme is discussed in section 2.2.

The same debts are also relied upon by CCPs<sup>46</sup> as collateral lodged by financial institutions which have margin liabilities to them. CCPs hold the debts as collateral margin at full face value, a situation they will become increasingly unable to alter as their "colleges" of regulators—the set of institutions that set their rules—fall under the control of the EU financial services authorities. Under the latest amendments to the European Market Infrastructure Regulation (EMIR),<sup>47</sup> known as EMIR 2.2,<sup>48</sup> the ECB itself will obtain numerous powers over CCPs, which could be used to impose consistently the inappropriate 0% treatment of Eurozone member state bonds. As things stand, CCPs, including, in particular, those in the UK, are able to decline to accept those bonds or to apply a haircut to the value at which they hold them.<sup>49</sup>

### 1.5 *The Liquidity Problem*

The same treatment has an important knock-on effect for the EU's implementation of the Liquidity Coverage Ratio (LCR), which is meant to ensure that banks can remain liquid in times of stressed financial markets and can meet their near-term liabilities and cash outflows as they fall due.<sup>50</sup> Banks must make a calculation of their near-term liabilities and likely cash outflows and demonstrate that they have sufficient High-Quality Liquid Assets (HQLAs) to meet those liabilities and outflows. Different types of asset can qualify as HQLAs and they are normally all bonds since they are more liquid than loans – but not all can be included in the calculation at full face value, without a haircut. There are three levels of HQLA: Level 1 counting at full face value, Level 2A counting at 85% of face value, and Level 2B counting at between 50 – 75% of face value. When bonds are allocated a 0% risk-weighting under CRR, they qualify as Level 1 HQLAs with no haircut,<sup>51</sup> as opposed to the Level 2A in which a 15% haircut would apply if the sovereign only enjoyed a 20% risk weight under CRR.<sup>52</sup> Because EU authorities allow the Eurozone's Level 2A bonds to enjoy a 0% risk weight, they are elevated to Level 1 status under LCR, strongly incentivising banks to hold them because they count for their full face value with no haircut.

Beyond whether Eurozone banks are as liquid as they appear, there is a question mark over the entire Eurozone bond market and its liquidity, with such a large proportion of it being held either within the ECB's QE programme (€6.6 trn), or as collateral behind the Eurosystem's loans to "monetary financial institutions" (€3.1 trn, primarily lent to banks), or as collateral for the TARGET2 debts that the Eurozone NCBs owe one another. The total bond market size itself is opaque, as is how much remains in private hands and is not tied up as a buy-and-hold investment in the Eurosystem programmes mentioned above. Rating agencies – pivotal to bond markets – have come under state control,<sup>53</sup> and clearing houses are increasingly doing so.<sup>54</sup> Furthermore, the immediate prospect is for a deterioration as a result of the mandatory buy-in provisions of the Central Securities Depositories Regulation (CSD Regulation),<sup>55</sup> being implemented in 2020. It is questionable whether the market is even as liquid as it was at the time of the Eurozone sovereign debt crisis in 2011-2, as the measures taken and planned by the authorities direct markets towards adopting risk assessments and trading positions that underpin the authorities' own interests, and control and even punish contrary and independent trading positions and assessments. This diminishes or drives out the layer of trading actors who make the market liquid. In effect these independent actors are no longer allowed to act in a way that contradicts the financial

<sup>46</sup> Also known as clearing houses.

<sup>47</sup> Regulation (EU) No 648/2012.

<sup>48</sup> Regulation (EU) No 2019/2099.

<sup>49</sup> EMIR, art. 46, read with the related Regulatory Technical Standards (Commission Delegated Regulation (EU) No 153/2013).

<sup>50</sup> Documented by the BIS document BCBS238, Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, dated January 2013.

<sup>51</sup> *Ibid*, paragraph 50(c) on page 18.

<sup>52</sup> *Ibid*, paragraph 52(a) on page 19.

<sup>53</sup> See Factor 5 in section 5.

<sup>54</sup> See the discussion of EMIR 2.2 under Factor 3, in section 5.

<sup>55</sup> Regulation (EU) No 909/2014.

interests of authorities, meaning the markets are no longer free markets but serve the interests of the state actors that supervise them. Further details are set out in Annex 6.

### 1.6 Why the EU's approach is wrong

The EU's approach fails to discriminate among the bonds issued by member states as to their creditworthiness.<sup>56</sup> More importantly, however, the EU deviates from the approach adopted in the Basel Rules in treating Eurozone member state government bonds as warranting sovereign treatment at all.<sup>57</sup> Those Rules should apply only to sovereign debts issued by states in control of a central bank issuer of their own currency. Eurozone member states are instead "sub-sovereign" since they have no such control. The rationale for sovereign debts enjoying special treatment under the Basel Rules is based on the presumption of their being issued by governments whose central banks can print their own currency. In that case, the government, acting through its central bank, retains the necessary powers to create money to make coupon and principal payments and hence avoid any default. This is an important sovereign power that can only be exercised by a government that has sovereign control of its own currency, and it lends to the debts of that government in its own currency a quality that is matched neither by the same government's debts in a foreign currency nor its debts in a shared currency.

The Basel Rules do make a differentiation for the treatment of debts issued by a government in a foreign currency, where the government does control its own domestic currency: the government can issue more of its own currency, exchange it in the foreign exchange markets for the currency in which the debt is denominated and make its debt service payments. However, this entails significant risks, both in terms of the government's ability to obtain the foreign currency at all and in terms of the amount of its own currency it will have to issue in order to obtain a fixed amount of the foreign currency. In practice, any doubts about the government's ability to repay its debts will lead the markets to drive down the international value of the government's own currency, making it even more difficult for the government to service its debts. This is an additional risk for the investor or lender to whom the debt is owed, compared with the situation where the debt is in the government's own currency. Basel Rules recognise this increased risk but their frame of reference contrasts a domestic currency debt of a government that has sovereign control of its currency with a foreign currency debt of a government in the same circumstances.

Eurozone member state debt does not fit into either set of circumstances. In fact, the quality is lower than either a domestic or foreign currency debt issued by a country with sovereign control over its own currency. A Eurozone member state cannot issue more "domestic" currency, whether to meet its debts in euros or to create euros to sell in the foreign exchange markets to service its debts in foreign currency. The power to issue more of the "domestic" currency—the euro—has been ceded exclusively to the European-level monetary authorities.

As things stand, therefore, the Basel risk-weighting for exposures to sovereigns and central banks ranges, in theory, from 0% to 150% for exposures denominated in either the domestic or the foreign currency, starting with lower risk-weights for exposures to stronger credit-rated counterparties, as mentioned above. In addition, exposures in a domestic currency are permitted to be 0% risk-weighted

---

<sup>56</sup> Others have made the same point, notably in response to discussion paper: Basel Committee on Banking Supervision, *The Regulatory Treatment of Sovereign Exposures*, December 2017. Responses are available at <https://www.bis.org/bcb/publ/comments/d425/overview.htm>. However, no action has yet been taken.

<sup>57</sup> This fact was discussed in a 1987 Basel consultation paper and a 1988 Basel I paper. The Basel Committee members outside the European Community (EC) considered the EC's approach to EC member state sovereign risk as unattractive and put them at a competitive disadvantage. The Basel Committee noted that the approach resulted in asymmetry among the Basel Committee members, whilst also noting that at the time its practical importance would not be significant due to the relatively low level of cross-border business undertaken by banks located in the EC. In addition, these papers highlight how the original Basel Rules were intended to address the risks presented by different types of sovereign and resulted in the distinction between the treatment for sovereign debt issued by OECD countries and non-OECD countries. See Bank for International Settlements, Committee on Banking Regulations and Supervisory Practices, *Proposals for International Convergence of Capital Measurement and Capital Standards*, December 1987, and the related Basel I paper, *International Convergence of Capital Measurement and Capital Standards*, July 1988.

if the state applies a permitted national discretion to adopt such a treatment, so long as its sovereign exposures are "issued and funded" in its domestic currency.<sup>58</sup> In practice, all Committee Members currently take advantage of this discretion for their government borrowings in their domestic currencies.<sup>59</sup> For Eurozone member states, the question arises as to whether that approach should be followed or whether it would leave some credit risk unmanaged—as it is not envisaged in the Basel Rules—such that a modification is required to take account of the circumstances of the Eurozone.<sup>60</sup>

To reiterate, there are fundamental differences between the position of Eurozone member states and of normal sovereigns outside the Eurozone. Eurozone member states do not have the usual array of monetary policy tools at their disposal nor are sufficiently analogous tools held by the ECB. Their NCBs do not control the issuance of their domestic currency<sup>61</sup> and they do not control the actual issuer, the ECB.<sup>62</sup> Unlike Japan, the US or the UK, Eurozone member states have no ability to authorise their central banks to issue currency to pay coupons on their debt or to repay the principal if they otherwise run out of funds. They can instead only issue more debt or default, as demonstrated in the cases of Ireland, Portugal, Greece and Cyprus: each issued additional debt to avoid default in the absence of funds, but could issue it only to the International Monetary Fund, to other EU member states or to one of the EU's bail-out mechanisms (the European Financial Stabilisation Mechanism (EFSM), the EFSF or the ESM)<sup>63</sup> because the financial markets had closed on them.

Furthermore, member state NCBs cannot unilaterally change local interest rates to strengthen or weaken "their" currency's value in the foreign exchange markets. Eurozone member state debt is not guaranteed "jointly and severally" by the other states of the Eurozone. The Eurozone does not issue debt as a bloc, and there are no Eurobonds akin to US Treasury bonds or UK Gilts. Each member state's NCB owns and funds the ECB to a certain percentage (known as its "capital key" – see Table 5 below) and assumes liabilities for ECB losses to that same percentage up until the ECB's capital and reserves have been exhausted. After that, a Qualified Majority Vote of the ECB Governing Council is needed to raise more capital, again in line with each NCB's capital key.<sup>64</sup> Meanwhile, on the expenditure side, Eurozone member states have also lost many attributes of sovereigns: while retaining responsibility, within certain limits, for their own tax and spending, they are severely constrained by the Maastricht Rules<sup>65</sup> (to foster stability and growth) and by the Fiscal Stability Treaty<sup>66</sup> (intended to bring the debt-to-GDP ratio down to 60% by 2030 or by even more in order to take account of age-related social costs up to 2050). The constraints limit the annual fiscal deficit that can be run, the period for which any fiscal deficit can be run and the raising of new debt. In practice, the Eurozone member states are precluded from meaningful, autonomous measures to reflate their domestic economies.

The Eurozone structure has created a type of debt for its member states that is comparable with municipal or public sector entity bonds in other jurisdictions, or even the debt of emerging market

<sup>58</sup> In its discussion paper: Basel Committee on Banking Supervision, *The Regulatory Treatment of Sovereign Exposures*, December 2017, the Basel Committee proposed removing this exemption to reflect that exposures to any sovereign entail some risk. However, no such change has been made.

<sup>59</sup> *Ibid.*

<sup>60</sup> The Basel Committee did not go so far as to detail the appropriate treatment for the Eurozone member state government bond risk in its December 2017 discussion paper, *ibid.*

<sup>61</sup> Article 128 of the Treaty on the European Union grants the ECB exclusive powers to authorise the issue of euro banknotes. Once authorised, the ECB and the NCBs are able to issue the notes, but the latter cannot issue such notes unilaterally.

<sup>62</sup> In addition, the ECB is increasingly taking a greater role in member states' issuances, while being responsible for setting interest rates at the Eurozone level.

See [https://www.ecb.europa.eu/stats/policy\\_and\\_exchange\\_rates/key\\_ecb\\_interest\\_rates/html/index.en.html](https://www.ecb.europa.eu/stats/policy_and_exchange_rates/key_ecb_interest_rates/html/index.en.html).

<sup>63</sup> Of which the EFSM and EFSF are now closed to further drawings, leaving the ESM, described below, alone as a fund available for new drawings.

<sup>64</sup> For details of how the ECB is funded, see <https://www.ecb.europa.eu/ecb/orga/capital/html/index.en.html>.

<sup>65</sup> The annual government deficit must not exceed 3% of GDP, or 2.2% if the member state is also in the Eurozone, while government debt must not exceed 60% of GDP.

<sup>66</sup> This is formally known as the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (TSCG). It was agreed on 2 March 2012 and entered into force on 1 January 2013. The main provision of this Treaty is the requirement to have a balanced budget rule in domestic legal orders (the Fiscal Compact), Article 3, TSCG. Out of the 25 Contracting Parties to the TSCG, 22 are formally bound by the Fiscal Compact (the 19 Eurozone member states plus Bulgaria, Denmark and Romania). See [https://ec.europa.eu/info/publications/fiscal-compact-taking-stock\\_en](https://ec.europa.eu/info/publications/fiscal-compact-taking-stock_en).

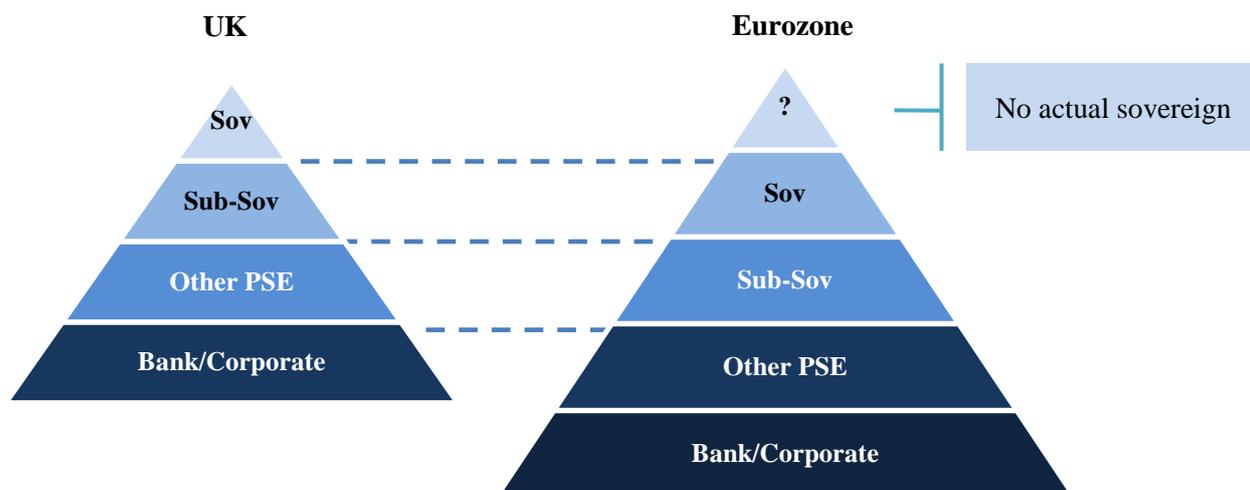
sovereigns.<sup>67</sup> Many municipals and public sector entities have state-like features but can default on their obligations, just like private corporations, since they are not able to print money to repay their debts. By adopting the approach the EU has taken, it has undermined the work of the global, standard-setting Basel Committee in seeking to capture the risks, particularly credit risks, arising in the financial markets. In essence, EU financial regulations have obscured the extent of the financial risks inherent in the Eurozone which would become apparent if risk-based capital requirements were to be applied in accordance with the Basel Rules.

The EU Stability and Growth Pact<sup>68</sup> seeks to rein in EU member states' expenditure and to provide for sound public finances and the coordination of fiscal policies. If it were to be properly applied, the Pact would reduce the chances of default of a Eurozone member state government.<sup>69</sup> It might therefore be argued that the Pact, by controlling expenditure, justifies a sovereign risk-weighted treatment for Eurozone member state bond issuances. However, this fails to consider the structural differences between the sub-sovereign nature of Eurozone member states and normal sovereigns. If a government cannot print its own currency or operate other monetary levers to repay its debt—because it is operating in a currency it does not control and it does not retain its own currency as a fallback—all other things being equal, its debt is unquestionably riskier than normal sovereign debt, and the additional risk should be recognised and accounted for in the context of the regulatory capital regime.<sup>70</sup>

### 1.7 Illustration of the problem

The structural differences can be explained using Figure 2.

Figure 2: The nature of a sovereign claim vs. a sub-sovereign claim, e.g., on a Eurozone member state



<sup>67</sup> For a list of sovereign defaults, see Beers, D., and Mavalwalla, J. (2017) *Database of Sovereign Defaults*, Bank of Canada, Technical Report No. 101: <https://www.bankofcanada.ca/wp-content/uploads/2016/06/r101-revised-june2017.pdf>.

<sup>68</sup> The EU Stability and Growth Pact is an agreement among the then 28 member states of the EU relating to fiscal issues only. It was introduced by a resolution and two Council Regulations of July 1997, which entered into force in July 1998 and January 1999, respectively. The Maastricht Treaty (formally, the Treaty on the European Union) officially established the European Union in 1993, creating EU citizenship and laid the foundations for the introduction of the euro and a central banking system.

<sup>69</sup> There is also the ESM, which provides limited financial assistance to Eurozone states in financial difficulty. It can borrow through bond issuances up to €500 bn (ESM Treaty, art. 39). Note that while art. 39 was drafted as a transitional provision subject to change before the treaty entered into force, the amount has remained unaltered in the 2019 draft revised text. €153,233 bn was used to bail-out the Irish, Portuguese, Cypriot, Spanish and Greek banks between 2011 and 2016.

<sup>70</sup> Others have made the same point, notably in response to the discussion paper Bank for International Settlements, Basel Committee on Banking Supervision, *The Regulatory Treatment of Sovereign Exposures*, December 2017.

There is no sovereign, as contemplated in the Basel Rules, at the apex of the Eurosystem pyramid. Each Eurozone member state is instead on the level of a sub-sovereign in a country with its own currency.

It has already been seen that this is not reflected in the risk-weightings accorded to the sovereign. The under-weighting at the sovereign level has then trickled down to the risk-weightings accorded to all other levels of sovereign-related entity in the Eurozone. It has a consequential impact on the credit quality of public sector entities that depend on the sovereign. These entities derive their creditworthiness from their connection to the sovereign borrower under which they sit. The sovereign's creditworthiness is reduced by it not having sovereign control over its currency. In consequence, the creditworthiness of these other public sector entities is reduced.

This fact ought to be reflected in the risk-weightings accorded by banks to their business with the sovereign and with all these other entities. Thus, every type of Eurozone counterparty automatically ranks one level below where it would rank in a genuinely sovereign country:

- Sub-sovereigns, whose debts sit within the scope of what Eurostat classifies as general government gross debt,<sup>71</sup> including state government, local government and social security funds.
- "Other public sector entities" (OPSEs)—also classified as "sub-sub-sovereigns"—would include publicly funded transport, postal, water, gas, electricity and communication utilities, as well as private companies under majority public control and special-purpose asset holding companies with a supply contract with a public entity (such as within a structure funded by the EIB Group through the European Fund for Strategic Investments (EFSI)<sup>72</sup>).

These entities are classified into two groups: (1) sub-sovereign, whose debts are included in the Eurostat database of "general government gross debt"; and (2) other public sector entity, whose debts are invisible in the Eurostat database.

There is also the issue of the EU institutions that sit above the sovereigns—the "supra-sovereigns", namely the EU itself, the ECB, the EIB, and the ESM—and how they are backed. They are backed by the same sovereigns, which are not genuine sovereigns, meaning that the supra-sovereigns should be less highly rated than they are.

Finally, the same phenomenon may well be operating at the bank and corporate level as well, although the matter is beyond the scope of this paper. This could occur with banks because the standardised risk-weighting for an OECD bank is 20%, regardless of its credit rating. This could also occur with corporates if the corporate has a high external credit rating, even if its standardised risk-weighting is 100%.

The position of supra-sovereigns merits special consideration.

### 1.8 Supra-sovereigns: the structural flaw in supra-sovereign claims

Just as we must have regard to the situation facing the entities sitting below a sovereign, we must also have regard to the situation facing the supra-sovereigns in the Eurozone and to the claims that depositors may have on a "national deposit guarantee scheme" (NDGS) in case the bank went into resolution.

The supra-sovereigns and the NDGS do not have capital and resources of their own: their creditworthiness depends on their recourse to the EU and Eurozone member states. See Table 1.

---

<sup>71</sup> [https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=sdg\\_17\\_40&plugin=1](https://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=sdg_17_40&plugin=1) accessed on 26/11/19.

<sup>72</sup> The EFSI is discussed in section 2.3.

Table 1: Line of recourse for EU entities

ENTITY	LINE OF RECOURSE
European Union <sup>73</sup>	Where the EU has borrowed in order to make a loan, or where it has issued a guarantee to the EIB for its loans, a default by a borrower or a guarantee claim by the EIB would leave a claim under the Commitments Appropriation of the EU Budget, which is a joint-and-several liability of all EU member states, whether in the Eurozone or not. The amount that can be committed by the EU is limited to 0.26% of EU GNI for the seven-year Multiannual Financial Framework up to the end of 2020, plus what remains committed from previous periods. This is confirmed in Moody's 2015 rating report on the EU in which they attest, on p.1 under "Overview and Outlook", to the "European Commission's right to call for additional resources of on average up to around 0.26% of EU Gross National Income (around €40 billion on average) each year during 2014-20 from its member states, on a joint and several basis".
European Investment Bank <sup>74</sup>	The subscribed-but-not-called block of capital, subscribed by all EU member states, but on a several-but-not-joint basis.
European Stability Mechanism <sup>75</sup>	The subscribed-but-not-called block of capital, subscribed by all Eurozone States, but on a several-but-not-joint basis.
European Central Bank <sup>76</sup>	A small block of subscribed-but-not-called capital from the non-Eurozone central banks. The capital subscribed by the Eurozone central banks is larger but has all been called. A further raising of the capital requires Qualified Majority Voting support of the ECB Governing Council, which is composed of the senior ECB executives and the governors of the Eurozone central banks. A capital raising is allocated around the Eurozone and non-Eurozone central banks according to their capital keys in the ECB (which are calculated with reference to each member state's share of the EU's population and GDP). The resultant claims on central banks to pay in new capital are on a several-but-not-joint basis.
National deposit guarantee scheme	A claim on the exchequer of the member state concerned, as Olaf Scholz, German Finance Minister, recently confirmed in his speech proposing to upgrade the separate NDGS under a European Deposit Insurance Scheme. <sup>77</sup>

Table 2 shows a clear hierarchy based on the nature of the claim on member states, and on which ones.

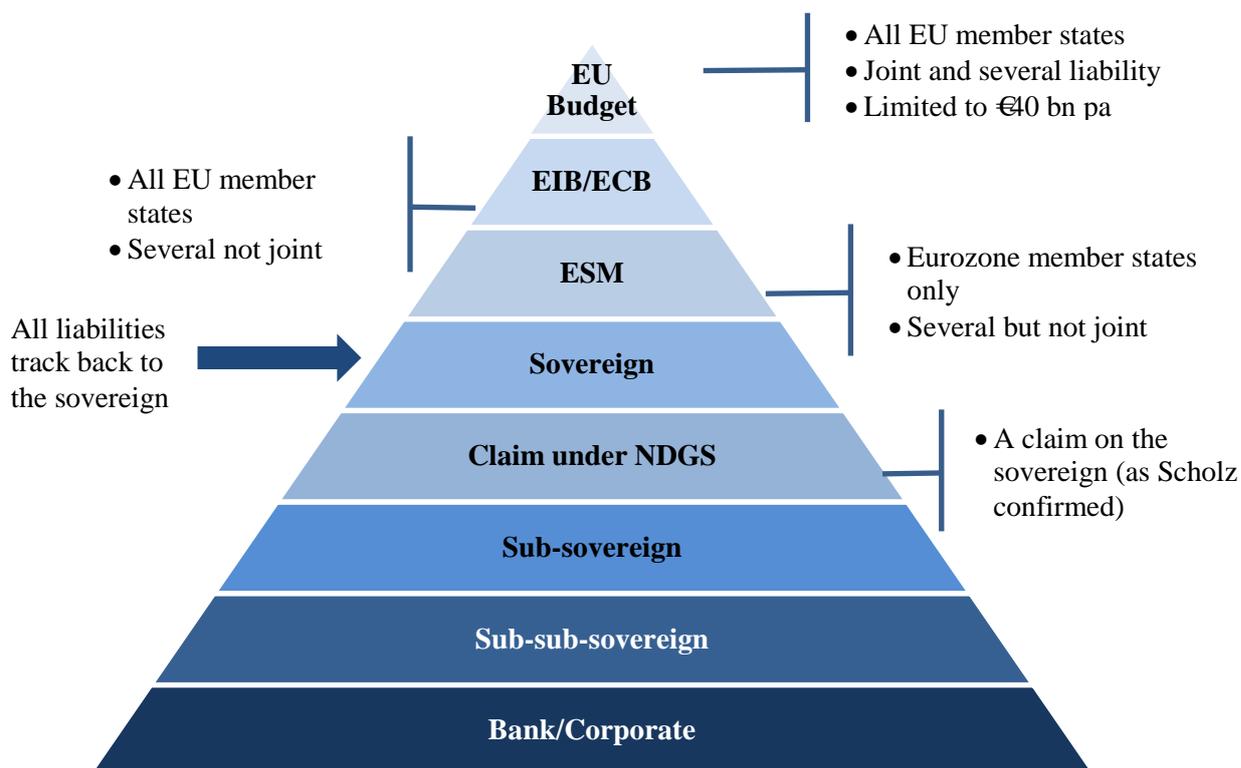
<sup>73</sup> EU investor publication – Investor Presentation p.8 of July 2015, confirmed in Moody's 2015 rating report on the EU.  
<sup>74</sup> Explanation in Moody's 2015 rating report on the EIB of 2015 pp. 16 – 17, "Strength of Member Support".  
<sup>75</sup> [https://www.esm.europa.eu/esm-governance#anc\\_shareholders](https://www.esm.europa.eu/esm-governance#anc_shareholders) – The subscribed capital is €705 billion, but the paid-in capital is only €80 billion. The table, accessed on 27/11/19, shows each member state's subscribed and paid-in capital but omits to state the contingent liability of each member state to pay in the balance.  
<sup>76</sup> See Table 5 for a breakdown of ECB capital.  
<sup>77</sup> See Scholz, O., "Germany will consider EU-wide bank deposit insurance", Financial Times, 5 November 2019. Scholz's proposal did not receive wide support, especially in Germany, and has not to date been taken forward.

Table 2: Nature of liabilities of EU entities

ENTITY	NATURE OF LIABILITY
European Union	In place/no decision-making needed; joint-and-several liability; all EU member states.
European Investment Bank	In place/no decision-making needed; several-but-not-joint basis of all EU member states.
European Stability Mechanism	In place/no decision-making needed; several-but-not-joint basis – Eurozone only.
European Central Bank	Not in place – requires a vote of the ECB Governing Council to create the liability; several-but-not-joint basis of all EU member states.
National deposit guarantee scheme	In place/no decision-making needed; liability of one member state only.

It is therefore clear that the creditworthiness of all the Eurozone supra-sovereigns—which sit above the sovereigns in the hierarchy—is dependent upon the same sovereigns as the entities below, including the NDGS. See Figure 3.

Figure 3: There is no "Eurozone government", no genuine sovereign issuer



Just as the risk-weightings accorded by banks to their business with the sovereign and with all entities in the levels below the sovereign may be too favourable, in the sense of not reflecting the true credit exposure involved, this concern also applies to the risk-weightings accorded by banks to all the supra-sovereigns, since their creditworthiness is based on their being a look-through to the same sovereigns.

### 1.9 The supra-sovereign capital, collateral and liquidity problem

Like the banks, the supra-sovereigns harbour their own problems in relation to capital, collateral and liquidity, including:

- The EIB's loan portfolio is concentrated in the sub-sovereign and OPSE sectors, and its risk-weightings on loans, in many cases over 15 years' final maturity, ought adequately to recognise both the counterparty risk and facility risk dimensions of credit risk.<sup>78</sup>
- The Eurosystem eligible collateral list contains supra-sovereigns, sub-sovereigns and OPSEs, as well as sovereigns, and the haircuts ought adequately to recognise both the credit risk and market risk inherent in these holdings.
- The Eurosystem makes loans to monetary financial institutions (MFIs) based on this collateral, both through Longer-term Refinancing Operations and through the modules of TARGET2, and again the haircuts ought adequately to recognise both the credit risk and market risk inherent in accepting these holdings as collateral.
- Eurosystem members' NCBs lend to one another through TARGET2 also based on this collateral, and similarly the haircuts ought adequately to recognise both the credit risk and market risk inherent in accepting these holdings as collateral.<sup>79</sup>

Eurostat collects and reports some (incomplete) data on this topic. However, the total amount of public sector debt involved exceeds the amounts reported in the Eurostat figures because Eurostat only includes the debts into the sovereign and sub-sovereign levels in Figure 2 above. The debts at the OPSE level are excluded. Nor do the Eurostat figures include the sovereigns' contingent liabilities under:

- The Commitments Appropriation of the EU Budget.
- The subscribed-but-not-called capital commitments to the EIB and ESM.
- Guarantees issued by member states in the context of securitisations of banks' "NPLs".
- Guarantees issued by sovereigns for the debts of public sector entities to the EIB where the PSE would class as a sub-sub-sovereign.

There cannot be a contingent liability for a capital commitment regarding the ECB because that would need a Governing Council meeting to create it.

Overall, the exposures of the Eurosystem are opaque and difficult to pin down. Annex 1 sets out numerous points of uncertainty as to the full situation which require further exploration if an accurate assessment is to be made.

---

<sup>78</sup> The risks in the EIB are discussed in section 2.3.

<sup>79</sup> The risks in TARGET2 are discussed in section 2.1.

Table 3: The impacts of the risk-weighting of sovereigns at 0%

IMPACT	OF SOVEREIGN BEING 0% RISK WEIGHTED	OF SUB- AND SUB-SUB-SOVEREIGNS ENJOYING TOO FAVOURABLE A RISK-WEIGHTING
Capital call on EIB, ESM, ECB less reliable	✓	
EU, ESM, EIB overrated	✓	✓
EIB CET1 ratio overstated		✓
Banks' CET1 ratio overstated	✓	✓
Banks less liquid than they appear	✓	✓
QE portfolio contains more risk	✓	✓ (if it contains these bonds)
Haircuts in ECB eligible collateral list are too low	✓	✓
NCBs have collateral shortfall	✓	✓
CCPs have collateral shortfall	✓	✓
NDGS claim less valuable than it appears	✓	

1.10 Depiction of the impacts

Table 3 summarises the primary and secondary impacts of the risk-weighting of sovereigns at 0%, and of the trickle-down (and indeed trickle-up) effect of risk-weightings being accorded that are too generous to public entities and to supra-sovereigns.

1.11 Application to other financial markets participants

The EU has applied its approach to the regulatory capital treatment of Eurozone member state government debts across the financial system as a whole, not just in the context of banks. For example, insurance companies are required to apply a similar treatment to Eurozone member state government bonds in their own regulatory capital treatment under Solvency II.<sup>80</sup> There is an additional issue with EU-based insurance companies which relates to the so-called Ultimate Forward Rate. This is used to calculate the required regulatory capital against life contracts, and particularly where the contracts have a guaranteed rate in them – which is common in many continental countries, such as Germany, although not in the UK. For all currencies other than the euro, the rate is set at market rates. For the euro, it is a

<sup>80</sup> Article 180, Commission Delegated Regulation (EU) 2015/35 of 10 October 2014, supplementing Directive 2009/138/EC of the European Parliament and of the Council on the taking-up and pursuit of the business of Insurance and Reinsurance (Solvency II).

fixed rate determined in the regulation, which is now well above market rates.<sup>81</sup> That lowers the capital requirement but introduces further risk.

Then there are pension funds. The main pension funds in the EU are in the Netherlands and Ireland, and, before Brexit, in the UK. Currently, EU pension funds do not have solvency capital requirements, but under pressure from continental life insurance companies—which do and which therefore believe they are at a competitive disadvantage to pension funds in the market for retirement income products—the EU has sought to introduce solvency capital for pension funds in the revisions to the IORP Directive.<sup>82</sup> Solvency II-type regulatory capital requirements for EU pension funds would introduce a similar problem to that faced by other EU financial institutions. Also there is the mooted "financial transactions tax", strongly supported by France,<sup>83</sup> which would badly affect pension funds.<sup>84</sup>

### 1.12 The Basel Committee's assessment of the EU's implementation of its Rules

As a strict technical matter, Basel assessed the EU's credit risk-weighting regime under the standardised approach as "largely compliant"<sup>85</sup> – the same grading as the US. However, even some EU institutions recognise that the EU implementation of Basel has undermined confidence in the risk-weighted assets (RWA) framework and acted as a drag on bank valuations. This includes areas where the EU has expressly deviated from the letter of Basel (as is the case for instance with Company Voluntary Arrangement exemptions and the treatment of insurance subsidiaries) as against those where it has deviated from the spirit of the rules, which is the case for sovereign debt treatment.

This is reflected in two quotes from a 12 November 2019 speech by Jose-Manuel Campa of the European Banking Association: "Fitch for instance argued that 'making EU banking regulation fully compliant with Basel standards will be ... important for ... restoring investors' confidence in risk-weighted assets (RWA)'. They concluded that 'an EU move to improve Basel compliance would aid [the] analysis of bank capital, and reduce investor scepticism'. Similarly, Moody's stressed that, and I quote, the 'BCBS [Basel Committee] finding is credit negative for EU banks, because they are subject to a regulatory regime and to capital requirements that are not as rigorous as those in other countries'. The analysts stressed that the EU's assessment was the weakest at those times".<sup>86</sup>

It is also worth noting that almost one-third of the Basel Committee representatives are from the EU. Decisions of the Basel Committee are taken by consensus. Moreover, Basel has determined that the EU has been deficient in allowing banks that employ an IRB approach too many concessions in using their credit models – including on sovereigns.<sup>87</sup>

Sovereign treatment has also been a vexed topic more generally. In 2017, the Basel Committee considered, in its proposed revisions to the Basel Rules, the introduction of new rules for sovereign

<sup>81</sup> From 1 January 2020, the UFR is 3.75%, well above current long-term market rates. See <https://eiopa.europa.eu/Pages/News/EIOPA-publishes-the-calculation-of-the-Ultimate-Forward-Rate-for-2020.aspx>.

<sup>82</sup> The IORP II Directive (Directive (EU) 2016/2341 of December 14, 2016) repealed the IORP I Directive (Directive 2003/41/EC of 3 June 2003). The European Commission's proposals to include Solvency II capital requirements for pensions were excluded from the final version of IORP II and Recital 77 explains the policy decision: "The further development at Union level of solvency models, such as the holistic balance sheet (HBS), is not realistic in practical terms and not effective in terms of costs and benefits, particularly given the diversity of IORPs within and across member states. No quantitative capital requirements, such as Solvency II or HBS models derived therefrom, should therefore be developed at the Union level with regard to IORPs, as they could potentially decrease the willingness of employers to provide occupational pension schemes". It is questionable whether this is the end of the story, given the European Commission's persistent practice of concentrating ever more power at the centre.

<sup>83</sup> "France to push for European financial transactions tax", Reuters, December 10, 2017; <https://uk.reuters.com/article/us-france-tax-environment/france-to-push-for-european-financial-transactions-tax-idUKKBN1E40G1>.

<sup>84</sup> Tim Worstall, *The case against a financial transactions tax*, Current Controversies Paper No. 33, November 2011, Institute of Economic Affairs, [https://iea.org.uk/wp-content/uploads/2016/07/Financial%20Transaction%20Tax\\_0.pdf](https://iea.org.uk/wp-content/uploads/2016/07/Financial%20Transaction%20Tax_0.pdf).

<sup>85</sup> Basel Committee on Banking Supervision. *Programme (RCAP): Assessment of Basel III Regulations – European Union*, December 2014: <https://www.bis.org/bcbs/publ/d300.pdf>.

<sup>86</sup> See <https://eba.europa.eu/file/248669/download?token=J2cBYTyJ>.

<sup>87</sup> See fn. 85 above.

exposures, distinguishing between exposures to central banks, exposures to central governments and exposures to other sovereign entities, including sub-national governments. Exposures to EU member state governments were envisaged to qualify as exposures to a central government, despite Eurozone countries' central banks not having the independent power to issue currency.<sup>88</sup> This proposal would not therefore have rectified the current misapplication of the rules for sovereign treatment by the EU, but it would have resulted in further more sophisticated sub-distinctions between the various categories of sovereign, which might have required a more sophisticated breakdown of risk amongst entities within the Eurozone that rely on member state support. However, even this initiative failed. No consensus was reached as to the appropriateness of the proposal and it was not incorporated into the Basel Rules.

## 2. How TARGET2, the QE programme, the EIB Group and bank NPLs augment the problem

The situation is compounded by the build-up of large liabilities, many of which are insufficiently collateralised, related to the TARGET2 euro payment system, the Eurozone's QE programme and the loans and guarantees made by the EIB Group. The liabilities themselves have become very significant, but, in addition, many of the liabilities and loans have been collateralised with member state government bonds and other member state public sector entity bonds, which are wrongly presumed to be safe, zero risk-weighted collateral. These three examples enable us to attempt to quantify the scale of the problem that is addressed in this paper by indicating the additional public sector liabilities permitted by the zero risk-weighting of Eurozone sovereigns. A more accurate way of quantifying the problem would be to have access to the portfolios of business of the Eurozone supra-sovereigns and of all Eurozone banks, as well their respective IRB methodologies and then to calculate their degree of under-capitalisation and under-collateralisation. Annex 1 gives a fuller overview of the extensive researches that would have to be undertaken to fully quantify the problem, so the calculations here regarding TARGET2, QE and the EIB Group should be read merely as indicative of the scale of the problem. The problem is compounded by the volume of NPLs in many Eurozone banks.

### 2.1 TARGET2

TARGET2 is the high-value real-time gross (RTGS) payment system for the euro, comprising the national high-value payment systems of the 19 Eurozone member states, the euro-denominated high-value payment systems in five non-Eurozone EU member states and the arrangements between TARGET2-participating central banks and the ECB to make cross-border payments. All business in euros contracted with Eurosystem members must be settled through TARGET2, and it also carries the main financial markets business between financial institutions, as well as the settlements of balances in other Financial Markets Infrastructures.<sup>89</sup>

The TARGET2 system includes modules through which the Eurozone NCBs make loans to the banks that they have sponsored onto the system.<sup>90</sup> These modules are the Proprietary Home Account, which an NCB maintains itself and links in to the TARGET2 infrastructure, and the Home Accounts Module and Standing Facilities, which sit inside the TARGET2 infrastructure.

These loans must all be backed by collateral on the Eurosystem eligible collateral list. Where the collateral includes, as it must, bonds issued by the EU's supra-sovereigns, sovereigns, sub-sovereigns

<sup>88</sup> Basel Committee on Banking Supervision, *The Regulatory Treatment of Sovereign Exposures*, December 2017. The definition of an exposure to a central government is stated as: "exposures to a government of a state which has the power to raise taxes, borrow money and issue currency by means of a central bank, either of that state, or of a currency union to which that state belongs". This appears designed to cover Eurozone states, and it fails to make the vital distinction that those states do not individually control the central bank of the currency union (the ECB) which issues the relevant currency.

<sup>89</sup> Essentially, these are a multilateral systems between participating financial institutions, including the operator of the system, used for the purposes of recording, clearing, or settling payments, securities, derivatives, or other financial transactions. <https://www.ecb.europa.eu/paym/target/target2/html/index.en.html>.

<sup>90</sup> *TARGET2 Information Guide for TARGET2 Users* v4.0 of December 2016, page 12.

and OPSEs, the loans—and therefore the NCBs—will be under-collateralised if the creditors are lending close to the face value of the bonds less the haircut.

The quantity of direct financing being extended by the Eurosystem to the banks is not made explicitly clear in the Eurosystem's accounts. It would be one of the areas for further detailed enquiry in order fully to assess the level of risk posed to the global markets resulting from the Eurosystem, as laid out in Annex 1.

The Eurosystem issues four sets of accounts: the ECB's annual report as of December 31st, a Eurosystem consolidated balance sheet over two pages as at December 31st, which is included within the ECB annual report, a Eurosystem aggregate balance sheet on the last business day of each month, and the disaggregated financial statement of the Eurosystem, also on the last business day of each month. The Eurosystem aggregated balance sheet of 30 August 2019 (i.e., the sum of all the external assets and liabilities of the ECB and the NCBs vis-à-vis non-members of the Eurosystem) showed "loans to monetary financial institutions" that were residents of the Euro area of €3.1 trn. These cannot be loans between Eurosystem members, nor loans to Eurozone sovereigns or supra-sovereigns, nor loans to any entity outside the Eurozone. There is no similar position in the ECB balance sheet published at year-end beyond the much smaller "longer-term refinancing operations" of just over €720 bn. By a process of elimination, then, this figure must represent loans made by NCBs to banks, either of the full €3.1 trn, or of €2.4 trn if the full figure includes "longer-term refinancing operations".

Over and above the loans made by NCBs to banks through the modules of TARGET2, there is the issue of the imbalances between the NCBs on their accounts held with one another, which were established to process cross-border payments. These payments are ultimately for private sector end-users, be they financial institutions, corporates or individuals. TARGET2 has converted private sector cross-border liabilities into sovereign cross-border liabilities, which are treated as risk-free. To illustrate, suppose an Italian company imports machinery from a German company and finances this with a loan from its Italian bank. The Italian bank debits the loan account and makes a payment into the German company's German bank. This, in turn, leads to a TARGET2 debit for the Banca d'Italia and a TARGET2 credit for the Bundesbank. The balances between the Banca d'Italia and the Bundesbank are not settled, but are rather novated to the ECB at end-of-day, before being reversed back on to their original accounts at the start of the following day. The Banca d'Italia would retain either a deposit of the Bundesbank on its books or an overdraft on its own account at the Bundesbank.

By this method, TARGET2 causes the private debt of an Italian company to become funded by the central bank of Germany, an operation that does or does not add to the national debt<sup>91</sup> of the Italian government, depending upon which account the debt is configured on.

In the case where the debt is in the form of an overdraft on the Banca d'Italia's account at the Bundesbank, this also may or may not add to Italy's national debt depending on which bonds the overdraft is secured with from the Eurosystem eligible collateral list. If the bonds actually lodged by the Banca d'Italia are ones that are included in the Eurostat database for the "general government gross debt", then the operation will not add to Italy's national debt as it is commonly understood. If the bonds are issued by an Italian "other public sector entity", the operation will also not add to Italy's real national debt as the bonds have already been issued and are a public sector debt, but the debt will be incremental to the Eurostat figures. If, however, the bonds are issued by supra-sovereigns or by banks/corporates, the operation does increase the national debt, because the debt is a debt of the Banca d'Italia but the collateral is not in the name of any Italian public entity.

In the case where the debt is in the form of a deposit on the Bundesbank's account at the Banca d'Italia, this also increases the Italian national debt as no collateral is required.

---

<sup>91</sup> Defined to include Banca d'Italia's Eurosystem liabilities.

We assume that the debts of central banks are not included in Eurostat's "general government gross debt", as the notes to the tables do not specifically say they are. Annex 1 sets out the scope of Eurostat's figures.

It might be thought that the EU's TARGET2 system, which underpins the Eurozone, connects the member state economies sufficiently that their liabilities could be treated as supported by all Eurozone states collectively. This would then justify a 0% risk-weighting being applied. The Eurozone, as a whole, controls its own currency through the ECB, but the Eurozone does not issue debt and is merely a collection of individual member states. It is true that the TARGET2 system provides an element of cross-subsidisation between Eurozone member states in allowing for extensive and automated mutual credits and debits between member states' central banks.<sup>92</sup> However, the TARGET2 system merely involves the creation of intra-Eurosystem debts between member states' central banks, not a means of cancelling debts, since EU law prohibits bail-outs of member states.<sup>93</sup> Thus, TARGET2 does not achieve the communal backing by Eurozone member states of each other's debts, even though people may perceive these debts to be communally backed.

As a practical matter, were any Eurozone member state to run into financial difficulties, it has been made clear by Germany and other northern Eurozone member states with TARGET2 surpluses that there will be no bail-out;<sup>94</sup> and indeed the Eurozone's behaviour in relation to the post-2009 Greek sovereign debt crisis affirmed this approach. Although the Eurozone reform deal, agreed by EU finance ministers in June 2019, will see a common budget established for the euro area,<sup>95</sup> the expected limit of around €20 bn means that this deal could not then be used for the purposes of significant bail-outs. Further, at the beginning of 2017, Mario Draghi, the then (Italian) head of the ECB—who four years earlier had said the ECB would do "whatever it takes to preserve the euro"—made it clear, in a letter to two Italian parliamentarians, that a country could leave the Eurozone but would first need to settle its TARGET2 liabilities "in full".<sup>96</sup> This TARGET2 obligation would mean that if Italy were to leave the euro, for example, it would end up redenominating its national currency into lira whilst retaining euro debts – which would be debts in a foreign currency over which it exerts no control. The likelihood would be a fall in the relative value of the lira, putting Italy's repayment of its TARGET2 euro balances beyond reach. If an economically significant Eurozone member state, such as Italy, were to default on its debts, the Eurozone could face an existential crisis. The Governor of the Hungarian National Bank has noted that "[t]wo decades after the euro's launch, most of the necessary pillars of a successful global currency...are still missing".<sup>97</sup> It might be the case that the "no bail-out" prohibition in EU law and the statements of Mario Draghi about the enforcement of TARGET2 liabilities would in practice be circumvented and forgotten, but the size of the debts involved make this possibility politically difficult, such that this is an eventuality that cannot be relied upon to occur.

<sup>92</sup> Blake, D., "*Target2: The Silent Bailout System that Keeps the Euro Afloat*", SSRN, 22 May 2018, ([https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3182995](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3182995)), observes that Eurozone member states are able to borrow through the TARGET2 system without paying interest and without having to repay the loan. TARGET2 has been used by the highly indebted Eurozone member states to counteract in part Germany's refusal to share its surpluses (circa €900 bn) with those member states in deficit (Italy owes circa €450 bn and Spain owes circa €400 bn). See Figure 10 and the TARGET2 figures here: <https://www.ecb.europa.eu/paym/target/target2/facts/html/index.en.html>.

<sup>93</sup> Treaty on the Functioning of the European Union, arts. 123 and 125. These provisions apply as between all EU member states. However, while a bail-out is not permitted by law, certain types of conditional financial assistance are available to members of the Eurozone. Art. 136 of the Treaty on the Functioning of the European Union (as amended by the European Council Decision 2011/199/EU) states that "[t]he member states whose currency is the euro may establish a stability mechanism to be activated if indispensable to safeguard the stability of the euro area as a whole. The granting of any required financial assistance under the mechanism will be made subject to strict conditionality". Pursuant to this Article 136 and the ESM Treaty, the ESM was established. See fn. 69 above for details of the ESM's operation and lending capacity.

<sup>94</sup> Smith, H., "Greece must reform or leave Eurozone, says German minister", *The Guardian*, 4 December 2016.

<sup>95</sup> Dendrinou, V., "Finance Chiefs Agree on Euro-Area Budget But Skirt Funding", *Bloomberg*, 14 June 2019.

<sup>96</sup> Canepa, F., "Any country leaving euro zone must settle bill first: ECB's Draghi", *Reuters*, 20 January 2017.

<sup>97</sup> Matolcsy, G., "We need to admit the euro was a mistake", *Financial Times*, 3 November 2019.

## 2.2 The QE programme

In 2015, the ECB introduced a quantitative easing programme (officially called the Asset Purchase Programme (APP)) to provide liquidity to the Eurozone banking system and, in turn, stimulate economic growth. This programme has been extensively used. The ECB bought €2.6 trn of Eurozone bonds between March 2015 and December 2018.<sup>98</sup> Under QE, the ECB's balance sheet increased to €4.65 trn. The programme was running at €30 bn of new purchases per month until it was reduced to €15 bn a month pursuant to an ECB Governing Council meeting on 14 June 2018,<sup>99</sup> and new purchases were stopped as of the end of December 2018. However, the same meeting decided to reinvest maturities. As the QE portfolio size had built up to €2.6 trn at the end of 2018, its average remaining life becomes important in estimating the monthly maturities. If this was still the balance at the end of June 2018, and if the average remaining life was 48 months, the monthly maturities would be €54 bn, while if it was 60 months, they would be €43 bn. The run-down and curtailment of new purchases, even offset by the reinvestment of maturities, was deemed to have failed to achieve the desired stimulus, and, in November 2019, the ECB restarted the QE programme with additional purchases of Eurozone bonds at the rate of €20 bn per month.<sup>100</sup>

The key issue with QE is what the portfolio consists of in detail. All the bonds must be on the Eurosystem eligible collateral list. The question that arises relates to the quality of that collateral. Available statistics show that the majority of the QE portfolio is invested in public sector bonds – which covers all of the issuers within the scope of Eurostat's data, plus OPSE as shown in Figure 2 and the diagrams in Annex 1. Corporate and bank bonds were purchased but in much smaller volumes. The QE portfolio is owned in a structure whereby each NCB buys the bonds issued by entities in its own country. Neither the NCBs nor the ECB need to issue capital against the portfolio in the way a commercial bank would have to under the Basel Rules. To the extent the bonds held in the QE portfolio involve credit risk that is not provisioned with regulatory capital, the overall risk to the Eurosystem has increased. As with other aspects of the Eurosystem, there appears to be a significant shortfall in any loss-absorption layer inside the system given the size of QE and what it is invested in. The publicly available data are sparse. In Annex 1, we set out certain questions that need to be addressed for a full understanding of the position.

## 2.3 The EIB Group

The EIB Group has three components: the EIB itself, the European Investment Fund (EIF) and the EFSI. The EIB describes itself as "the lending arm of the European Union".<sup>101</sup> Established in 1958, with EU member states as shareholders, the EIB makes loans for the purpose of promoting European integration and social cohesion. The EIF was established in 1994 to provide finance for small- and medium-sized enterprises (SMEs, including microfinance) in order to "foster EU objectives in support of entrepreneurship, growth, innovation, research and development, and employment".<sup>102</sup> It is part of the EIB Group but does not lend money to SMEs directly. Instead, it provides finance through private banks and funds, principally through venture capital and in guaranteeing loans.

The EFSI is an initiative launched jointly by the EIB Group—the EIB and the EIF—and the European Commission to help overcome the current investment gap in the EU. EFSI is one of the three pillars of the Investment Plan for Europe<sup>103</sup> that aims to revive investment in strategic projects around the continent to ensure that money reaches the real economy. With EFSI support, the EIB Group is "providing funding for economically viable projects, especially for projects with a higher risk profile

<sup>98</sup> <https://www.bbc.co.uk/news/business-49674176>. Bond coupons and maturing principal were reinvested in the programme. These bonds must be on the ECB eligible collateral list.

<sup>99</sup> <https://www.theguardian.com/business/live/2018/jun/14/ecb-qe-stimulus-mario-draghi-fed-rate-hike-uk-retail-sales-business-live>.

<sup>100</sup> <https://www.ecb.europa.eu/press/pr/date/2019/html/ecb.mp190912~08de50b4d2.en.html>.

<sup>101</sup> <https://www.eib.org/en/about/index.htm>.

<sup>102</sup> <https://www.eif.org/index.htm>.

<sup>103</sup> See Investment Plan for Europe: the Juncker Plan at [https://ec.europa.eu/commission/priorities/jobs-growth-and-investment/investment-plan-europe-juncker-plan\\_en](https://ec.europa.eu/commission/priorities/jobs-growth-and-investment/investment-plan-europe-juncker-plan_en).

than usually taken on by the Bank". It is intended to focus on sectors of key importance for the EU economy, such as: strategic infrastructure including digital, transport and energy; education, research, development and innovation; renewable energy and resource efficiency; and support for small- and mid-sized businesses".<sup>104</sup> EFSI was first announced by European Commission President Jean-Claude Juncker in November 2014 and was also known as the Juncker Plan and, later, the InvestEU Programme.<sup>105,106</sup>

EIB loans are concentrated into the type of borrower referred to in Figure 1 and in the diagrams in Annex 1 as "other public sector entity". Such loans fall outside Eurostat's statistics. The EIB's paid-in capital is only around 10% of its subscribed capital; the remainder represents a claim on EU member states on a sovereign-but-not-joint basis, as also shown in Annex 1. A key point is that the EIF, not being a bank, does not have to maintain regulatory capital. *By having the EIF make the high-risk commitments that would attract a large capital requirement if the EIB had made them, the EIB manages to limit the appearance of the risks in the business it and its subsidiary are undertaking.*

Further, the data issued by EIB does not give clarity as to the make-up of its loan portfolio or its risk-weighting system. The EIB has substantial off-balance sheet business as well as its loans. It is opaque what the risk profile is of the counterparties to this portfolio of off-balance sheet business, as well as of the portfolio itself due to its intrinsic characteristics. Yet the EIB still reports a very high CET1 ratio. Annex 1 describes the further enquiries needing to be made about the EIB in order to ascertain whether it is another institution that is applying risk-weightings that overstate the quality of the Eurozone sovereigns which are its borrowers or on whom there is a financial dependency on the part of its borrowers. This effect—where other public sector borrowers are accorded too favourable risk-weightings—is one we refer to as "trickle-down". If it is in play at the EIB, then its portfolio of business contains more risk than its CET1 ratio implies, and there is a greater chance that the EU member states will be called upon to pay in some or all of their subscribed-but-not-called capital.

By the same token, this claim on member states for more capital would not be as strong as it appears, because, in the case of 19 of the 28 EU member states, it is a claim on an entity that is sub-sovereign and does not control its own currency.

If the EIB's assets are less solid than they appear, and if the claims on EU member states for extra capital are less reliable than they appear, this weakens both the pillars on which the EIB's own credit rating depends.

## 2.4 Bank NPLs

The previous sub-sections discussed the risk to the Eurozone banking system arising from the sub-sovereign status of Eurozone member states – which is the main focus of the paper. However, this risk is compounded by the scale of NPLs in many Eurozone banks by private-sector borrowers. Banks have put in place restructuring and forbearance arrangements for such borrowers when it is clear that the debt is unlikely ever to be repaid, e.g., because the borrower's business has been "idle" with no activity during the reference period. These arrangements include the discounting of NPLs but then treating the residual or rump loan as "performing" – a treatment premised on the borrower being able and willing to achieve partial repayment in spite of evidence that the other portion of the loan will not be recovered.

<sup>104</sup> <https://www.eib.org/en/efsi/index.htm>.

<sup>105</sup> EFSI is the EU's version of what in the UK is known as a "private finance initiative" (PFI) – a way of creating "public-private partnerships" (PPPs) to finance major infrastructure investments and other public sector projects.

<sup>106</sup> To illustrate how the EU uses EFSI/InvestEU, in January 2020, the EU announced a €1 trn Green Deal Investment Plan (GDIP) that will create an "enabling framework" to stimulate private and public investment in support of the transformation of the EU economy to meet its environmental strategy for the EU economy to become carbon neutral by 2050. The GDIP will encourage "crowding in" private investment by leveraging the EU's budget guarantee under the InvestEU programme with a key role to be played by the EIB to ensure the funded projects "provide high additionality" (Rust, S., "EC promises 'enabling framework' for green investment", IPE, 17 January 2020; <https://www.ipe.com/news/ec-promises-enabling-framework-for-green-investment/10043247.article>).

### 3. The Eurozone's use of misleading accounting practices

Misleading accounting practices have led to additional risk, some of which are also opaque, the opacity itself causing yet more risk. The approach to Eurozone accounting appears to be based on a presumption that the system will work its way out of the current situation through growth (allowing billions of euros worth of NPLs throughout the Eurozone to become performing again) before taxpayers in the successful northern member state economies – especially in Germany – realise that they will ultimately be liable for bailing out the Eurosystem.

The opacity of the EU's accounting framework is also a problem, leading to uncertainties regarding the Eurosystem, beyond those examined in this paper. There are the questions about the nature of the Eurosystem eligible asset list, over the amount of Eurozone member state sovereign bonds owned or controlled (as collateral) by the Eurosystem, as well as the amounts of other Eurozone member state public sector entity debt supplied either by the EIB or controlled as collateral by the Eurosystem. Finally, there is the question of the true extent of the imbalances in the TARGET2 system and the efficacy of the legal means by which the gross balances are reduced to what the ECB reports.<sup>107</sup>

### 4. Quantifying the scale of the problem

The EU wishes to promote the creditworthiness of Eurozone (and other EU) member state government bonds and other liabilities. However, the data show that the underlying levels of member state indebtedness, potentially being either provisioned with inadequate levels of capital or used at inappropriate levels for intra-Eurozone and other collateral purposes, is of significant concern. In essence, there are potentially huge levels of debt in Eurozone member states to which the Basel capital and collateral treatments are misapplied. Here we estimate the levels of that debt. Some of this debt will be held by non-financial institutions, which may be able to fend for themselves in determining the repayment risks inherent in what they own. Other debt will be owned by financial institutions which can, in principle, manage their books based on their own assessment of the unmanaged risk arising from such instruments. However, even if this is correct, there are second, third and further order effects where that risk will be difficult to trace and measure. The original flaw of not capturing the risk in Eurozone financial instruments gives rise to significant systemic risk to the EU's financial system as a whole – and thence, unless steps are taken, to the global financial system.

#### 4.1 What are the key adverse impacts?

There are certain specific instances of the impact of the sub-sovereign treatment in operation which need to be understood in order fully to evaluate the situation.

##### *Unreliability of member state ability to meet a capital call from the EIB, ESM or ECB*

Rating reports of Eurozone supra-sovereigns stress the very strong legal claim on member states<sup>108</sup> and make some adjustment for the average credit rating of the group of member states concerned (whether that be Eurozone only or all EU). However, since the Eurozone member state ratings are themselves overstated because the Eurozone member states are not genuine sovereigns, the ability of these member states to meet capital calls is concomitantly weaker. We interpret this as implying that the ECB has a claim on the sovereign as and when the Governing Council agrees to raise the ECB's capital, albeit the claim is formally routed through the NCBs of the EU member states, which are the ECB's shareholders.

---

<sup>107</sup> A brief exposition of these questions is set out in the Annex 1 to this paper.

<sup>108</sup> For example, Moody's EIB rating report 2015 under "Overview and Outlook", page 1; and Moody's EU rating report 2015 under "Overview and Outlook", page 1.

*Over-ratings of the EU, ESM and EIB*

The credit ratings of the EU, ESM and EIB are thus overstated. In the EU's case, the call for extra funding to make the EU's debt service payments is strong legally, but, in reality, is as weak financially as the calls for pay-in of capital by the ESM and EIB. The ECB is unrated.

Furthermore, the quality of the EIB's loan portfolio—quoted in the Moody's EIB rating report 2015<sup>109</sup> as a source of the EIB's strength—is undermined by its concentration on public sector entities in Eurozone member states, even where the loan has a guarantee from the sovereign. The sovereign guarantee is less reliable because it is not a genuine sovereign, and the stand-alone creditworthiness of the borrower is lower because its ultimate source of strength is its connection to the same sovereign. Moreover, Moody's makes reference to "third party credit enhancements (e.g., guarantee by other parties, pledged financial security, assignment of rights)", without stating who are the issuers of the guarantees, what the pledged financial security is or what rights have been assigned, such that there can be no certainty that these supposed credit enhancements really do enhance the credit risk of the loan itself.

*EIB Group*

The role of the EIB is to make loans on behalf of the European Union.<sup>110</sup> The exact make-up of the EIB loan portfolio is not in the public domain and would be one of the areas for detailed enquiry set out in Annex 1. The credit risk embodied in the EIB's investments adds to the credit risk of EU member states.

*Eurosystem QE programme*

In 2015, the ECB introduced a quantitative easing programme. Not only were Eurozone government bonds purchased, so were corporate bonds and the bonds of OPSEs. To the extent that these latter bonds involved credit risk, the overall risk to the Eurosystem increased.

The exact make-up of the QE programme portfolio is not in the public domain and would be one of the further areas for detailed enquiry as laid out in Annex 1.

*Eurosystem eligible collateral list<sup>111</sup>*

The Eurosystem publishes a list of bonds that are eligible as collateral for Eurosystem monetary and payment operations. This means that central banks can borrow from one another in TARGET2 based on this collateral, and that banks can borrow from central banks. There are open questions—addressed in Annex 1—as to whether certain bonds are eligible as collateral at any Eurosystem member, or just at a "home" Eurosystem member. That point aside, the list contains bond issuers that are the EU's supra-sovereigns, sovereigns, sub-sovereigns and OPSEs, as well as financial institutions and securitisation vehicle companies.

Each bond issue has a haircut assigned to it. In the case of Eurozone supra-sovereigns, sovereigns, sub-sovereigns and OPSEs, these will be too low, given the true status of the sovereigns themselves and given that all the other three types depend ultimately on the same sovereigns. The Eurosystem will therefore be under-collateralised on its loans when it advances against this collateral up to the face value less haircut.

---

<sup>109</sup> See fn. 108 above.

<sup>110</sup> <https://www.eib.org/en/about/index.htm>.

<sup>111</sup> <https://www.ecb.europa.eu/mopo/assets/html/index.en.html>, the Eurosystem not being a legal person but rather a collective term for the ECB and the Eurozone NCBs.

### *Bank liquidity*

As explained above, banks are allowed to hold these same lines of bonds for their regulatory liquidity ratios, with specified haircuts or no haircut. The haircuts are too low for the same reasons that the haircuts in the Eurosystem eligible collateral list are too low. In consequence, banks are less liquid than they appear to be.

### *Bank capital adequacy*

Where banks are lending to or contracting for off-balance sheet business with this same universe of counterparties (Eurozone supra-sovereigns, sovereigns, sub-sovereigns, OPSEs), their IRB models will be understating the credit risk, which will have the result of the banks overstating their CET1 ratios.

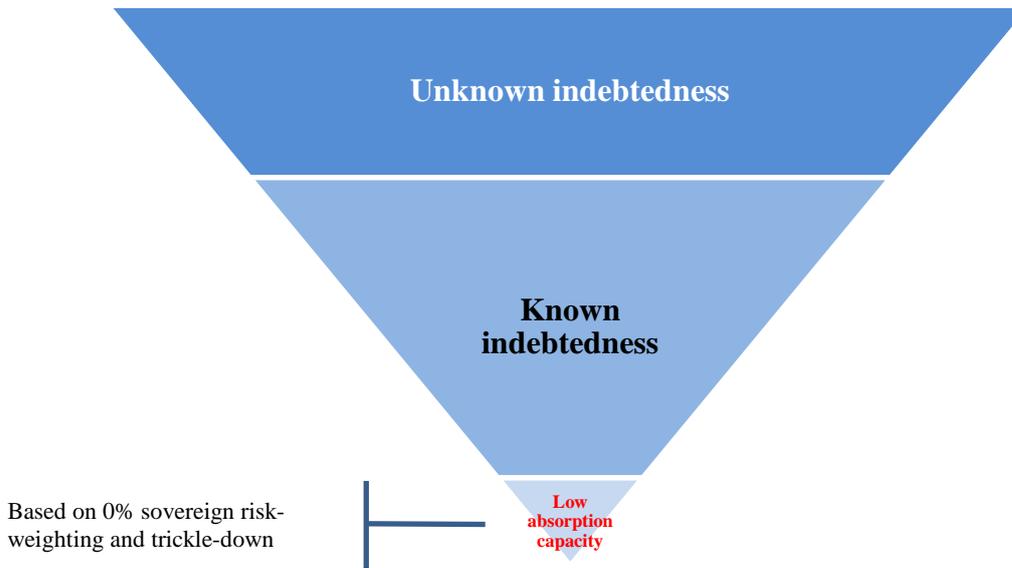
## **4.2 How to assess the scale of the problem?**

The overall scale of the problem is based on the current known portfolio of assets being risk-weighted at too low a level:

- Where the asset is in the books of a bank, the under-weighting gives rise to too low a loss-absorption capacity for the case that the asset defaults.
- Where the asset is being used as collateral, the under-weighting is expressed as a haircut that is too low to provide the lender with a comfortable security margin if they have to repossess and liquidate the collateral, which, in turn, leaves them exposed to a risk of loss. There is inadequate risk-absorption capacity in the collateral, which means that the loan it is securing will be under-weighted in the lender's calculation and the lender will be maintaining too low a loss-absorption capacity.
- Where the asset is being held by one of the entities that form part of the supra-sovereign and sovereign network of entities, it is unclear whether they hold any capital to cushion against a risk of loss, beyond having a claim on one another.

All in all, the loss-absorption capacity is too low, given the known portfolio of assets and the current known risks – see Figure 4.

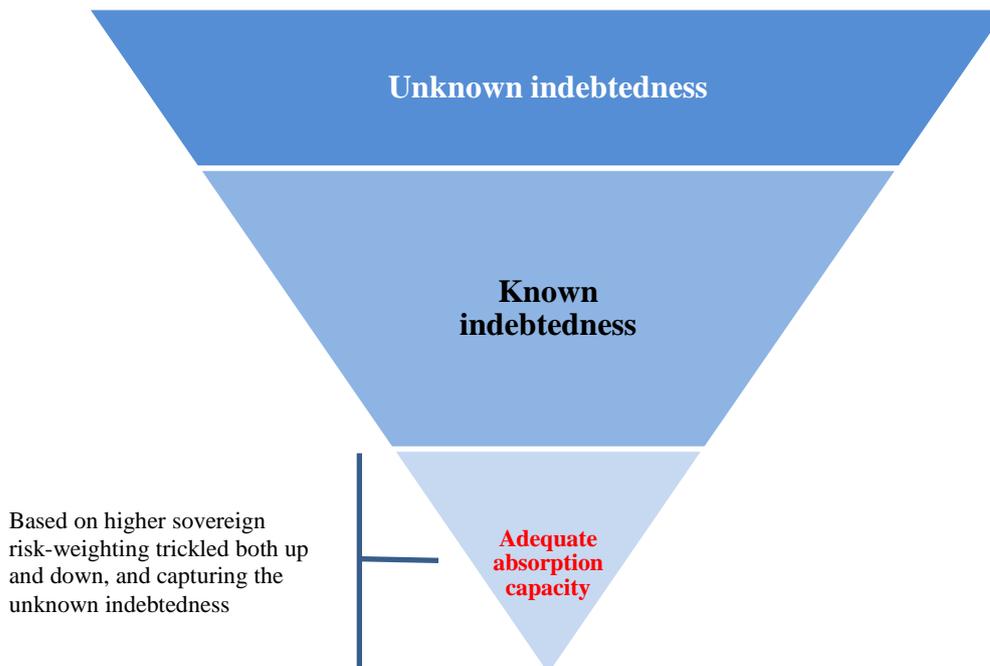
Figure 4: Current loss-absorption capacity is too low even in respect of known indebtedness



This issue is compounded because there is unknown indebtedness, as outlined above, that needs to be brought into the equation, and the loss-absorption capacity needs to be increased as a percentage of both the known and unknown levels of indebtedness – see Figure 5.

Figure 5: Increasing loss-absorption capacity through higher risk-weightings

Capturing Unknown Indebtedness and subjecting both it and known indebtedness to higher risk-weightings would greatly increase the need for loss-absorption capacity.



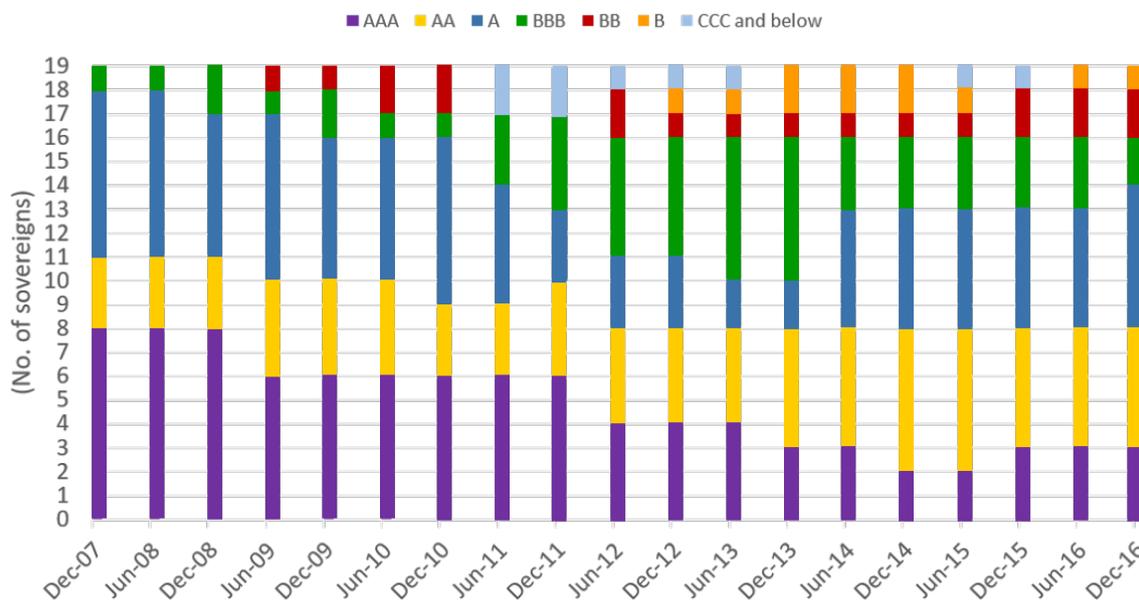
The only place from which member states can draw extra funds to increase the loss-absorption capacity of the supra-sovereigns is by borrowing more. Given the exigencies of the Fiscal Stability Treaty and their current levels of debt, this source is limited.

Banks can raise their capital by issuing more of it, by selling assets at above their book value, and through retained profits. Two normal sources of recapitalisation are all but closed off at present in the Eurozone: markets are closed for new bank share issuance and bank merger and acquisition activity is low. Bank profitability is hindered by low interest rates and weak credit demand. Banks should also increase their capital to comply with Basel III – which would contribute to higher loss-absorption capacity. However, the European Banking Federation recently sponsored a study from Copenhagen Economics<sup>112</sup> which concluded that this could only be achieved by banks both reducing their quantity of lending and by increasing its price. This would negatively affect businesses and consumers and reduce GDP growth. In sum, the options for banks to raise their capital are currently very limited.

### 4.3 Official measures of national debt

Figure 6 shows how the market assessment of Eurozone member state debt—as reflected in S&P's credit ratings—differs from the EU's 0% risk-weighting assumption over the period between December 2007 and December 2016, which includes the period of the 2007-8 financial crisis. Only six of the 19 Eurozone members had January 2020 credit ratings (AAA or AA) which could justify the 0% risk-weighting assumption if the Eurozone member did control all the levers of control over its own currency – down from 11 members prior to the beginning of the crisis.

Figure 6: Eurozone Sovereign Bond Credit Ratings



Source: Eurozone Sovereign Rating Trends 2017, S&P Global Ratings

Figure 7 shows official EU government debt to GDP ratios for 2019 Q1. Included are the 19 Eurozone member states. The average of these (denoted EA-19) is 86%, well above the Maastricht limit of 60%.<sup>113</sup> Key Eurozone economies, Italy and Spain,<sup>114</sup> have official debt to GDP ratios of 133% and 98%, respectively. It should be noted that these figures do not include the debts of the level "other public sector entity" – as we discuss further in Annex 1. This suggests that the official measure—even

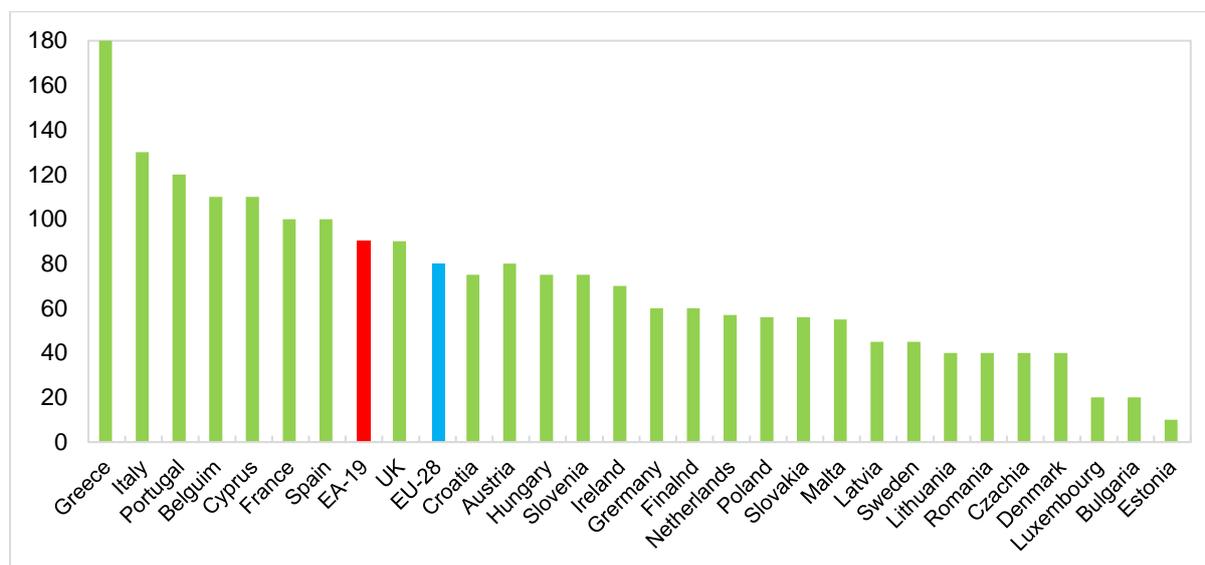
<sup>112</sup> *EU Implementation of the Final Basel III Framework: Impact on the banking market and the real economy*, accessed as document 191122\_copenhagen-economics\_final-basel-iii-evaluation.pdf from the Copenhagen Economics website.

<sup>113</sup> Article 126 of the Treaty on the Functioning of the European Union.

<sup>114</sup> Selected because they have the highest TARGET2 liabilities.

before taking the other factors below into consideration—underestimates the true scale of Eurozone member state debt.

Figure 7: European Union Government Debt to GDP ratios, 2019 Q1



Source: Newsrelease euroindicators 119/2019 – 19 July 2019, Eurostat;

<https://ec.europa.eu/standard/documents/2995521/9984123/2-19072019-AP-EN.pdf/437bbb45-7db5-4841-b104-296a0dfc2f1c>

The lower creditworthiness of certain Eurozone member state government bonds, in turn, affects those who hold these bonds—in particular, Eurozone banks—and introduces risk which the supervisors and markets need to manage. Of the €1.1 trn of Eurozone government debt outstanding,<sup>115</sup> Eurozone banks held around €1.8 trn of it on their books as at the start of 2019.<sup>116</sup> Given total Eurozone bank assets of just over €30 trn,<sup>117</sup> the banks' exposure to their governments' debt amounts to 6% of their assets (median), rising to around 11% in the case of Cyprus – see Figure 8. There are, of course, legitimate reasons why banks hold these bonds – to comply with the LCR and to have a stock of readily marketable assets which can be converted into cash either in the open market or through loans or repurchase agreements at the central bank. When all monetary financial institutions" (MFIs) are included (such as "other deposit-taking institutions", defined under EU Regulation ECB/2013/33, in addition to banks), the reliance of Eurozone governments on short-term investors in their bonds is even more striking. Figure 9 shows that in 2018, these institutions held 24%, 17% and 18%, respectively, of the bonds of Germany, Spain and Italy. This compares with just 8% for the UK, where the bulk of government bonds are held by long-term investors such as pension funds and life offices.

Table 4 shows that the majority of bonds issued by EU central governments (more than 50% on average) have short residual maturities (less than seven years), which increases rollover risk, the risk that governments are forced to refinance their maturing debts on unfavourable terms or, worse, unable to refinance at all because the markets close out on them.<sup>118</sup> By contrast, the average residual maturity of UK central government bonds is much greater at 15 years. Indeed, the UK has the longest maturing central government debt of all members of the OECD, which exceeds that of, for example, Japan (8 years), France (8 years), Germany (6.8 years), Italy (6.5 years), Canada (6.2 years) and the US (5.7 years).<sup>119</sup> One of the key reasons for this is the strong demand for long-dated bonds from UK pension

<sup>115</sup> General government gross debt – 2019 Q1, Eurostat; <https://ec.europa.eu/eurostat/web/products-datasets/-/teina230>.

<sup>116</sup> European Central Bank (May 2019) *Financial Stability Review*.

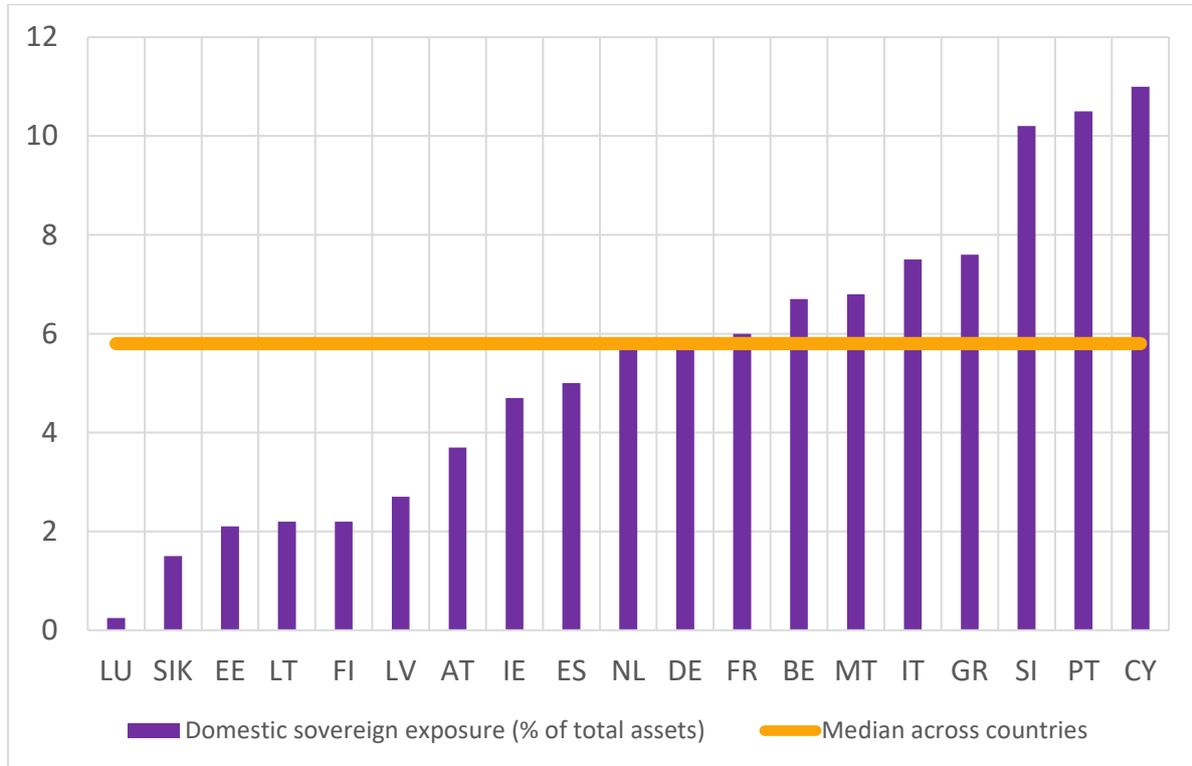
<sup>117</sup> European Banking Federation: <https://www.ebf.eu/>.

<sup>118</sup> Also noteworthy is the fact that Eurostat does not report this information for major countries such as Germany and the Netherlands.

<sup>119</sup> Source: Chart A.5 Average maturity of the debt stock by country (end-December 2018), *HM Treasury Debt Management Report 2019-20*.

funds and life offices. It gives the UK government huge flexibility in choosing the timing and terms of any refinancing of its maturing debt.

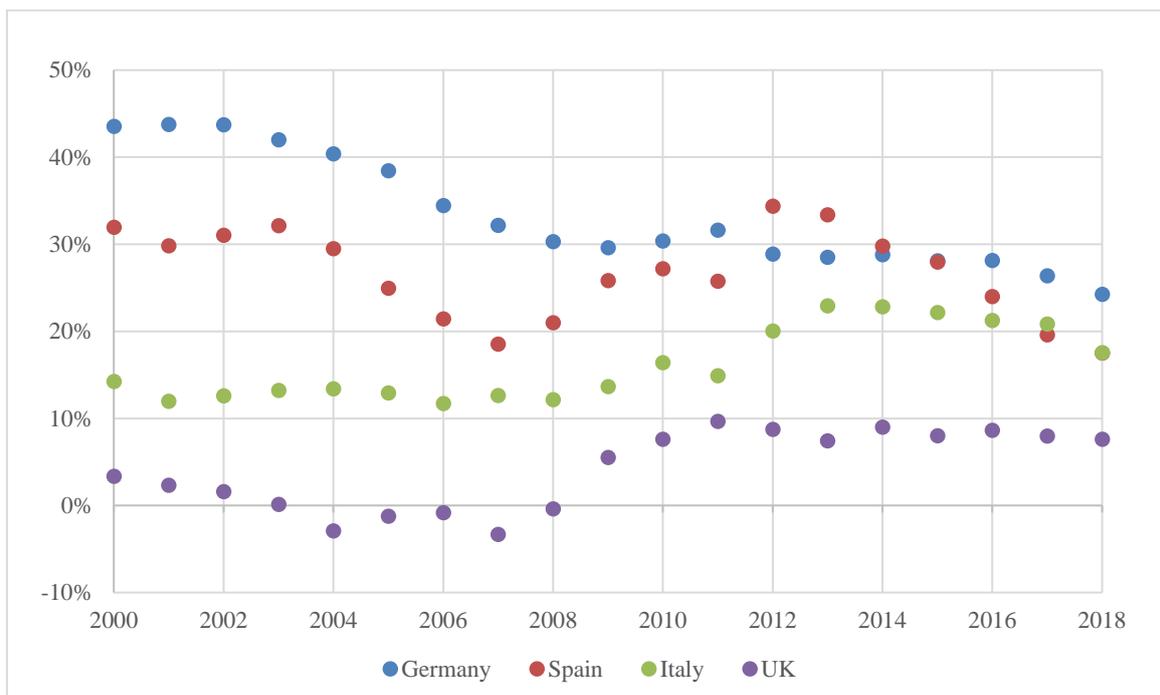
Figure 8: Domestic sovereign exposures by Eurozone banks



Source: Chart 3 (left panel) in European Central Bank (2019) Financial Stability Review, May;

<https://www.ecb.europa.eu/pub/financial-stability/fsr/html/ecb.fsr201905~266e856634.en.html>

Figure 9: Domestic sovereign exposures by all Eurozone monetary financial institutions



Source: Bruegel Dataset on Sovereign Bond Holdings, October 2018

Table 4: Residual maturity of EU central government bonds, percentage of total, 2018

STATE	MATURITY: LESS THAN 1 YEAR (ULTRA-SHORT)	MATURITY: FROM 1 TO 7 YEARS (SHORT)	MATURITY: FROM 7 TO 15 YEARS (MEDIUM)	MATURITY: OVER 15 YEARS (LONG)
Belgium	14	36	26	24
Bulgaria	6	55	25	14
Czechia	18	51	27	4
Denmark	14	46	17	23
Germany	18	N/A	N/A	N/A
Estonia	47	24	10	19
Ireland	15	36	32	16
Greece	15	14	17	55
Spain	16	45	28	11
France	18	43	24	14
Croatia	18	52	27	2
Italy	9	47	19	26
Cyprus	N/A	N/A	N/A	N/A
Latvia	15	52	15	18
Lithuania	6	54	26	14
Luxembourg	N/A	N/A	N/A	N/A
Hungary	28	N/A	N/A	N/A
Malta	18	39	32	11
Netherlands	N/A	N/A	N/A	N/A
Austria	3	N/A	N/A	N/A
Poland	N/A	N/A	N/A	N/A
Portugal	24	39	22	15
Romania	22	51	18	9
Slovenia	10	36	30	23
Slovakia	10	38	36	16
Finland	N/A	N/A	N/A	N/A
Sweden	31	48	17	3
United Kingdom	21	20	16	43

Sources: (1) For all countries except UK: Average remaining maturity of EU central government gross debt 2018, Eurostat, [https://ec.europa.eu/eurostat/web/products-datasets/product?code=gov\\_10dd\\_rmd](https://ec.europa.eu/eurostat/web/products-datasets/product?code=gov_10dd_rmd).

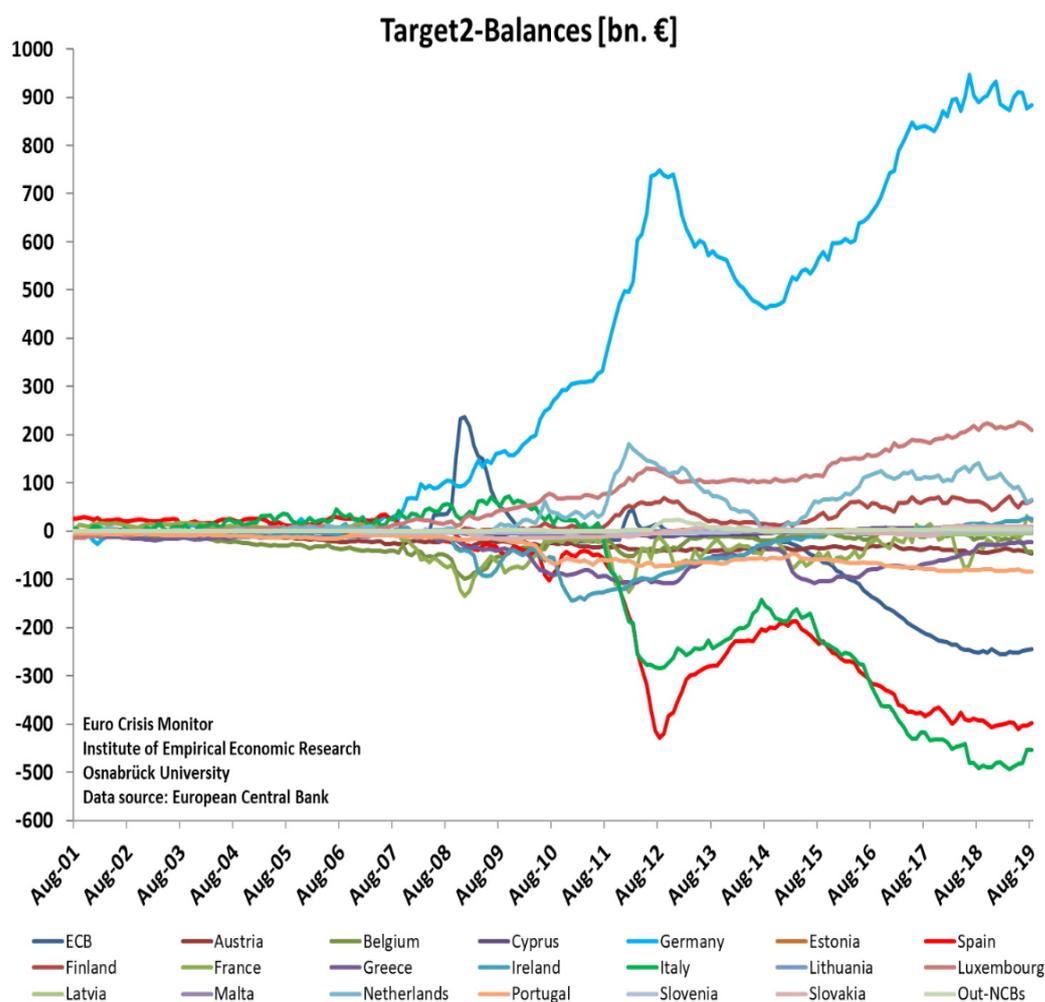
(2) For UK: Charts A1 and A3 of HM Treasury Debt Management Report 2019-20, [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/785550/debt\\_management\\_report\\_2019-20\\_final\\_web.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/785550/debt_management_report_2019-20_final_web.pdf).

#### 4.4 TARGET2

The official figures present an incomplete picture of the true national debts of Italy and Spain, for example. Figure 10 shows the additional liabilities that they have accrued under TARGET2. As of August 2019, Italy and Spain had outstanding liabilities under TARGET2 of €454 bn and €398 bn,

respectively. These correspond to 25% and 32% of GDP.<sup>120</sup> These amounts may or may not be adding to these countries' national debt, or may be doing so only in part (as explained in section 2.1 above). The publicly available data do not allow us to distinguish between a TARGET2 liability accruing in the form of an uncollateralised deposit – which would add to the national debt – and an overdraft collateralised with bonds that already form part of the Eurostat figures for "general government gross debt" – which might not.<sup>121</sup> If the full TARGET2 liability counts as national debt, then the total debt to GDP ratios of Italy and Spain are 158% and 130%, respectively.

Figure 10: TARGET2 balances, € bn, August 2001–August 2019



Source: [www.eurocrisismonitor.com/](http://www.eurocrisismonitor.com/)

#### 4.5 The QE programme

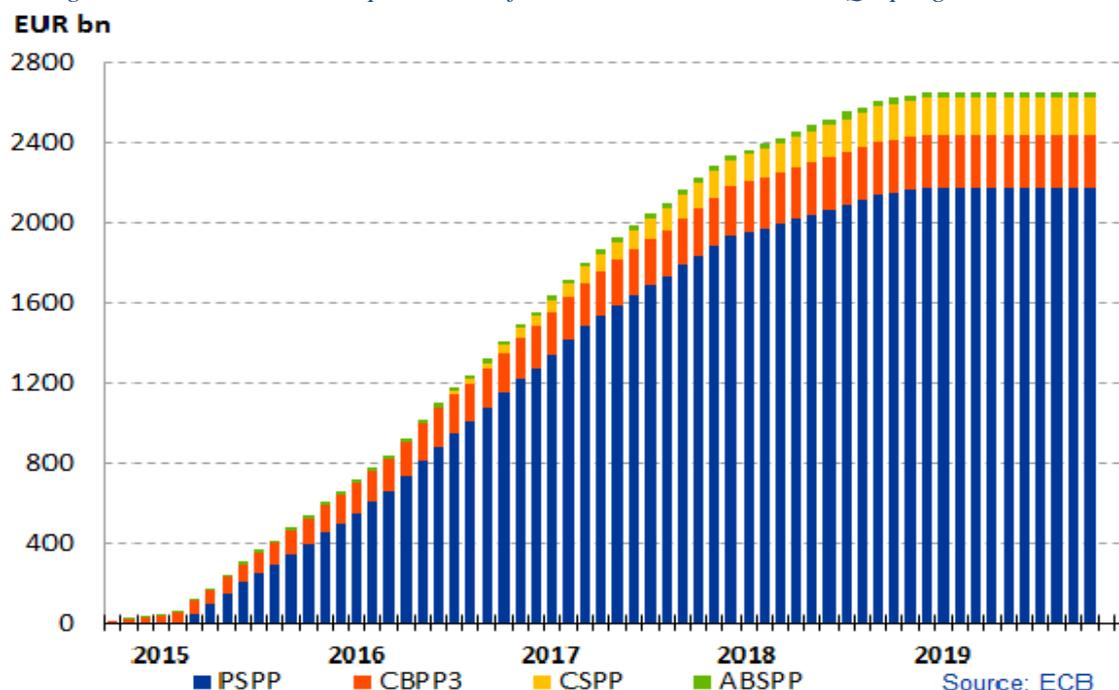
We next consider the Eurozone QE programme. There are four streams of asset purchases: the Public Sector Purchase Programme (PSPP), the Covered Bond Purchase Programme 3 (CBPP3), the Corporate

<sup>120</sup> Based on 2019 Q2 GDP data, using a USD = 0.9 EUR conversion rate. Sources: [countryeconomy.com/gdp/Italy](http://countryeconomy.com/gdp/Italy); [countryeconomy.com/gdp/Spain](http://countryeconomy.com/gdp/Spain).

<sup>121</sup> It is important to distinguish between loans in TARGET2 that occur when an NCB has a long balance on its account held at another NCB—for which no collateral is offered—from loans where an NCB overdraws its account at another NCB. The latter case can only be effected against collateral, which could be sovereign bonds of its own country because it has a ready supply of them; and the possibility of additional government issues exists for this purpose. The former type of borrowing—taking in deposits from other NCBs—does have the effect of inflating the overall debt above the quoted ratios, whereas the latter does not. The ratios quoted are based on Eurostat's "general government gross debt", which includes loans as well as bonds, and encompasses the sovereign borrower and regional/local authorities.

Sector Purchase Programme (CSPP) and the Asset-Backed Securities Purchase Programme (ABSPP).<sup>122</sup> Figure 11 shows the cumulative net purchases of bonds under the programme. As of October 2019, the proportions of total bond purchases across the four programmes are 82%, 10%, 7% and 1%, respectively.

Figure 11: Cumulative net purchases of bonds under the Eurozone QE programme, 2015–2019



Source: <https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html>

The ECB confirms that, under the PSPP, net purchases were in line with each Eurozone member state's ECB capital key<sup>123</sup> – see Table 5 below.<sup>124</sup> We will assume that the same rule applies to all bond purchases. This implies, for example, that Italy's share of bond purchases across the whole QE programme was 11.8023% of the total, while Spain's was 8.3391%. Given a total of €2.6 trn, this means that the purchases of Italian and Spanish public sector bonds amounted to €307 bn and €217 bn, equivalent to 17% and 18% of GDP, respectively – using GDP data in Table 6. 82% of the bonds purchased in the QE programme were public sector entity (PSE) bonds. PSE bonds are split between central government bonds—which are classified as sovereign bonds and already included in the measure of national debt above—and the bonds of OPSEs – which may not be included in the definition of national debt if they are debts of public entities whose obligations fall outside the Eurostat scope of "general government gross debt".

Without the further information outlined in Annex 1, we cannot know the breakdown of the portfolio and how much of it falls outside the Eurostat figures. For the purposes of this section, we will assume that all bonds purchased under the PSPP are sovereign bonds and hence do not add to the overall net

<sup>122</sup> <https://www.ecb.europa.eu/mopo/implement/omt/html/index.en.html>.

<sup>123</sup> <https://www.ecb.europa.eu/mopo/implement/omt/html/pspp-qa.en.html>.

<sup>124</sup> EU member states outside the Eurozone hold the remaining 30.4% of the capital key in the ECB. For example, the Bank of England has a shareholding of €58 mn. These shareholdings are explained as follows: "The EU's nine non-euro area NCBs are required to contribute to the operational costs incurred by the ECB in relation to their participation in the European System of Central Banks by paying up a small percentage of their share in the ECB's subscribed capital. Since 29 December 2010, their contributions have represented 3.75% of their total share in the subscribed capital. The capital paid to the ECB by the non-euro area NCBs amounts to €23,333,635.55. ...The non-euro area NCBs are not entitled to receive any share of the distributable profits of the ECB, nor are they liable to fund any losses of the ECB"; <https://www.ecb.europa.eu/ecb/orga/capital/html/index.en.html>.

liabilities of the Eurozone.<sup>125</sup> This means that 18% of the bonds purchased do add to Eurozone public sector balance sheet – i.e., to the assets owned by a PSE (i.e., by a Eurozone NCB) that are not issued by another PSE. This increase in the size of the public balance sheet inherently tracks back to the balance sheet of each member state, since the supra-sovereigns—like the ECB and EIB—are no more than a look-through to the sovereigns behind them.

Notwithstanding this line of recourse in case losses are incurred, in the construct of QE, it is the NCB of a member state that buys the bonds issued by entities in that member state. So the QE portfolios of Italian and Spanish issuers are bought by the NCBs of Italy and Spain respectively, adding the same amount to their assets, but not adding to their capital. The addition is to liabilities. QE directly increases the liabilities of the central bank of each member state. For Italy, this amounts to €5 bn (3.1% of GDP), while for Spain, it amounts to €9 bn (3.2% of GDP). Again, we should regard these figures as approximate.

*Table 5: Eurozone NCBs' contributions to the ECB's capital*

NATIONAL CENTRAL BANK	CAPITAL KEY %	PAID-UP CAPITAL (€)
Nationale Bank van België/Banque Nationale de Belgique (Belgium)	2.5280	273,656,178.72
Deutsche Bundesbank (Germany)	18.3670	1,988,229,048.48
Eesti Pank (Estonia)	0.1968	21,303,613.91
Central Bank of Ireland (Ireland)	1.1754	127,237,133.10
Bank of Greece (Greece)	1.7292	187,186,022.25
Banco de España (Spain)	8.3391	902,708,164.54
Banque de France (France)	14.2061	1,537,811,329.32
Banca d'Italia (Italy)	11.8023	1,277,599,809.38
Central Bank of Cyprus (Cyprus)	0.1503	16,269,985.63
Latvijas Banka (Latvia)	0.2731	29,563,094.31
Lietuvos bankas (Lithuania)	0.4059	43,938,703.70
Banque centrale du Luxembourg (Luxembourg)	0.2270	24,572,766.05
Central Bank of Malta (Malta)	0.0732	7,923,905.17
De Nederlandsche Bank (The Netherlands)	4.0677	440,328,812.57
Oesterreichische Nationalbank (Austria)	2.0325	220,018,268.69
Banco de Portugal (Portugal)	1.6367	177,172,890.71
Banka Slovenije (Slovenia)	0.3361	36,382,848.76
Národná banka Slovenska (Slovakia)	0.8004	86,643,356.59
Suomen Pankki – Finlands Bank (Finland)	1.2708	137,564,189.84
Total <sup>1</sup>	69.6176	7,536,110,121.69

*Note: 1. Owing to rounding, the total may not correspond to the sum of all figures shown.*

*Source: <https://www.ecb.europa.eu/ecb/orga/capital/html/index.en.html>.*

<sup>125</sup> This is likely to be an underestimate.

Table 6: EU GDP in 2018

YEAR	PERCENTAGE OF EU28 TOTAL 2018	CURRENT PRICES, MILLION EURO 2018
European Union – 28 countries	100.0	15,898,311.6
Euro area (19 countries)	72.7	11,561,187.9
Germany	21.0	3,344,370.0
United Kingdom	15.2	2,419,185.9
France	14.8	2,353,090.0
Italy	11.1	1,765,421.4
Spain	7.6	1,202,193.0
Netherlands	4.9	774,039.0
Poland	3.1	496,360.9
Sweden	3.0	471,196.2
Belgium	2.9	459,819.8
Austria	2.4	385,711.9
Ireland	2.0	324,038.2
Denmark	1.9	301,340.9
Finland	1.5	234,453.0
Czechia	1.3	207,772.4
Portugal	1.3	203,896.2
Romania	1.3	202,883.6
Greece	1.2	184,713.6
Hungary	0.8	133,782.2
Slovakia	0.6	89,721.0
Luxembourg	0.4	60,053.1
Bulgaria	0.4	56,086.9
Croatia	0.3	51,579.1
Slovenia	0.3	45,754.8
Lithuania	0.3	45,264.4
Latvia	0.2	29,151.0
Estonia	0.2	26,035.9
Cyprus	0.1	21,137.8
Malta	0.1	12,323.8

Source: Eurostat; <https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>;  
<https://appsso.eurostat.ec.europa.eu/nui/setupDownloads.do>.

The implication of these data is that the Eurosystem owned €2.6 trn<sup>126</sup> of Eurozone debts as at the end of 2018 in its QE programme. For the most part, the NCBs bought public sector debt issued by entities in their own country, which did not increase the country's own national debt. However, the NCBs also

<sup>126</sup> Eurosystem consolidated balance sheet at 12/31/18 at position 7.1.

bought debt that was not public sector, funded the purchase with new liabilities, and thus increased their own national debt.

The entire QE portfolio—public sector or not—carries a credit risk against which the NCBs carry no capital, because the profits and losses on QE are transferred to the ECB. This results in an unrecognised risk of loss for the ECB. The ECB's QE portfolio is subject to the ECB profit-and-loss absorption mechanism whereby the ECB takes over any profit or loss experienced by the NCB that is the holder of the asset. Against this risk, the ECB had capital, reserves and an unappropriated Profit and Loss Account of €9 bn and provisions and revaluation accounts of €33 bn on the same date, which amounted to a loss-absorbing capacity of €42 bn in all, i.e., just 1.6% of the QE amount. As the QE portfolio has an average life (duration) of the order of 4–6 years, an upward movement in interest rates of just 0.32% would cause the value of the portfolio to reduce by 1.6%, eliminating the ECB's entire loss-absorption capacity and requiring it to be recapitalised by its owners, all the NCBs of the EU member states.

*Table 7: EIB accounts 2018*

ACTIVITY IN 2018	IN €MILLION
Projects approved	62,723
European Union	52,406
Partner Countries	10,317
Signatures	55,640
European Union	47,832
Partner Countries	7,808
Disbursements	52,597
European Union	46,866
Partner Countries	5,731
Resources raised (before swaps)	59,958
Core currencies (EUR, GBP, USD)	51,720
Other currencies	8,238
<b>SITUATION AS AT 31.12.2018</b>	<b>IN €MILLION</b>
Outstandings	
Loans disbursed	451,121
Loans to be disbursed	105,847
Financing from budgetary resources	14,298
Borrowings	455,384
Own funds	71,325
Balance sheet total	555,793
Net profit for year	2,339
Subscribed capital	243,284
<i>of which called up</i>	21,699

Source: EIB Group: key statutory figures; [https://www.eib.org/en/about/key\\_figures/data.htm](https://www.eib.org/en/about/key_figures/data.htm)

#### 4.6 The EIB Group

Finally, we consider the EIB Group. Table 7 shows the accounts for the EIB in 2018. At the end of 2018, loans disbursed or committed by the EIB amounted to €561.2 bn (€451.1 bn disbursed + €105.8 bn committed). The EIB's total subscribed capital is €443.3 bn, although only €22 bn is called up.

The EIB is increasing its loan book by approximately 10% per annum on a compound basis, but not increasing its capital. We know that the primary destination of its lending is into "other public sector entities" within the EU.

We know that its subsidiary, the EIF, also enables funding into "other public sector entities" within the EU, and that the EIF's activity is substantially bound up with financings under the EFSI, into which the EIB also lends directly.

The EIF's method of enabling funding is either to issue a guarantee to an investor that injects cash into an EFSI project or to make a so-called "equity commitment" to a fund, which then can take on other borrowings and inject cash into an EFSI project.

Either way, the EIF's engagement does not result in a position on its balance sheet, because guarantees are off-balance sheet and because its "equity commitment" is structured as an agreement to inject more capital on top of a small paid-in portion.

The paid-in portion does appear on the EIF's balance sheet, but since it is such a small portion of the whole, the EIF holds very little direct investments. At the end of 2018, the EIF had only €790 mn of investments, €70 mn being private equity holdings and €200 mn debt investments; it also has €1.2 bn of treasury investments. Set against that, its capital, including share premium, is €1.3 bn, and there is a further recourse fund of €3.6 bn to the EIB, the EU and the smaller shareholders *pro rata* to their percentage holding.<sup>127</sup>

The key point about the EIF is that it is the EIB's (and the EU's) vehicle for supplying higher risk financing. The EU's responsibility for their subscribed-but-not-called portion of the EIF's capital is  $29\% \times €3.6 \text{ bn} = €1.04 \text{ bn}$ , and this will come under the Commitments Appropriation of the EU Budget. The EIB's responsibility for their subscribed-but-not-called portion of the EIF's capital is  $62\% \times €3.6 \text{ bn} = €2.23 \text{ bn}$ . A call on that could be met by the EIB issuing more debt itself or by calling up more of the subscribed-but-not-called portion of the member states' capital. The EIF is discussed in more detail in Annex 2.

The EIB and EIF together advance the financings under the EFSI, in the manner described in Annex 3. The original EFSI programme had reached its funding total of €315 bn by mid-2018. This was later extended to €500 bn by 2020. The EIB now enjoys a €26 bn first-loss guarantee from the EU Budget, complemented by a €7.5 bn allocation of the EIB's own capital, making a total of €33.5 bn that the EIB is permitted to commit in the context of EFSI financings.<sup>128</sup>

Since the EIF is not a bank, the EIB is not required to deduct its capital in the EIF from its own capital before determining the EIB's own ability to lend. That ability is 20 times the EIB's on-balance sheet capital under the Basel Rules Leverage Ratio, or the amount, after application of the EIB's IRB methodology and taking into consideration the EIB's regulatory capital fraction, which causes it to have a surplus over its minimum CET1 ratio.

Since the capital in the EIF is part-paid, and 80% unpaid, this 80% is not considered in the EIB's Leverage Ratio. Furthermore, only 20% of the EIB's capital commitment to the EIF needs to be carried on its balance sheet—€58 mn—which is an insignificant figure given the EIB's size. It would be interesting to know what risk-weighting the EIB gives to this €58 mn. The EIF is an AAA-rated entity,

<sup>127</sup> EIF, *2018 Annual Report*, p.11 of the accounts/p.97 out of 184 in the document.

<sup>128</sup> <https://www.eib.org/en/efsi/what-is-efsi/index.htm>.

due to the recourse it has to the EU and EIB, which are also both AAA-rated. On that basis, the EIB could accord a very low risk-weighting to its capital in EIF, as long as it overlooked the fact that it was itself a significant source of support to the EIF's rating. If, on the other hand, the EIB considered the quality of EIF's asset portfolio as exemplified by the contents of pages 69 to 77 in the EIF 2018 Annual Report, and if the EIB considered the level of subordination of the EIF's loans and investments in its customers, then the EIB should apply a very high risk-weighting to its paid-in capital in the EIF of €558 mn, and should carry a substantial risk-weighted asset to take account of the off-balance sheet liability to pay in the callable capital of €2.23 bn.

Figure 12 shows the shareholdings in the EIB by member state. For example, Italy's shareholding was 16.1108% of the total, while Spain's was 9.6665%. The shareholders in the EIF are: the EIB (62%), the European Union (29%) and 30 privately owned EU financial institutions (9%). The EU member states therefore own 91% of the EIF through either the EU or EIB. The Eurozone's share of the EIB is 74%, while its share of the EIF is 67%.<sup>129</sup> In terms of member state liability for the exposures caused by the EFSI, member state shares in the EU Budget are given in Figure 13. This implies that Italy and Spain are liable for 11.92% and 8.46%, respectively, of the €26 bn guarantee from the EU Budget, and 16.1108% and 9.6665%, respectively, of the €7.5 bn allocation of the EIB's own capital.

But the main issue is the share of the EIB's assets committed into those countries, out of the total of €57 bn of loans either disbursed or committed as of 31/12/18. This includes the EIB's loans in the context of the EFSI, but it does not include the EIF's EFSI commitments. Those commitments are small relative to the amounts committed by the EIB, even though they are high risk, but this only gives half the picture, or even less. Calculations extrapolated from EIF's annual reports from 2009 to 2018 suggest that it had a book of guarantees outstanding as at 31/12/18 of €7 bn and a book of "equity commitments" of €15 bn, but the important figure is how much finance was "leveraged" by EIF investments, i.e., the amount of finance that the underlying projects were able to raise from various financiers thanks to the engagement of the EIF as a backstop. The total amount leveraged came to €300 bn.

Taking this amount together with the EIB's own loans of €57 bn, we have an amount of €357 bn of financing extended or enabled by the EIB Group.

---

<sup>129</sup> That is, 74% of (62% + 29%).

Figure 12: European Investment Bank shareholdings, 2013

Breakdown of the EIB's capital since 1 July 2013

	Amount (EUR)		0	10,000,000,000	20,000,000,000	30,000,000,000	40,000,000,000
Germany	39,195,022,000	DE					
France	39,195,022,000	FR					
Italy	39,195,022,000	IT					
United Kingdom	39,195,022,000	GB					
Spain	23,517,013,500	ES					
Netherlands	10,864,587,500	NL					
Belgium	10,864,587,500	BE					
Sweden	7,207,577,000	SE					
Denmark	5,501,052,500	DK					
Austria	5,393,232,000	AT					
Poland	5,017,144,500	PL					
Finland	3,098,617,500	FI					
Greece	2,946,995,500	GR					
Portugal	1,899,171,000	PT					
Czech Republic	1,851,369,500	CZ					
Hungary	1,751,480,000	HU					
Ireland	1,375,262,000	IE					
Romania	1,270,021,000	RO					
Croatia	891,165,500	HR					
Slovak Republic	630,206,000	SK					
Slovenia	585,089,500	SI					
Bulgaria	427,869,500	BG					
Lithuania	367,127,000	LT					
Luxembourg	275,054,500	LU					
Cyprus	269,710,500	CY					
Latvia	224,048,000	LV					
Estonia	173,020,000	EE					
Malta	102,665,000	MT					
<b>Total</b>	<b>243,284,154,500</b>						

Source: EIB Group: Governance and structure; <https://www.eib.org/en/about/governance-and-structure/shareholders/index.htm>.

The contention is that 75% of this portfolio is lent to Eurozone public sector borrowers whose debts fall outside the Eurostat figures, either because they are outside the EU<sup>130</sup> or because they are an OPSE excluded from the scope of Eurostat's figures. Such a loan into a Eurozone OPSE increases the national debt of that Eurozone member state as commonly understood.<sup>131</sup>

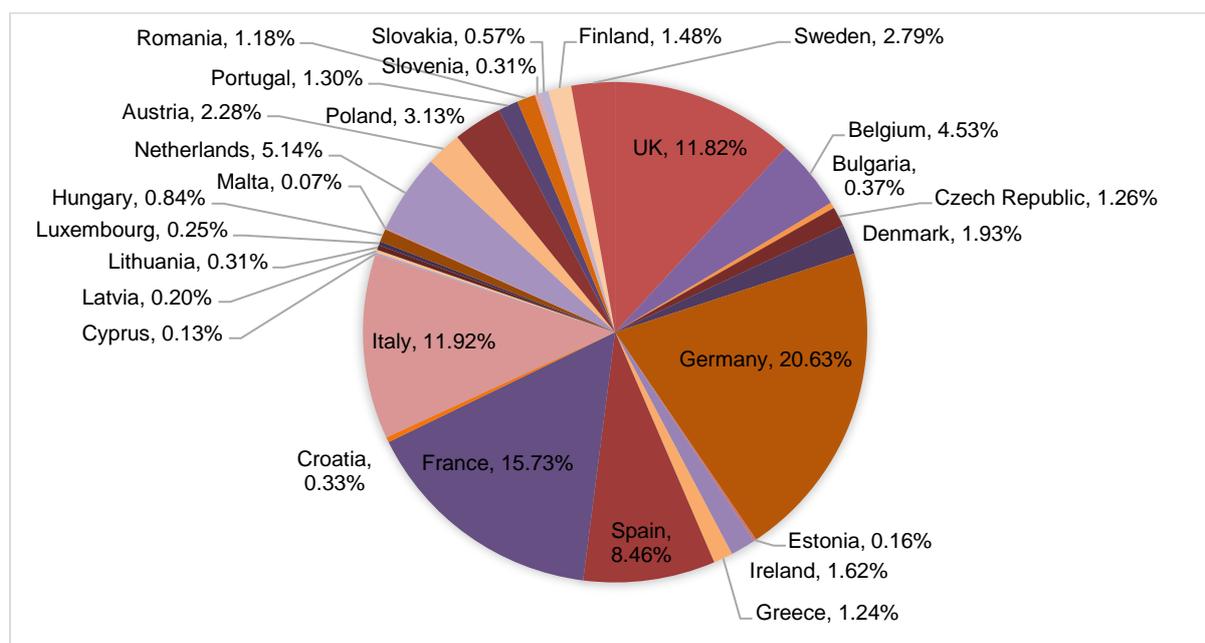
The EFSI operates EU-wide, but it is possible to track the size of its investments down to the Eurozone member state level. The total finance enabled by EFSI—over €300 bn by the end of 2018—can be tracked to the member state in which a public sector entity has agreed to use the resulting asset and should, therefore, be added to the state's public sector debt, the EFSI borrower ranking as an OPSE at one step removed. In effect the borrowing EFSI company is a form of shell company, arguably established solely to keep its direct debts out of the Eurostat figures.

A chart on p.140 of the EIF 2018 annual report gives a geographical breakdown of the "exposure at risk" under guarantees: 18.4% is into Italy and 11.0% into Spain. If we use these percentages as markers for how much of the total finance enabled by the EIF has been added as new, invisible, public sector debt in those two countries, it is €5 bn in Italy and €3 bn in Spain.

<sup>130</sup> The entirety of the EIB's loan portfolio outside the EU is to public sector borrowers in the non-EU country concerned.

<sup>131</sup> The remainder of the EIB's portfolio comprises loans to SMEs through commercial banks.

Figure 13: Percentage share of EU Budget revenue by member state, 2017, after rebates



Source: Amending Budget No. 6/2017: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018B0091&from=EN>

Italy's share of liabilities in the EIB and the EIF/EFISI is €9 bn (2.22% of GDP) and €5 bn (3.13% of GDP), respectively. In comparison, Spain's share of liabilities in these organisations are €24 bn (1.96% of GDP) and €33 bn (2.70% of GDP), respectively.

It is important to recognise that the EIB shareholding of €243.3 bn is not included in national balance sheets under EU public accounting rules. James Richardson, Chief Economist at the National Infrastructure Commission, described this as a "little bit of fiscal magic".<sup>132</sup> Piers Williamson from The Housing Finance Corporation (THFC) went further: "[o]ne of the benefits of the EIB is that, until recently, it was classified as a remote contingent liability. Effectively, it is off the Government's balance sheet, so it is a fantastic money-printing device for every nation in the European Union. I do not mean that cynically; it genuinely is that".<sup>133</sup> It is nevertheless important to understand the all-in position and accept that these liabilities are genuinely part of each country's national debt.

#### 4.7 Total potential liabilities

Table 8 brings together the total potential liabilities for Italy and Spain from the six sources considered above. Italy's total potential liability is up to 167% of GDP, while Spain's is up to 138% of GDP. By comparison, the debt to GDP ratio of Argentina is 86%.<sup>134</sup>

<sup>132</sup> Quoted in House of Lords *Brexit: the European Investment Bank*, 31 January 2019; <https://publications.parliament.uk/pa/ld201719/ldselect/ldecom/269/269.pdf>.

<sup>133</sup> *Ibid.*

<sup>134</sup> <https://tradingeconomics.com/argentina/government-debt-to-gdp>, Cf. Gallas, D., "Why confidence in Argentina's economy is dwindling", BBC News, 30 August 2018, <https://www.bbc.com/news/world-latin-america-44107630> and Pérez, S., and Dube, R. "Argentina's president-elect faces his nemesis: the IMF", Financial News, 4 November 2019. S&P's credit rating for Argentina is CCC- with negative outlook, while S&P's credit rating for Italy stands at BBB with negative outlook, which is three grades higher, and S&P's credit rating for Spain stands at A with stable outlook which is four grades higher than Argentina's (<https://tradingeconomics.com/argentina/rating>, <https://tradingeconomics.com/italy/rating>, and <https://tradingeconomics.com/spain/rating>).

Table 8: Total liabilities for Italy and Spain in 2018–19 (% of GDP)

SOURCE OF LIABILITY	QUALIFICATION	ITALY	SPAIN
National debt	As per Eurostat database	133	98
TARGET2	Depending on whether existing national debt is taken as collateral	0–25	0–32
QE programme	Extra liabilities taken on to buy non-public sector bonds	3.10	3.20
EIB	Loans to "other public sector entity"	2.22	1.96
EIF/EFSI	Loans not counted within Eurostat tables	3.13	2.70
Total		141.5–166.5	105.9–137.9

It is perfectly plausible that Italy has been able to borrow up to 33% more of its GDP (i.e., €82 bn) and Spain has been able to borrow up to 40% more of its GDP (i.e., €81 bn) than they would have been able to do had they been independent sovereign countries, given their third-party credit ratings. Although some of the figures in Table 8 might be underestimates and others might involve some double counting,<sup>135</sup> the table provides a rough quantitative estimate of the size of the risk that arises from the sub-sovereign reality of Eurozone membership for Italy and Spain.

## 5. Exacerbating Factors

We now consider six factors that exacerbate the situation.

### **Factor 1: Use of bank resolution to offload risk from member state retail (and other) depositors and investors into global markets**

*First, EU, Eurozone and member state actions in the context of failing banks tend to evade the pan-EU legal requirements for bank resolution and protect local member state retail (and other) depositors and investors, exacerbating the unmanaged risk exposure faced by wholesale investors, especially those outside the Eurozone.* Applicable bank resolution regulations and their practice of interpretation and implementation have secured the protection above all others of local, retail (and other) depositors and investors in the Eurozone issuer states. The consequence has been an evasion of the agreed pan-EU regime for sharing the burden of failing financial institutions across equity and debtholders more or less equally. The interests of local individual taxpayers within Eurozone member states have been prioritised to the detriment of investors elsewhere, with the result that other parts of the financial system holding Eurozone bank bonds, such as other banks, pension funds and (now to a lesser degree) insurance companies are exposed to additional risk arising from these holdings. This is itself a source of systemic risk for bank holders of the debt.

EU authorities have the power, in the context of the resolution of banks which are seen to be "failing or likely to fail", to "bail-in" creditors, i.e., incrementally to write off a bank's equity holdings and write down its subordinated debt, and then its senior debt, up to a point where this allows the bank to continue in business, while ensuring the protection of retail depositors, up to a limit of €100,000 in their accounts.<sup>136</sup> Local member state legislators and authorities can, at a moment of prospective failure,

<sup>135</sup> It is impossible to tell from the published official data, so some debt included in TARGET2 and the QE programme might already have been included in Table 8 and might already have been counted in row 1.

<sup>136</sup> Larger depositors are in principle to be bailed-in, protecting retail depositors only up to €100,000. Retail depositors with less than €100,000 are to be paid out by way of the national deposit guarantee scheme, so the resolved bank would have two levels of liability: the national deposit scheme as the only creditor, with the bailed-in depositors becoming

crystallise and nullify numerous exposures arising from their local banks and force them to be borne by the global financial market.

The relevant pan-EU regime follows from the Bank Recovery and Resolution Directive (BRRD).<sup>137</sup> This directive was crafted to govern bank resolutions across the EU and to achieve a mutualisation (i.e., sharing) of losses in the private sector. It applies when a bank is "failing or likely to fail". At that point, if State support is provided (as it normally is), the resolution authorities have the power to ensure shareholders and creditors of the bank bear losses equivalent to a minimum of 8% of the bank's liabilities through bail-in. Thus, for instance, if public money is used to bail-out the bank, then an immediate 8% write-down of equity or conversion of (junior and then senior) debt into equity is required as a matter of law, prior to any other resolution steps being taken.<sup>138</sup> This mechanism is intended to ensure burden-sharing across existing investors and creditors and to incentivise creditors, in particular, to pay proper attention to the financial condition of their banks. Within the Eurozone, the arrangements for resolution of 113 (as at Q3 2019) systemically important banks (i.e., the same set of banks that are supervised under the Eurozone's SSM) is overseen by a pan-Eurozone body, the Single Resolution Board (SRB). It is also intended to be required (although this is not yet fully implemented) that banks issue additional capital in the form of so-called TLAC (Total Loss Absorbing Capacity<sup>139</sup>), to ensure that, if any bail-in takes place, there is adequate replacement capital available afterwards to continue the bank's operations.

In practice, for many, if not most, of the Eurozone resolutions occurring to date, local retail investors in banks' regulatory capital issuances have become exposed to the BRRD's requirement for bail-in of 8% of liabilities. A pure application of the rule would have meant the authorities eliminated equity and subordinated debt owned by retail holders as part of any bail-in, at the same time as eliminating holdings of wholesale market investors in those instruments. Eurozone member state governments and central banks have responded to such cases by seeking to avoid pain for local retail investors, circumventing the BRRD rules by ever-more ingenious and increasingly questionable methods. They have sought to target international wholesale investors by bailing-in their debt and minimising the bail-in for local individual taxpayers, local retail investors in bank equity or debt and local depositors. The treatment is now under challenge, in the case of Banco Santander's acquisition of Banco Popular Espanol.<sup>140</sup> Circumventions have included a failure to apply the 8% bail-in rule in the recent cases of bank resolution or bank recapitalisation in Greece, Italy, Cyprus and Germany.<sup>141</sup> The claim being made by Mexican holders of equity and subordinated debt under the Mexico-Spain Bilateral Investment Treaty is that Spain's administration of the demise of Banco Popular amounted to unlawful expropriation of the

---

shareholders with shares that reflect how much in excess of €100,000 they had in their accounts. This template has not, in the event, been fully followed, and there have thus far been no pay-outs from national deposit schemes.

<sup>137</sup> Directive 2014/59/EU.

<sup>138</sup> There are additional EU "state aid" rules which are applied at the discretion of the European Commission to similar, though less prescriptive, effect in this context.

<sup>139</sup> The TLAC standard is to be implemented in the EU through changes to the CRR, with related changes being made to the EU's "minimum requirements for own funds and eligible liabilities" (MREL) in the BRRD.

<sup>140</sup> Andriopoulos, D. and Asimakopoulos, I.G., "Does Investment Arbitration Threaten the Effectiveness and Integrity of EU Bank Resolution?", Kluwer Arbitration Blog, 29 October 2019.

<sup>141</sup> In Italy, the SRB took the view that BRRD—and therefore the 8% rule—did not need to be applied because the failure of the banks was not expected to have a significant adverse impact on financial stability and neither bank provided critical functions (SRB (2017a) Decision of the Single Resolution Board in its executive session of 23 June 2017 concerning the assessment of the conditions for resolution in respect of Banca Popolare di Vicenza S.p.A., non-confidential version, (SRB/EES/2017/12) and SRB (2017c) Decision of the Single Resolution Board in its executive session of 23 June 2017 concerning the assessment of the conditions for resolution in respect of Veneto Banca S.p.A., non-confidential version, (SRB/EES/2017/11)). In Greece, the resolutions were rushed through before the 8% write-down rule came into effect and local legislation was re-written to prioritise Greek government debt (World Bank 2016. *Bank resolution and bail-in in the EU: selected case studies pre and post BRRD* (English). Washington, D.C.: World Bank Group). In Cyprus, a bank was recently resolved with an overt avoidance of the application BRRD on the purported basis that its resolution involved a continuation of steps taken before the law came into force (which is not an approach generally recognised as legitimate in law). See European Commission press release, "State aid: Commission approves aid for financing the orderly market exit of Cyprus Cooperative Bank Ltd, involving sale of some parts to Hellenic Bank", 19 June 2018. In December 2019, the European Commission approved a €3.6bn package of restructuring aid for German state-owned bank NordLB, which was stated not to breach the 8% rule on the basis that private investors would, the EC determined, have accepted similar terms so no state aid was provided.

claimants' investment. The situation should ultimately largely be superseded once the TLAC requirements are fully implemented, although this implementation is rendered questionable by uncertainties as to where exactly the banks will raise the additional capital (if they are not to reduce lending) and by the competing claims for new capital caused by Basel III.

In the EU-Singapore Investor Protection Agreement approved by the European Parliament in February 2019,<sup>142</sup> there is a commitment to give equal treatment to sovereign debt holders both outside and inside the EU. This previously uncommon measure restricts the ability of member states to write off foreigners' debt (in this case, EU member state debt owned in Singapore), whilst preserving domestic investors. If this commitment became a common feature of investor protection agreements, it would have the effect of exacerbating systemic risk issues in the context of the way the Eurozone is constructed, since it removes a lever for debt refinancing. Nevertheless, it is a provision which should be included in a future UK-EU, post-Brexit trade deal since the UK will need fair treatment for its global investors when managing Eurozone risk if it is not to be forced to assume the worst-case valuation for member state debt as well as for any public sector and other debt which is dependent on the financial backing of member states.

## **Factor 2: Pressure to maintain local member state banks**

*Second, there is a lack of cross-border intra-Eurozone bank mergers and acquisition activity.* The logical and intended result of the creation of the Eurozone is a pan-Eurozone market for banks and investment firms. Intrazone cross-border bank takeovers should occur, with stronger firms taking over weaker ones, regardless of where those are located within the Eurozone as a whole. This amalgamation process should, if it happened, reduce very significantly the likelihood of resolution or insolvency of local banks in distress, since there would be a larger pool of more successful financial institutions available to take over less successful ones, including in other Eurozone member states. Non-viable ("zombie") banks would be absorbed or put out of business, rather than being kept going for lack of a buyer. The result could be that, for some smaller Eurozone member states, the number of financial institutions would decline. Ultimately, of course, they might no longer have a major domestic bank.

However, such a situation has so far proven to be politically unpalatable. Cross-border mergers within the Eurozone have not occurred in circumstances involving potential BRRD resolution action. Instead, it has invariably been a large, domestic bank that has stepped in.<sup>143</sup> In particular, cross-border mergers could expose the contributors to the deposit guarantee scheme of the acquirer's country to the balance sheet, NPLs and any partiality in the application of law and regulation of the target bank<sup>144</sup> and its domestic framework. For example, when the EU and Eurozone authorities were considering the rescue possibilities for depositors in the Co-op Bank of Cyprus, Cypriot legal difficulties in recovering local mortgage debt by way of repossession were seen as a risk that those in other Eurozone member states and in financial institutions located in those states should not accept.

Also, were such cross-border takeovers to be permitted, they would reduce significantly the ability of the target's country to raise capital by issuing bonds to its local financial institutions, since those institutions would become foreign-owned and controlled. This would deprive the state of ready buyers for their debt. It would also, even if such extra confirmation were necessary, dissolve the illusion that there was ever a real possibility of the member state leaving the Eurozone. Such a step would require the repatriation of central bank and regulatory functions from the ECB and necessitate the re-establishment of a local financial market. This is rendered all the more difficult if major local market actors are owned by foreign institutions headquartered elsewhere in the Eurozone.

<sup>142</sup> The Investment Protection Agreement between the European Union and its Member States and the Republic Of Singapore, 14 November 2019, available at <https://trade.ec.europa.eu/doclib/press/index.cfm?id=961>.

<sup>143</sup> Santander in the case of Banco Popular Espanol; Hellenic Bank in the case of CoOp Bank of Cyprus; Intesa SanPaolo in the case of Veneto Banca and Banca Popolare di Vicenza.

<sup>144</sup> This can arise, in practice, even when overseen by the pan-Eurozone authorities.

### Factor 3: Central counterparties used to offload additional member state risk into global markets

Third, a regulatory incentive is created for central counterparties to accept additional risk, which is then effectively borne by the global markets. CCPs act as buyer to every seller and seller to every buyer in certain financial transactions. The CCP automatically assumes such a role when a contract is entered into across an exchange; and it does so through a novation process when the contract is initially entered into bilaterally or "over the counter". They are particularly important in the derivatives markets. Their role has been bolstered by various post-2007-8 crisis measures, requiring the clearing by a CCP of certain liquid derivatives contracts (and the trading on an exchange of many such contracts), reflecting a new understanding of the importance of CCPs. EU law regulates EU CCPs and non-EU CCPs recognised by the EU as legitimate venues for EU customers to use for their clearing. CCPs are only permitted to accept cash or certain government bonds (including EU and US bonds) as collateral. CCPs may themselves determine which issuers to accept and some of them will not accept all EU issuers' bonds as collateral, even though by regulation they are eligible.<sup>145</sup> EU law also mandates the investment of cash held by CCPs into such assets and other high-quality sovereign debt instruments, but again CCPs may currently choose between these instruments when making their decisions.

Revisions to the European Market Infrastructure Regulation (EMIR), known as EMIR 2.2,<sup>146</sup> enhance the ECB's role in the regulation of CCPs and include new regulatory restrictions and processes for CCPs to change the kinds of sovereign debt that they will accept. The introduction of these new provisions has, in part, been a response to the Eurozone crisis of 2009–2011 when certain major CCPs, including those outside the Eurozone, ceased accepting, as collateral, Greek and other perceived lower credit quality Eurozone member state debt. They also introduced haircuts, which had not been applied before, on certain other Eurozone member state debt, reducing the collateral value attributed to that debt. Concerns were expressed<sup>147</sup> that the application of these haircuts resulted in market price reductions in certain Eurozone member state debt and a decrease in demand for that debt. Although these decisions were appropriately made for risk reasons by financial infrastructure providers whose main role is to manage risk in the financial markets, the Eurozone now wishes its regulators to be directly or indirectly in control of any decisions to apply haircuts. The aim is for the Eurozone to determine for itself the level of risk arising from its member states' debt. Yet any meaningful control by the Eurozone of the risk-weighting and acceptance of its member state bonds as collateral gives rise to a significant source of systemic risk for the financial markets,<sup>148</sup> and is yet another example of the EU's refusal to accept the markets' assessment of the risks that it generates.

Under EMIR 2.2, an EU-based CCP's college of regulators has the power to prevent a CCP from changing accepted collateral classes on risk grounds. Because the members and users of CCPs are the main global financial institutions, a decision to force CCPs to treat collateral as having an artificially high value would mutualise the risk of that mispriced collateral. CCPs hold collateral for their members and users and would, in such a case, be forced to apply a lower haircut to the value of that collateral than if they were applying their own *bona fide* assessment of the credit risk arising from the collateral. The composition of the college is weighted in favour of the Eurozone. As a general matter, the college will comprise the CCP's home regulator and other relevant regulators, such as those of the trading venues served by the CCP and the national regulators of those clearing members of the CCP who make largest contributions to the CCP's default (or guarantee) fund. The ECB is required to be a member of a college in its capacity as supervisor of large banks that are clearing members of the CCP and in its

---

<sup>145</sup> EMIR, art. 46, read with the related Regulatory Technical Standards (Commission Delegated Regulation (EU) No 153/2013).

<sup>146</sup> Regulation (EU) No 2019/2099.

<sup>147</sup> Armakola, A., Douady, R., Laurent, J-P. and Molteni, F., *Repurchase Agreements and Systemic Risk in the European Sovereign Debt Crises: The Role of European Clearing Houses*, 2017 (<https://hal.archives-ouvertes.fr/hal-01479252v1>), cited by ESMA in Report on securities financing transactions and leverage in the EU, 4 October 2016, ESMA/2016/1415. See also Stephen Morris and Patrick Jenkins, *Financial Times* (December 23, 2018); Isabel Schnabel, *Financial Times* (28 August 2018); Helen Chandler-Wilde, *Daily Telegraph* (2 December 2018).

<sup>148</sup> Reynolds, B., "Rebutting the argument of various Eurozone politicians and central bankers that the Eurozone should not be able to control euro clearing", *Financial Times*, 15 May 2017.

capacity as a central bank where the CCP clears financial instruments denominated in euros. If the ECB is a member in both of those capacities, it will have two votes in the college, giving it a strengthened say.<sup>149</sup> Where the CCP is also based in a Eurozone state, the national regulator will be particularly incentivised to preserve the system, as will the regulators of the clearing members that are based in the Eurozone. Christian Noyer, the former Governor of the Banque de France, has made it clear that CCPs' margining policies will be set to "protect the euro area". He also said he wanted to see the bulk of euro derivatives clearing – currently 75% of the global clearing of euro derivatives is executed in London – moved to the Eurozone and ideally Paris "since no other city in Europe has the same pool of talent that Paris has".<sup>150</sup> "In the end", he said, "you are only sure of what's under your control and jurisdiction. We need the legislative power, the judiciary power, supervisory power, the central bank control of liquidity".<sup>151</sup> Yet, no systemic risk implications are considered, nor any effects on the cost of financial services for EU businesses and consumers.

#### **Factor 4: Use of securitisations in a manner that obscures member state bank risk**

*Fourth, an "arbitrage" is being permitted in the context of reducing non-performing loans for EU banks that apply the internal ratings-based (IRB) approach, which obscures the risk occurring on the books of member state banks.* The issue arises in the context of the securitisation of Eurozone banks' NPLs.<sup>152,153</sup> A programme to securitise the €75 billion nominal of NPLs in the Greek banking system, known as "Hercules", was recently approved by the European Commission.<sup>154</sup> The NPLs are sold by the bank that generated them to a special-purpose securitisation entity, which then issues tranches of bonds to finance the purchase. The sale value is the gross book value of the NPLs, less write-downs already taken by the bank; the sale takes the NPLs off the bank's books. This programme will result in large volumes of the senior tranches of bonds issued by the securitisation entities being guaranteed by the Republic of Greece towards their holder. The structure was pioneered in Italy.<sup>155</sup> The NPLs on a bank's balance sheet would be tying up 20–25% of their value in CET1 capital<sup>156</sup> because they would be subject to a Credit Conversion Factor (CCF)<sup>157</sup> in the range of 300–400% through the bank's IRB

<sup>149</sup> See the revisions in EMIR 2.2 to arts. 18, 19 and 49.

<sup>150</sup> Hawkes, A., "London must lose euro trading: On eve of crucial Brexit talks, continental bankers close ranks threatening 83,000 jobs in City", Financial Mail on Sunday, 17 June 2017; <https://www.thisismoney.co.uk/money/news/article-4613874/Countdown-Brexit-London-lose-euro-trading.html>. France has repeated this demand again following Brexit, as reported in Jones, H., and Thomas, L., "Exclusive: France ramps up pressure to shift \$200 billion euro clearing away from London – sources", Reuters Business News, February 7, 2020; <https://uk.reuters.com/article/uk-britain-eu-clearing-exclusive-idUKKBN2011SH>.

<sup>151</sup> Nikolaeva, M., and Jones, H. "Noyer says Brexit banks taking formal steps to secure EU business in Paris", Reuters, 27 June 2017; <https://www.reuters.com/article/uk-britain-eu-paris-banks/noyer-says-brexit-banks-taking-formal-steps-to-secure-eu-business-in-paris-idukkbn19i1ae>.

<sup>152</sup> The ECB accepts that "NPL risk transfer and securitisation transactions can be beneficial for banks in terms of funding, liquidity management, specialisation and efficiency". However, it acknowledges that these are usually complex processes and should be conducted with care. Consequently, institutions wanting to engage in such transactions are expected to "conduct robust risk analysis and to have adequate risk control processes" (ECB (2017). *Guidance to Banks on Non-performing Loans*, March 2017, page 13; <https://www.bankingsupervision.europa.eu/legalframework/publiccons/pdf/npl/comparison.en.pdf>).

<sup>153</sup> The Governor of the Greek central bank, Yannis Stournaras, recently revealed a figure of €75 billion in NPLs in the Greek banking sector as of mid-2019, equivalent to 43.6% of all loans. Ambitious targets for NPL reduction have been agreed between the four largest banks and the ECB/SSM, and under a similar framework by the Bank of Greece for smaller banks: NPL ratios are to fall to 35% by the end of 2019, and close to 20% by the end of 2021. Even so, they will still at that point be five times the euro area average. See Stournaras, Y., "Greek economy – Current developments", speech at the Belgian Business Club, 5 September 2019.

<sup>154</sup> See [https://europa.eu/rapid/press-release\\_IP-19-6058\\_en.htm](https://europa.eu/rapid/press-release_IP-19-6058_en.htm).

<sup>155</sup> The Republic of Italy agreed to provide €2 billion of guarantees to assist with securitisation of NPLs. See *Italy: Liquidation of Veneto Banca and Banca Popolare di Vicenza*, Economic Research Department, BNPParibas, 12 July 2017; <https://economic-research.bnpparibas.com/html/en-US/Liquidation-Veneto-Banca-Banca-Popolare-Vicenza-7/12/2017,30109>. See also <https://www.bankingsupervision.europa.eu/press/pr/date/2017/html/ssm.pr170623.en.html>.

<sup>156</sup> Value, in this sense, is the so-called "carrying value", which will differ from the loan's nominal value by the write-downs already taken by the bank. In the speech at the Belgian Business Club, Yannis Stournaras said: "Over the past three years to mid-2019, the absolute stock of NPLs fell by about €30 billion, largely through write-offs and sales". For this reason, it can reasonably be assumed that the current carrying value of the stock of €75 billion nominal of NPLs is €50 billion.

<sup>157</sup> The factor within an IRB model that converts the nominal amount of a piece of risk-bearing business into its value as a risk-weighted asset.

model, reflecting a high risk of loss. The value prior to the application of this calculation, thanks to earlier write-offs, would be €50 billion in the case of Greece. The CET1<sup>158</sup> needed to support that portfolio would be €50 billion x 7% multiplied by the CCF of 300–400%, giving a range of €10.5–14.0 billion. To release this capital, the bank sells the NPLs to a securitisation vehicle in return for two assets that carry a 0% CCF: around 10% of the sale value in cash and 90% in the form of the bonds guaranteed by their own sovereign. This transaction releases the entirety of the €10.5–14.0 billion of CET1 capital tied up behind the NPLs, when the sovereign issuing the guarantee is only just investment grade (Republic of Italy – BBB) or is speculative grade (Republic of Greece – BB-).<sup>159</sup>

### Factor 5: Control of ratings of credit rating agencies

*Fifth, the EU has introduced regulations for credit rating agencies, allowing it to control the ratings given by those agencies.* Credit rating agencies are generally expected to observe international supervisory standards set primarily by the International Organization of Securities Commissions. Those credit rating agencies which operate in the EU are subject to direct regulation under the Credit Rating Agencies Regulation of 2009<sup>160</sup> and to direct supervision by the European Securities and Markets Authority (ESMA). This Regulation came into force after a series of downgrades by rating agencies of Eurozone member state government debt, and it was intended by many of those framing the Regulation that it would permit ESMA to control the judgements of those rating agencies in a manner acceptable to the Eurozone.<sup>161</sup> This, of course, places severe limits on independent objective analysis of Eurozone debt and is, therefore, a very troubling development given the intentions at play and the level of Eurozone risk at stake.<sup>162</sup>

We have used public credit ratings, as the Basel Rules themselves do, to illustrate the misapplication of the Basel Rules to Eurozone sovereign claims. For instance, we noted that the Republic of Italy is accorded a 0% risk-weighting when it is rated BBB. This does not necessarily mean that we agree with the public credit ratings. They are prone to the same problem we are illustrating – overrating Eurozone sovereigns in comparison with true sovereigns without fully factoring in the difference in quality between the two that rests on sovereign monetary powers over the currency. It is of prime importance to the Eurozone that the credit rating agencies continue to treat Eurozone members as genuine sovereigns, and not ones that had surrendered important sovereign powers to Eurozone institutions – which means the agencies must be closely controlled by Eurozone institutions.

It is notable that Italy—and Portugal—sit in the bottom-most level of "investment grade". A single downgrade would convert the bonds into "speculative grade" and compel many institutional investors

<sup>158</sup> Common Equity Tier 1, the quality of capital needing to be issued under the Basel regime and in a specific minimum proportion to the bank's RWA. For non-systemically important banks this is 7%, plus any counter-cyclical buffer that its financial regulator imposes from time to time.

<sup>159</sup> <https://tradingeconomics.com/greece/rating>.

<sup>160</sup> Regulation (EC) No 1060/2009.

<sup>161</sup> At the height of the Eurozone sovereign debt crisis in 2011, Christian Noyer, head of the French central bank, "lashed out at Britain after credit rating agencies warned that France's AAA credit rating could be downgraded amid fears that the Eurozone have failed to do enough to prop up bankrupt economies in the single currency or overstretched Eurozone banks", David Richards, "France lose its credit rating? It should be the UK! blasts head of central bank amid rising tensions between London and Paris", Daily Mail, 16 December 2011; <https://www.dailymail.co.uk/news/article-2074450/France-lose-AAA-credit-rating-It-UK-Blasts-head-central-bank.html>.

<sup>162</sup> In a speech in 2011, Michel Barnier raised the possibility of banning sovereign debt ratings of EU Member States that were receiving state aid: Barnier, M. (2011) "The new European Securities and Markets Authority: Helping enhance the resilience of financial markets", Speech/11/514 (11 July, Paris). The EU also considered establishing a public European rating agency to issue sovereign debt ratings. However, this was not progressed in the face of market challenges over its credibility and objectivity. See European Parliament resolution of 8 June 2011 on credit rating agencies: future perspectives (2010/2302(INI)) OJ C 380E, 11.12.2012, p. 24–31, Opinion of the European Economic and Social Committee on the 'Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EC) No 1060/2009 on credit rating agencies' COM(2011) 747 final — 2011/0361 (COD) and Commission Staff Working Paper Executive Summary Of The Impact Assessment, SEC/2011/1355. On the purpose of the CRA Regulation, see, for example, the Memo from the Commission, New rules on credit rating agencies (CRAs) enter into force – frequently asked questions, 18 June 2013.

to sell out of their holdings. This would be very damaging and, of course, the European authorities are very keen to avoid it happening.

Clearly there is a public interest in credit rating agencies carrying out their work properly, and the current structure must be questioned. A regulatory framework that gives supervisory authority to one of the EU financial authorities, and the power to regulate other authorities and the credit rating agencies themselves, quickly becomes fraught with conflicts of interest. The credit rating agencies provide credit ratings for EU financial supervisory authorities and their governors (the member states directly or indirectly), the financial institutions they supervise, and ultimately the EU institutions (the EU, ESM, EIB and EIF), while at the same time being supposedly regulated "independently" by ESMA, one of that same group of authorities.

As these various authorities have a vested interest in having high ratings for their members and stakeholders (especially that the ratings should sit within the level of "investment grade"), there must be questions about apparent or potential breaches of those conflicts. If it becomes apparent that pressure has been applied to credit rating agencies, how will the investor community judge the published ratings?

### **Factor 6: Potential offloading of member state risk into global financial market through pan-EU deposit insurance**

*Finally, there is a further likely mutualisation of Eurozone risk across the financial sector by virtue of the proposed European Deposit Insurance Scheme. An intended new pre-funded<sup>163</sup> European deposit insurance scheme (EDIS)<sup>164</sup> would mutualise risks of the failure of a Eurozone bank by sharing losses of local deposit-takers across the banking community operating within the Eurozone. If the scheme were to proceed by replacing current national deposit guarantee schemes (NDGS), losses incurred by local Eurozone member state retail (and certain other) depositors would be made whole by the EDIS scheme, exposing the taxpayers of all member states collectively rather than just exposing taxpayers within the member state where the failing bank was located. The EDIS in this form would therefore create an additional degree of moral hazard, since local regulators would be further incentivised to protect their institutions as the ones purchasing many of their bond issuances, given that third-country and third-party monies contributed to the EDIS would be used to bail out their local bank depositors. The scheme would also increase the exposures for individual banks operating across the Eurozone, including international banks operating through subsidiaries there, by virtue of the requirements for the funding and replenishment of funds for the scheme.*

The UK's ring-fencing initiatives take the opposite approach to EDIS. Ring-fencing is premised on limiting the degree to which taxpayers are required to cover bad lending, whereas EDIS, on the above model, exposes all Eurozone taxpayers to bad lending wherever it was generated. Ring-fencing, in other words, is a preventative measure, aimed at disincentivising bad lending. By contrast, EDIS is an attempt at a curative measure, accepting that bad lending will happen and seeking to share the burden. The EU has abandoned its proposed ring-fencing measures, the Liikanen bank reform proposals.<sup>165</sup> The risk is that the EDIS approach will incentivise irresponsible lending, leading to significant numbers of new NPLs to add to existing NPL inventories that are still in excess of 40% of the gross book value of banks' loans in both Cyprus and Greece.

<sup>163</sup> Funding mechanisms remain as yet uncertain. If member states contributed their own bonds, the mechanism would effectively be the same as them agreeing to a mechanism through which any pay-out from the scheme generated a claim on each member state, in line, for example, with their ECB capital key.

<sup>164</sup> For further details on original proposals for the EDIS, see Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 806/2014 in order to establish a European Deposit Insurance Scheme, COM(2015) 586 final, 24/11/2015.

<sup>165</sup> See the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Commission Work Programme 2018, An agenda for a more united, stronger and more democratic Europe, 24 October 2017, and the Proposal for a Regulation of the European Parliament and of the Council on structural measures improving the resilience of EU credit institutions, COM/2014/043 final, 2014/0020 (COD), 29 January 2014.

On the other hand, we have the version of EDIS as propounded by Olaf Scholz, the German Finance Minister, in a speech delivered in London in early November 2019<sup>166</sup> and accompanied by a "Position paper on the goals of the banking union". However, in common with many other Eurozone structures, this EDIS would be a limited overlay on top of existing national schemes. Mr Scholz admitted by inference that a claim by a depositor under current national schemes is really a claim on that country's Exchequer, which in most cases can only be met by extra borrowing. He proposes that a country that could not borrow more on the open market to meet a claim should have recourse to a bail-out fund – the ESM. Only as a very final backstop would there be a drawing on the EDIS.

Mr. Scholz flagged the success of the current deposit protection arrangements on the basis that no claim had so far been made on them, but he did this without recognising that member states wanted to avoid claims on their own Exchequers and that bank rescues had so far been conducted in a way that did not comply with the terms of the EU BRRD. Nor is it recognised as a supervision failure that so many banks have collapsed or found themselves in serious difficulties, relying on Eurosystem funding.

Mr. Scholz's proposal is a quite small step, and is contingent upon the acceptance by other member states of difficult medicine: a single EU-wide tax base for corporates and banks, limitation of the 0% risk-weighting for sovereign bonds to the portfolios that banks are obliged to hold as a "base concentration", and a reduction of NPLs to no more than 5% of all loans. Further integration of banking supervision and resolution procedures is also demanded. In addition, the proposed EDIS is not envisaged as a normal deposit insurance scheme. Member states would only gain access to it after exhausting their own options for meeting depositor claims – pay out their own cash, or, failing that, borrow on the open market to raise the cash, or, failing that, borrow from the ESM to raise the cash. It will not elude member states' attention that their availing themselves of the ESM will bring with it an EU (and probably the International Monetary Fund) austerity and supervision regime at a time when their country is in economic and financial difficulty, of which a leading symptom is the failure of a bank of such size that compensating its depositors requires the member state to exhaust its own cash and borrowing resources, and fall back on the ESM. These cannot be regarded as realistic quid pro quo conditions for German agreement to an EDIS which will only be drawable as a final backstop.

Indeed, this turned out to be the case. Within a month of his London speech, Mr. Scholz lost significant political influence in Germany by failing to win the leadership of the Social Democratic Party. The Financial Times reported that "Scholz is now a lame duck. He has no backing to agree anything – let alone EDIS".<sup>167</sup>

## **6. Risk transmission and exposure of the global financial system to potential contagion and a doom loop**

The Eurozone set-up is not cost-free. Importantly, it has implications for the rest of the world, since risks within the Eurozone can be transmitted across the rest of the world, leading to a potential risk of contagion and a doom loop that could have a damaging effect on the global economy.

### **6.1 Risks within the Eurozone**

The factors discussed in the earlier sections of this paper have created an unquantified amount of unmanaged risk that has been transmitted throughout the Eurozone and, in particular, an unmanaged risk on the balance sheets of Eurozone banks and investment firms. The liabilities and contingent liabilities built up by Eurozone and other EU member states as a result of TARGET2, the QE programme and in the EIB Group, while certainly significant, are only part of the total amount of unrecognised risk hidden beneath the surface.

---

<sup>166</sup> See Scholz, O., "Germany will consider EU-wide bank deposit insurance", Financial Times, 5 November 2019.

<sup>167</sup> Khan, M, and Chazan, G., "Weakened Scholz puts brakes on Eurozone reform", Financial Times, 4 December 2019.

The key issue in TARGET2 is the under-collateralisation of the Eurosystem lenders on their loans to banks; a secondary issue is the potential creation of more public debt. The key issues with QE are the lack of an adequate loss-absorption layer inside the Eurosystem, given the size of QE, and what is contained in the portfolio of bonds purchased: although the bonds are on the eligible collateral list, there is no publicly available information on their quality. The key issue with the EIB Group is the low level of regulatory capital available to support their investments; a secondary issue relates to the size of the Group's leveraged loan book and the potential obligations of member states to inject more capital. The key issue with NPLs is that many of them are in reality "zombie" loans that will never be repaid, which is damaging to both banks and the wider economy. Banks are needlessly devoting capital to supporting loans to "zombie" companies. This represents a massive distortion of economic resources. Such companies should be allowed to fail and their capital and workforce should be reallocated to more productive uses and banks should be redirecting their lending to new companies with a brighter future. The "zombie" loans should be written off.

These issues lead to a chain of consequences for the Eurozone. The EU's approach has allowed weaker Eurozone member states to issue more debt than would otherwise be possible and to service existing debt at lower cost than would otherwise be possible. Evidence of this for weaker Eurozone member states can be seen in the total debt-to-GDP ratios of Italy and Spain of up to 167% and 138% of GDP, respectively, which are significantly higher than would normally be expected, given S&P's credit ratings of BBB for Italy<sup>168</sup> and A for Spain.<sup>169</sup>

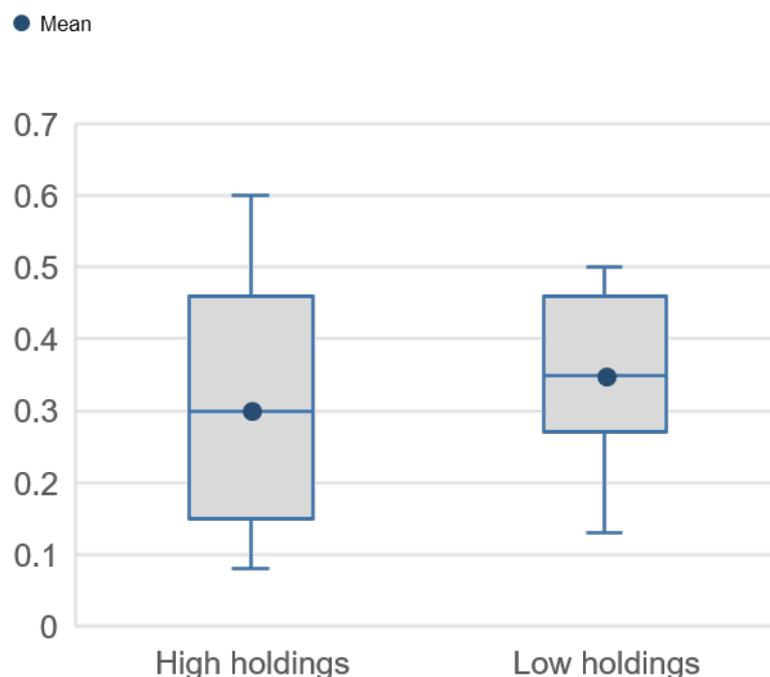
As regards lower servicing costs, the zero-weighting of government bonds would tend to reduce their yield (i.e., interest rate), making it cheaper for governments to borrow. Indirect support for this comes from Figure 14, which shows that banks with larger domestic sovereign exposures do not seem to face closer credit default swap (CDS) spread correlations with their sovereign than their peers with smaller exposures. This indicates that the markets do not yet appear to be penalising banks that hold higher amounts of government bonds – which, if they did, would lead the banks to demand higher yields on those holdings.

---

<sup>168</sup> <https://tradingeconomics.com/italy/rating>.

<sup>169</sup> <https://tradingeconomics.com/spain/rating>.

Figure 14: Correlations between bank and sovereign CDS spreads for banks with low and high sovereign bond holdings



Note: The sample consists of euro area monetary financial institutions (unconsolidated data).

The low/high holdings refer to below and above-median holdings in the sample.

Source: Chart 3 (right panel) in European Central Bank (2019) *Financial Stability Review*, May; <https://www.ecb.europa.eu/pub/financial-stability/fsr/html/ecb.fsr201905~266e856634.en.html>.

It is not certain, of course, whether there is any linkage between the two points. It is unclear whether lower yields led to more borrowing (because cheaper) or less borrowing (because of smaller expenditure to service the debt) – as compared to the counterfactual of a positive risk-weighting of government debt. It is conceivable that lower yields did induce some peripheral Eurozone governments (e.g., Greece) to borrow more during 1999–2008, whilst the main cause of the lower yields was not zero-weighting but, rather, the implicit backing of other EU members. This view is shared by some commentators: "Club Med debt was [believed by Moody's to be] as good as German debt because Europe was sacred. That delusion enabled Greece to borrow for 10 years at 21 basis points over Bunds even when the structural imbalances from the bubble screamed impending disaster. Moody's kept Greece on a strong A-rating even as it became clear that the public accounts were spiralling out of control. It continued to dismiss fears of a Greek default as absurd even after the incoming Papandreou Government discovered that the deficit was more than 12% of GDP, rather than 6% as claimed (actually 15%), and funding markets were jamming shut. The rating was still A-grade when Athens was negotiating a \$147 bn (£115 bn) rescue with the EU and International Monetary Fund (IMF). Only after the bail-out did it slash Greek ratings four notches to junk. The reason for Moody's mispricing of Club Med risk was based on political calculations. [Moody's] was convinced that the EU would never allow a Eurozone state to spiral into insolvency. Solidarity would prevail".<sup>170</sup>

Another consequence relates to the structure of the ECB's QE programme, which involves NCBs purchasing sovereign bonds of their own member state in the secondary market and in large quantities, albeit that they cannot exceed 33% of the member state's outstanding debt. Purchases of seasoned

<sup>170</sup> Evans-Pritchard, A. "Moody's UK bombshell is about political religion and Brexit heresy, not credit-worthiness", Daily Telegraph, 12 November 2019.

bonds<sup>171</sup> in such quantities reduce the secondary market supply, increase bond prices and reduce yields. This, in turn, creates a shortage of supply in the secondary market, which can only be met by new issuance in the primary market by the sovereign and at the lower yields brought about by QE. QE thus reduces the interest payments of the sovereigns on their new issuance and artificially creates a need for new supply in the primary market, which might not otherwise exist amongst investors if they could meet their needs from the secondary market. This works to the benefit of the sovereigns who have a need for new funding, because they can make new issues that will be taken up by investors denied supply from the secondary market. The main purchasers of member state bonds in the primary market are typically their domestic banks and investment firms, concentrating risk in the economy of the home member state by putting at risk the balance sheets of banks and investment firms located there.

## 6.2 Risk transmission to the rest of the world

The effects of the Eurozone's actions run much wider than the Eurozone. Eurozone banks offload some of the risk they have acquired into global financial markets through, for example, the derivatives, repo and other interbank markets. Further, once Eurozone member state government bonds enter the global financial system, the credit risk can no longer be accurately identified, isolated and managed either by firms dealing with counterparties exposed to the risk or by the regulators outside the zone. This is because regulatory interventions within the EU or Eurozone do not address the systemic risk that results from Eurozone member state debt. Indeed, in order to do so, the supervisors would have to reverse the effects - of the EU rules assuming sovereign treatment - through their supervision of individual financial institutions and their oversight of the whole EU financial market. Such a step has not so far been taken. Furthermore, global financial institutions with Eurozone subsidiaries will in practice need to stand behind them, so risk on the books of those subsidiaries will also be transmitted into the global financial system.

This does not, of course, prevent financial institutions outside the Eurozone from taking some protective measures of their own. Financial counterparties engaged in market activities could seek to address the risk of Eurozone member state government debts in a private capacity by minimising their exposures, direct and indirect, to those debts. For example, non-EU banks do not have to accept Eurozone member state government debts or, if such debts were to be accepted, they could apply a discretionary risk weighting to the value of their holdings of those debts. Indeed, many banks and insurers as a matter of good risk management have decided to limit their exposures voluntarily, betraying a more realistic assessment of the creditworthiness of those debts. Furthermore, banks and insurers applying more sophisticated regulatory capital models based on their own internal risk modelling (i.e., the IRB methodology) can find that this results, depending on the workings of the model, in higher capital charges for Eurozone sovereign issuers with higher debt-to-GDP ratios, causing them to reduce their holdings.

However, such steps can only be of limited use in the case of a systemic risk, like Eurozone risk. This is because systemic risk can lead to contagion if the markets begin to question the stability and viability of institutions within the whole financial system. This will be true however well-insulated a bank tries to make itself and however distant it is geographically from the source of the risk – as we saw with the California sub-prime crisis.

## 6.3 Risk of contagion

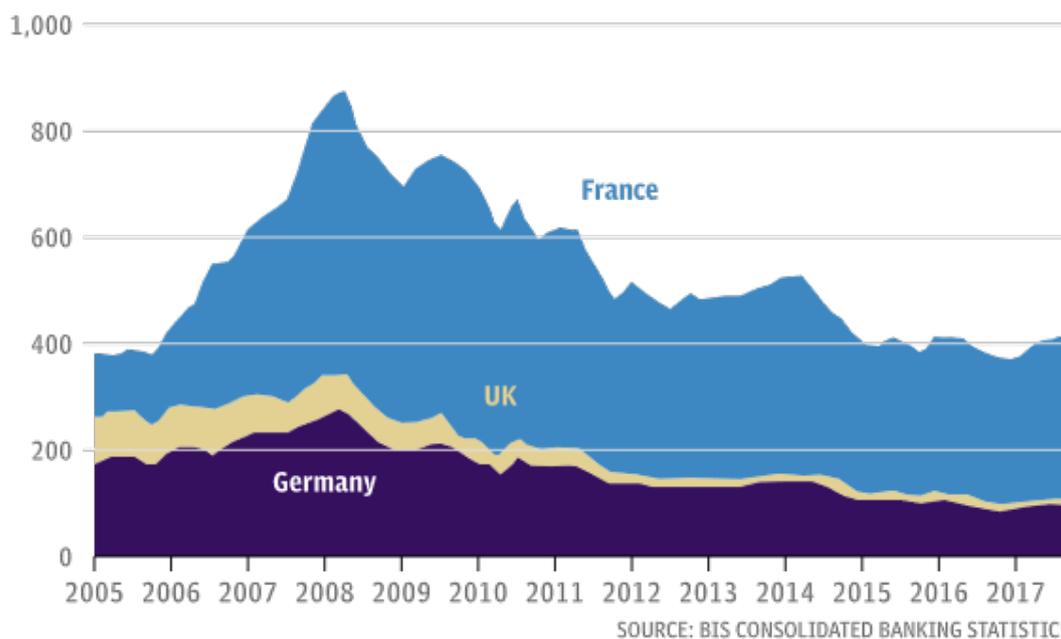
Since the global financial markets are now highly interconnected, contagion in one particular area can spread across sectors and geographies. The result could be the creation of a domino effect, impacting banks in the UK, the US and beyond, given the indirect exposures of banks in those jurisdictions to Eurozone banks and investment firms.

---

<sup>171</sup> A seasoned bond is one which has been publicly traded in the secondary market long enough to eliminate any short-term effects from its initial offering to the public.

Bloomberg identifies Italy's debts as being the "Big Problem": "Europe's most dangerous stock of public borrowing—some €1.5 trn (\$1.7 trn)—is concentrated on the balance sheets of banks in Rome and Milan. But a rout could quickly sweep in lenders in Frankfurt, Paris and Madrid – the main banks in the rest of Europe are holding more than €25 bn of sovereign and private Italian debt. ...French banks [with €85.5 bn in loans] are the most exposed if a sell-off in Italy starts to affect the economy and spread through Europe's financial system. The country's two largest banks, BNP Paribas SA and Credit Agricole SA, own retail units in Italy".<sup>172</sup> The direct exposure of UK banks to Italy is small in comparison (€7.4 bn), but UK banks have lent heavily to French banks and so have significant indirect exposure. See Figure 15.<sup>173</sup>

Figure 15: Key foreign banks' exposure to Italian debt (\$bn)



Source: BIS data contained in a graph produced by The Telegraph: <https://www.telegraph.co.uk/business/2018/10/28/italy-careening-recession-wall-bank-crisis-warns-societe-general/>

The situation would become even riskier for the global markets – introducing conflicted regulatory oversight into the global system – were banks headquartered outside the EU to relocate business to the Eurozone after Brexit, which is something the Eurozone is keen to encourage.<sup>174</sup> Global banking groups in practice stand behind their subsidiaries, so the EU's desires, if acceded to, would introduce a greater direct impact from its conflicted and flawed oversight into the market through the global financial institutions. As noted by the Basel Committee itself, the risks of sovereign exposures can affect the banking system through various channels, including sovereign credit rating downgrades, which generate cliff-edge contagion effects and may precipitate downgrades to the ratings of other entities in the economy given that sovereign ratings set a "ceiling" on other credit ratings.<sup>175</sup> There would also be

<sup>172</sup> Salzano, G., Pogkas, D., Sills, B., "Why Italy's Debts Are Europe's Big Problem", Bloomberg 4 February 2019; <https://www.bloomberg.com/graphics/2019-italian-banks/>.

<sup>173</sup> <https://www.telegraph.co.uk/business/2018/10/28/italy-careening-recession-wall-bank-crisis-warns-societe-general/>.

<sup>174</sup> See, for example, the opinions and other papers issued by the three ESAs, the first of which were: Opinion of the European Banking Authority on issues related to the departure of the United Kingdom from the European Union, EBA/Op/2017/12, 12 October 2017; General Principles to support supervisory convergence in the context of the UK withdrawing from the EU, 31 May 2017, ESMA42-110-433; and Opinion on supervisory convergence in light of the United Kingdom withdrawing from the European Union, EIOPA-BoS-17/141, 11 July 2017. See also Paul Clarke, "City banks under pressure to strengthen Brexit hubs in Europe", Financial News, 20 January 2020; <https://www.fnlondon.com/articles/city-banks-under-pressure-to-increase-brex-it-hubs-in-europe-20200120>.

<sup>175</sup> Basel Committee on Banking Supervision, *The Regulatory Treatment of Sovereign Exposures*, Discussion Paper, 9 March 2018, page 4.

implications for the global economy itself. The risk would be exported to the rest of the world which would suffer macro-economically from the doom loop imploding in another Eurozone crisis – just as it did in the last one in 2009–11. The fall in Eurozone GDP would reduce imports from the rest of the world and spread the recession globally. Market participants, investors and jurisdictions hosting significant financial markets, such as the UK and US, should regard this matter as of very significant concern.

#### 6.4 The doom loop

What the data also shows is the strong mutual dependency between Eurozone governments and Eurozone banks (and other, non-bank, MFIs). The former rely on the latter to buy their bonds, while the latter rely on the former to pay coupons and repay principal on these bonds when due. However, this mutual dependency creates a potential "doom loop" which links risks on the bonds with risks to banks themselves. This loop has a negative feedback in both directions: as sovereign risk rises, it raises bank risks, and as bank risks rise, these raise sovereign risks through the effects on the economy. As the ECB itself warns: "weaker economic growth and a further rise in political uncertainty could intensify sovereign risks. ... [D]eteriorating macroeconomic conditions may pose a challenge to the sustainability of public finances. The materialisation of any of these risks may reignite concerns regarding public debt sustainability in the more vulnerable euro area countries".<sup>176</sup>

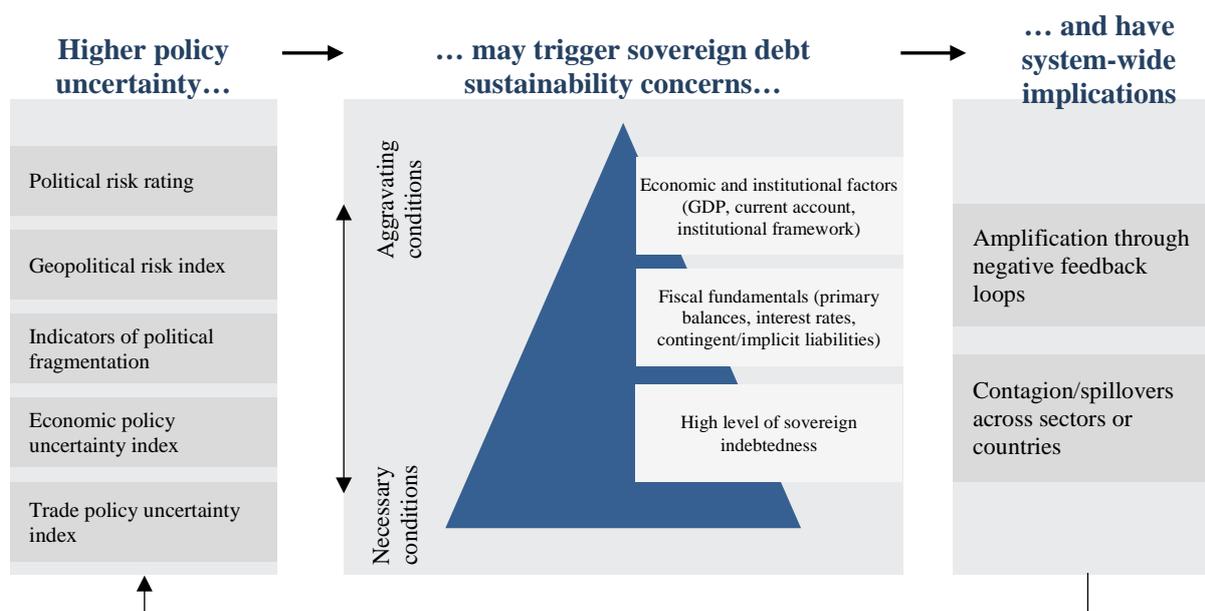
The risk to banks is threefold. *First, as the economy weakens, the banks will experience an increase in NPLs and an associated reduction in interest receipts.*<sup>177</sup> *Second, reduced tax receipts as employment falls increase the risk that governments will be unable to pay interest on their debt, since they cannot issue additional currency to do so, as a conventional sovereign can.* *Third, the combined effect of these two factors increases the risk that bank depositors will take flight and move their accounts from banks in weaker Eurozone member states to banks in stronger ones.* Normally banks would be required to issue a block of regulatory capital to take account of their holdings of bonds that have these risks embedded in them, but, as we have seen, in the case of Eurozone sovereign bonds, they do not. Figure 16 illustrates how policy uncertainty relating to these issues can trigger sovereign debt sustainability concerns.

---

<sup>176</sup> European Central Bank (May 2019) *Financial Stability Review*, p.21.

<sup>177</sup> NPL levels are above 40% in Greece and Cyprus and 25% in Italy.

Figure 16: Interlinkages between policy uncertainty and sovereign debt sustainability concerns



Source: Chart B in European Central Bank (2019) *Financial Stability Review*,  
 May; <https://www.ecb.europa.eu/pub/financial-stability/fsr/html/ecb.fsr201905~266e856634.en.html>.

This doom loop could spread to the UK, and then out into the global economy. Global financial institutions, in practice, stand behind their subsidiaries, which creates a level of contagion risk from the typically small subsidiaries of global (UK or US headquartered) financial institutions located in the EU27. Furthermore, as the Bank of England warned in its 2018 *Financial Stability Report*,<sup>178</sup> a banking crisis in Italy could threaten UK financial stability and could eventually be transmitted to the UK economy through French and German banks, which have massive exposure to Italy. While UK financial institutions' ownership of Italian debt is relatively small (as Figure 15 showed), they have "much higher claims on countries with close links to Italy, including France and Germany. ...If financial strains were to spread across the euro area, there could be a material risk to UK financial stability". Italian NPLs account for a quarter of all Eurozone NPLs. The Report says that UK banks might have to price down their Italian sovereign debt holdings due to the increased risk. This increased risk could then be passed on to households and businesses, through increased interest rates on loans and mortgages. This could, in turn, lead both to an increase in NPLs and have a negative effect on the economy as consumers have less money to spend and businesses find it more expensive to borrow to invest. The Bank of England conducts "stress tests"<sup>179</sup> which model financial risk to the UK originating from the rest of the world, including from Italy. The Report says that "UK banks were resilient to the 2018 stress test, which incorporated a synchronised global downturn in output growth as vulnerabilities across financial markets and the global economy crystallise". Without this resilience, an Italian banking crisis could easily be transmitted to the rest of the world, creating a doom loop that could have a damaging effect on the global economy. Not only do global banks stand behind their subsidiaries in other countries, governments generally stand behind their banks, as the sovereign debt crisis in Eurozone countries, such as Greece, Portugal, Ireland, Spain and Cyprus between 2009-14 showed.<sup>180</sup> It is clear from this experience the damage a doom loop can do.

<sup>178</sup> Bank of England (2018) *Financial Stability Report*; <https://www.bankofengland.co.uk/financial-stability-report/2018/november-2018>.

<sup>179</sup> Examined in more detail in the next section.

<sup>180</sup> [https://en.wikipedia.org/wiki/European\\_debt\\_crisis](https://en.wikipedia.org/wiki/European_debt_crisis).

## 7. How the UK currently mitigates Eurozone risk – and how the EU27 and US do not

Banks and their regulators identify risks through stress tests and manage these risks mainly through requiring the issuance of loss-absorbing capital through Basel Pillar 2. In this section, we examine how Eurozone risk is mitigated in the UK, but not in the EU27 or the US. It should be noted that the UK is limited in its ability openly to manage Eurozone risk under current EU law arrangements, which will last during the transition period for the UK's exit from the EU's legal arrangements until the end of 2020, since under those arrangements the UK is required to respect the ability of EU27 regulators to manage financial risk. The UK nevertheless manages to mitigate the risk in the manner we explain in this section.

*Stress tests.* Central banks and bank regulators apply annual stress tests to the financial institutions they supervise. These stress tests require the banks to analyse the implications of certain market stress hypotheticals specified by the relevant regulator or under applicable law. The effect is that banks are occasionally required to issue more regulatory capital under Basel Pillar 2 to cater for specific exigencies. In principle, stress tests could offset problems in the risk-weighting system by effectively subjecting banks to higher standards. However, this offsetting effect is only realised if the stress testing is robust and designed to be a real test of a bank's resilience. The Bank of England stress test meets these goals by ensuring that its stress tests do not constrain the losses that can arise. Different types of tests lead to different outcomes, of course. For the Bank of England, the process of test selection is robust and transparent. Its methodologies across the board are designed, in principle, to offset the zero risk-weight treatment. The EBA applies stress tests also, but it is constrained in doing so under the SSM,<sup>181</sup> resulting in a situation where its tests do not negate the zero risk-weight issue for Eurozone sovereign debt.

*Pillar 2.* The UK and the SSM have both implemented some corrective measures for the under-capitalisation of sovereign risk through Pillar 2. However, while the UK Prudential Regulation Authority (PRA),<sup>182</sup> for example, employs a Pillar 2 methodology for sovereign risk, which is based on IRB modelling rather than standardised rules, the EBA does not require any rigorous corrective measures to be adopted. A further problem relates to consistency of application and transparency. At the EU level, while regulators allow banks to disclose the aggregate Pillar 2 requirements, banks are prohibited from informing the market of the individual components. The result is that it is impossible to assess the adequacy of counterparty capital. Similarly, while market pressure has led to some EU banks under the SSM regularly disclosing their positions in some of the weaker Eurozone sovereigns, this also suffers from credibility issues. For instance, disclosures may be made on a point-in-time basis, and therefore subject to "window-dressing"; and disclosures may reflect the impact of hedging transactions which may have been contracted with other banks which themselves have significant Eurozone sovereign exposure and hence are subject to the same credit risk issues.

We now consider the most recent stress tests applied by the UK and EU, and then examine US practice.

### 7.1 The UK approach

The UK is, along with the US, co-host of the global financial markets. While a member of the EU, the UK had to mitigate the systemic risk arising from the Eurozone through stress tests and supervisory discretions exercised under the discretionary limb of the Basel Rules—Pillar 2. The Bank of England

<sup>181</sup> The SSM is the system of banking supervision in the European Union. It comprises the ECB and the national supervisory authorities of the participating countries. Its main aims are to:

- ensure the safety and soundness of the European banking system;
- increase financial integration and stability; and
- ensure consistent supervision.

The SSM is one of the two pillars of the EU banking union, along with the SRM.

Source: <https://www.bankingsupervision.europa.eu/about/thessm/html/index.en.html>.

<sup>182</sup> This is part of the Bank of England.

has conducted annual stress tests and the regulators have applied discretionary Pillar 2 top-up requirements to financial institutions by way of additional protection to depositors.

For example, in its 2019 stress test reported in its *Financial Stability Report*, the Bank made the following assumptions in respect of Eurozone risk:<sup>183</sup>

*Euro-area GDP contracts by 4.0% in 2019, with growth resuming in late 2020. Euro-area unemployment rises by 4.7 percentage points to peak at 12.6% in 2020, before falling to 11.6% by the end of the scenario (Chart 11). Headline euro-area inflation turns negative in 2019, reflecting weaker demand and lower commodity prices, and does not rise above zero until 2021 H1. Core inflation remains weak throughout the scenario.*

*Residential property prices fall by 20% across the euro area, while CRE prices fall by 26% in the stress (Chart 12). In particular, French CRE prices<sup>184</sup> fall by more than the euro-area average. Aggregate euro-area property prices recover modestly over the final years of the stress.*

Further, the UK PRA employs a Pillar 2 methodology for sovereign risk which is based on the IRB model rather than standardised rules. The same is not true of the EBA's application of its stress tests for the Eurozone.

It is important to recognise that the UK does not actually apply capital standards to EU27 banks operating through branches in London. The EU's capital standards are applied by the regulator of the bank located in its jurisdiction of incorporation. Generally, all the global banks have their European and rest-of-the-world headquarters in the UK. However, that is not true of the EU27 banks, some of which passport into the UK by establishing a branch in London from which they conduct their business. This is the case, for instance, with French and German banks – the main Eurozone banks with presences in London. This allows them to avoid the capital costs of running a UK subsidiary. As a result, French and German banks have their capital charges determined by the SSM. The EBA runs the stress tests for the SSM, but does not model the risk arising from the sub-sovereign nature of Eurozone member state government bonds. However, French and German banks are of modest size in global terms and have been dwindling significantly.<sup>185</sup> Thus, the vast bulk of global banking in the European time zone operates out of London under UK supervision and Bank of England stress tests.

Separate from the capital position, the UK has taken measures to improve the quality of bank management in response to the 2007-8 financial crisis. The UK was the only EU member state to have implemented tougher controls on bank governance. The Senior Managers Regime is intended, in part, to change the mindset of a bank's management when it comes to determining the appropriate level of capital for the risks that the bank faces. It is designed to move the bank management's mindset from viewing capital rules mechanically as determining the minimum level of required capital to a position where managers apply thought to assessing whether the risks facing their bank warrant more than the minimum requirements. EU rules on bank governance are relatively weak by contrast, which has resulted in banks claiming ample CET1 ratios at the same time as their shares trade in the market at

---

<sup>183</sup> <https://www.bankofengland.co.uk/-/media/boe/files/financial-stability-report/2019/december-2019.pdf?la=en&hash=99431A541357AC6D601A99B950455E2344C12901#page=12>.

<sup>184</sup> <https://www.cre.fr/en/Electricity/Wholesale-electricity-market/wholesale-electricity-market>.

<sup>185</sup> Daniel Pinto, London-based head of JPMorgan's corporate and investment bank, argues that consolidation among Europe's investment banks is needed to avoid them falling too far behind US investment banks: "The challenge is the lack of scale, European banks were not at a size to allow them to adjust to the post-crisis level of leverage and regulation. You need scale to be profitable and when you are in that situation you try to solve the issue by reducing costs". In 2019, there were only 155 mergers and acquisitions deals completed by European banks worth \$18.1bn, the lowest on record. In November 2019, Olaf Scholz, the German finance minister, called for the completion of the European banking union. But this would require cross-border mergers between banks, which EU regulators and politicians have long sought to block, in part because of the resulting job losses as well as the potential disappearance of domestic banks in some of the smaller states (Clarke, P., "JPMorgan's Pinto: European banks need scale to compete with US rivals", Financial News, 13 January 2020).

major discounts to their book values. The inference of this is that equity investors do not have confidence in the CET1 ratios as an adequate protection against the full set of risks inherent in the banks' on- and off-balance sheet business.<sup>186</sup>

After Brexit, the UK cannot safely operate under EU-made rules without being able to participate in the making of those rules. After the transition period contained in the UK-EU Withdrawal Agreement, at the end of 2020, the UK can take its own path on the treatment of exposure to sovereign risks to individual EU member states and has already indicated it intends to do so.<sup>187</sup>

The conclusion of the Bank of England's 2019 stress test was that "[t]he 2019 annual cyclical scenario stress test (ACS) shows the UK banking system would be resilient to deep simultaneous recessions in the UK and global economies that are more severe overall than the Global Financial Crisis, combined with large falls in asset prices and a separate stress of misconduct costs. It would therefore be able to continue to meet credit demand from UK households and businesses even in the unlikely event of these highly adverse conditions", and the key components of conditions were that "world GDP falls by 2.6%, UK GDP falls by 4.7%, Bank Rate rises to 4% and the UK unemployment rate rises to 9.2%".

The key triggers cited for these conditions arising are a US/China trade war and the situation in Hong Kong, rather than a Eurozone crisis. The main policy response is to increase UK banks' countercyclical buffer (CCyB) from 1% to 2% by the end of 2020, meaning that 2% becomes the CCyB in "standard conditions", i.e., in non-stressed conditions. This would enable the Bank of England to moderate the CCyB in times of stress so as to "preserve up to £500 bn of banks' capacity to lend to UK households and businesses".

Increasing the CCyB now is somewhat counter-cyclical to the logic for the CCyB existing, namely it should be increased in times of high credit demand, to dampen down banks' capacity to lend, rather than increased in a time of normal credit demand so as to create a way of supporting credit availability were times to become stressed. Nevertheless, an increased CCyB will mean that the UK's banks are better capitalised, and better able to withstand shocks. Such protections, however, only apply to UK banks, as only UK banks issue this additional capital.

This approach helps to counteract the Bank of England's setting of a 0% extra CET1 capital buffer for Other Systemically Important Institutions (O-SIIs), where the maximum extra buffer was 2%. The UK's banks are therefore, as of the end of 2019, subject to extra CET1 capital buffers of a 1% CCyB across the board, plus an uplift if the institution is one of the UK's four GSIFIs (HSBC 2%, Barclays 1.5%, Santander 1% and Standard Chartered 1%). These CET1 buffers sit on top of the global standard for minimum Core Capital (4.5%) and Capital Conservation Buffer (2.5%), or a combined minimum of 7% of RWA. HSBC's UK requirement is therefore currently 7% + 1% CCyB + 2% GSIFI = 10%, of RWA. This will rise to 11% by the end of 2020 due to the CCyB increase to 2%.

As regards the contents of the UK stress tests undertaken, while the 2019 stress tests emphasised the US/China trade and Hong Kong scenarios, there is also mention of Brexit, with the predominant factor considered in 2019 being a disorderly Brexit. The Financial Policy Committee<sup>188</sup> "judges that its 2019 stress test of the core UK banking system was sufficiently severe to encompass the range of economic shocks that could be associated with a disorderly Brexit" (page 21 of the *Financial Stability Report*<sup>189</sup>). A disorderly Brexit did not occur in January 2020, but the possibility still exists for the end of 2020 – so we can expect UK banks to cope with that scenario should it occur.

---

<sup>186</sup> The share price discounts also reflect overcapacity as well as the market's assessment that the profitability of the banking sector is expected to remain poor for some time, due to low interest rates. This is considered below.

<sup>187</sup> See fn 238 below.

<sup>188</sup> <https://www.bankofengland.co.uk/about/people/financial-policy-committee>.

<sup>189</sup> Bank of England, *Financial Stability Report 2019*; <https://www.bankofengland.co.uk/-/media/boe/files/financial-stability-report/2019/december-2019.pdf>

Looking further out, though, the Bank of England examines how the US/China and Hong Kong situations could develop (including debt vulnerabilities in China), but then notes as a new risk (page 29 of the Report) that there are "risks in the euro-area banking sector", as follows: "[e]uro-area bank resilience has improved in recent years, with aggregate CET1 capital now at 14% of risk-weighted assets. But, as noted in the ECB's latest *Financial Stability Review*,<sup>190</sup> the improvement in capital ratios has been reliant on falling risk weights, and the European authorities have yet to implement some elements of the Basel III capital standards. Price to book ratios for euro-area banks remain low in comparison to international peers, possibly reflecting overcapacity in the sector as well as challenges to some bank business models posed by low, and in some cases negative, interest rates. These issues mean that the euro-area banking system may be less able to cushion future shocks".

The set of Eurozone risks that are the subject of this paper have therefore been recognised in form, though not yet in substance or timing by the Bank of England: other factors are considered more imminent and substantial. Nevertheless, it is welcome to see this aspect mentioned. Of course, it would not affect the integrity of the results of the stress tests if the adverse conditions (world GDP falls by 2.6%, UK GDP falls by 4.7% and so on) were triggered by different events than the ones stated as predicates.

## 7.2 The EU approach

The CCyBs set by the regulators of EU member state financial systems are visible on this ECB website, which is updated monthly.<sup>191</sup> As of 26 January 2020, 14 out of the 19 Eurozone countries had a 0% CCyB, Luxembourg and France had a CCyB of 0.25%, Lithuania and Ireland had a CCyB of 1%, and Slovakia had a CCyB of 1.5%.

Whilst CCyBs have been kept low or non-existent for the majority of Eurozone financial institutions, Eurozone regulators have used the O-SII structure to impose extra buffers on individual institutions: the 2018 extra O-SII buffers (the latest ones available) show regulators adding between 0.25% and 2%, differentiated by bank name. This contrasts with levels set out at the inception of the CCyB regime in 2015 and referred to in Annex 4, which were customarily set by national regulators at the same level for all their nominated O-SIIs. The Eurozone had 113 O-SIIs in 2018, including 8 GSIFIs. However, there is no correlation between the country's GDP and the number of O-SIIs in it. They range from Cyprus with 10 O-SIIs to Greece with 4, from Germany with 13 to Italy with 3. See Tables 9 and 10.

*Table 9: Number of O-SIIs, and O-SII and CCyB buffers in the 19 Eurozone countries*

COUNTRY	# of O-SIIs	O-SII BUFFER RANGE	CCyB	COUNTRY	# of O-SIIs	O-SII BUFFER RANGE	CCyB
Austria	7	1-2%	0%	Portugal	6	0.25-1%	0%
Estonia	4	1-2%	0%	Spain	5	0.25-1%	0%
Latvia	6	1.25-2%	0%	Italy	3	0.25-1%	0%
Lithuania	4	1-2%	1%	Malta	3	0.5-2%	0%
Finland	3	0.5-2%	0%	Cyprus	10	0.5-2%	0%
Germany	13	0.5-2%	0%	Greece	4	1%	0%
Netherlands	5	1-2%	0%	Slovenia	7	0.25-1%	0%
Belgium	8	0.75-1.5%	0%	Slovakia	5	0.5-1%	1.5%
Luxembourg	8	0.5-2%	0.25%	Ireland	6	0-1.5%	0%
France	6	0.25-1.5%	0.25%				

Source: 2018 update of O-SIIs notified to the EBA  
 CCyBs set by the regulators of EU member state financial systems:  
[https://www.esrb.europa.eu/national\\_policy/ccb/html/index.en.html](https://www.esrb.europa.eu/national_policy/ccb/html/index.en.html)

<sup>190</sup> European Central Bank, *Financial Stability Review*, November 2019 <https://www.ecb.europa.eu/pub/financial-stability/fsr/html/ecb.fsr201911~facad0251f.en.html#toc1>.

<sup>191</sup> [https://www.esrb.europa.eu/national\\_policy/ccb/html/index.en.html](https://www.esrb.europa.eu/national_policy/ccb/html/index.en.html).

Table 10: Eurozone GSIFIs

INSTITUTION	COUNTRY	GSIFI LEVEL	EXTRA CET1 BUFFER
BNP Paribas	France	2	1.5%
Deutsche Bank	Germany	2	1.5%
Groupe BPCE	France	1	1%
Groupe Credit Agricole	France	1	1%
ING Bank	Netherlands	1	1%
Santander	Spain	1	1%
Societe Generale	France	1	1%
Unicredit	Italy	1	1%

Source: Financial Stability Board listing of November 2019

One thus has a subset of all institutions that are subject to an O-SII buffer, and a sub-subset – 8 institutions in France, Germany, Italy, Netherlands and Spain – that is subject to a further GSIFI buffer. There is also the possibility that the total buffer for an O-SII is higher than the total buffer for a GSIFI. The ECB justifies this in its SREP process (see below in Annex 5) on the basis of the performance of GSIFIs in stress tests, but this turns the logic of having GSIFIs on its head: because they are of crucial importance to the global financial system, they should have larger capital buffers than institutions which are not.

The remaining institutions are subject only to the CCyB, which in the main countries is set at 0%, and must therefore carry only the base figure of 7% of RWA. Recall that the UK has a 0% O-SII buffer but a 1% (rising in 2020 to 2%) CCyB, applicable to all, meaning that the base figure is 8% in the UK.

Turning to the issue of collateral, the Eurosystem eligible collateral list by its nature consists of securities that will be liquid right across the Eurozone and outside it (such as French government bonds) and those that will only be liquid in one compartment, such as municipal bonds. The regulator with the clearest overview of municipal bonds will be the one that sponsored them onto the list to begin with: the national regulator has a vested interest in these bonds being listed with the lowest possible haircut and remaining in good standing within the list. The Eurosystem regulator relies on the opinion of the national regulator, an opinion that is not disinterested.

The ECB's 2019 report on its Supervisory Review and Evaluation Process (SREP) published at the end of January 2020 shows a similar picture and the weak foundations upon which ECB supervision is based – see Annex 5.

### 7.3 Comparing the EU and UK approaches

The Eurozone's approach is country-by-country, with institution-specific buffers playing a greater role than system-wide buffers. If certain buffers like CCyB are meant to cater for systemic risks, as opposed to institution-specific risks, then the UK approach is clearly superior.

The UK approach is also superior in the case where the banking market is not concentrated on a small number of very large institutions. Germany has 13 O-SIIs, but these do not encompass the large number of independent savings and co-operative banks, so a low CCyB supplemented with an O-SII buffer leaves a large number of institutions only needing to hold the base of 7% of RWA.

The UK financial system and its claim of robust stability can further be contrasted to the Eurozone's claim by a series of absences:

- Unlike in the TARGET2 payment system, the participants in the UK's CHAPS system<sup>192</sup> cannot go overdrawn on their Settlement Accounts during the day, and therefore not overnight either. A Settlement Account must be in credit throughout the day, and the end-of-day credit balance is moved to the participant's Reserve Account.

If a CHAPS participant lacks funds during the day with which to settle the CHAPS payments it orders, its main option is to enter into a repurchase agreement with the Bank of England, selling eligible securities for cash, with a re-exchange in the future. The participant delivers the securities to the Bank of England in the CREST system<sup>193</sup>, and receives the cash on its CREST settlement account. It then transfers the cash from its CREST settlement account to its Bank of England Settlement Account in order to use the cash to meet its CHAPS payments.

- TARGET2, by contrast, allows the participants' "RTGS Accounts" to go into overdraft at the discretion of the participant's sponsoring national central bank, and against any collateral on the Eurosystem list (there is no limitation, as exists in the UK, whereby only Type A collateral – the collateral of the highest quality – can be used for payment operations).
- TARGET2 also allows the NCBs to go overdrawn on their accounts with one another that are used for cross-border payments, against any eligible collateral – the TARGET2 imbalances issues described at length in sections 2.1 and 4.4 of this paper.
- There has been no programme in the UK for the securitisation of NPLs as has been used in Italy and Cyprus and now – under Project Hercules – in Greece.<sup>194</sup>
- There has been no systematic programme to reduce banks' reported levels of NPLs through "forbearance" and "restructuring" techniques that return the loans to performing status without the borrower needing to bring forth any cash from its own resources as debt service. This has arguably created a portfolio of "zombie" loans reliant wholly on the liquidation of security as the source of eventual repayment, and where the cash debt service must remain low or non-existent for the loans to remain as performing.
- Both these "zombie" performing loans and the current carrying-value of NPLs (loan face value less write-downs made so far) are assigned a risk-weighting through the bank's IRB model and treated as if there were no current or past delinquency.

With these problems latent within the accounts and IRB models of the Eurozone institutions subjected to the EBA stress tests, it is difficult to regard the results with the same degree of confidence as the Bank of England's exercise, carried out upon a marketplace in which the above indicators are absent.

Given these qualitative differences, it is questionable whether the EBA stress tests have served their purpose in reassuring markets that banks are sound, only one of the aspects of which is their ability to withstand times of stress in financial markets.

EU financial institutions subject to stress tests are covered by the SSM. Some, but by no means all, of the institutions within the SSM have been notified to the EBA by national authorities as "O-SII", the EU's version of the Basel Committee's "domestic systemically important banks" (D-SIBs).

In Annex 4, we look at the respective lists of SSM institutions and O-SIIs around the time the system was introduced and when the first stress test was run – based on figures and portfolios as at 31 December

---

<sup>192</sup> <https://www.bankofengland.co.uk/payment-and-settlement/chaps>.

<sup>193</sup> <https://www.euroclear.com/dam/PDFs/Settlement/EUI/MA2740-CREST-settlement.pdf>.

<sup>194</sup> See fn 154 above and the surrounding text.

2013. We then look at the bank failures since then, and at a non-exhaustive list of the banks that are potentially unviable but which have been kept alive and not resolved.

The conclusions are clear:

- *The banks that have failed have all been within the SSM since its inception, as have the banks that continue, but which are at significant risk.*
- *The construct of the SSM, O-SIIs, the SRM and the stress tests has not ensured that the Eurozone banking system is sound.*
- *The market does not believe the system is sound since, despite the impressive CET1 ratios claimed by institutions and the improvements attested to by the Eurozone authorities, Eurozone banks, as a generality, trade at a discount to their book values.<sup>195</sup> Luis de Guindos has attributed this principally to weak profitability and high costs.<sup>196</sup> A 2018 study by ZEB Consultants for the European Banking Federation<sup>197</sup> addressed the issue on p.12 in the section entitled "Market prices reflect disbelief from investors" and stated that "investors are clearly not buying into the equity stories of most banks that at the same time fall short of expectations in terms of growth and/or innovation".<sup>198</sup>*
- *Under ZEB's "equity stories of most banks", we read that investors believe that bank assets are overvalued, and specifically that the "RWA" figures (which are the denominators in the calculation to determine the CET1 capital ratio in which the banks' CET1 capital amounts are the numerators) understate the risk in banks' on- and off-balance sheet business.*
- *Put another way, the market believes that the CET1 ratios are overstated because the "RWA" figures derive from IRB methodologies that assign generous Credit Conversion Factors to numerous asset classes, starting with Eurozone sovereigns, and trickling up to the Eurozone's supra-sovereigns and down to the Eurozone sub-sovereigns in the first instance, and trickling further down into other asset classes such bank NPLs, as well as auto receivables-backed, residential mortgage-backed, credit card receivables-backed financial institutions and so on.*
- *The cornerstone of this overstatement of CET1 ratios is the treatment of Eurozone member state credit risk – it is significantly understated.*

#### 7.4 The US approach

In terms of risk-weighting of Eurozone bonds, the US Federal Reserve typically grants these bonds a 0% risk weight under 12 CFR 217.32 (the standardised approach), based on their OECD country risk classification (CRC), which treats European countries as "high-income Euro area countries not reviewed or classified." Some very small EU states have, at times of crisis, been given a risk-weighting above 0%, such as:<sup>199</sup>

- Cyprus has received CRC ratings of 3 and above – a 3 rating results in a 50% risk weight.
- Estonia has received CRC ratings of 2 and above – a 2 rating results in a 20% risk weight.

<sup>195</sup> Keynote speech by Luis de Guindos, Vice-President of the ECB, at the ABI annual conference "Banking Union and Basel III – risk and supervision 2019", Rome, 25 June 2019, <https://www.ecb.europa.eu/press/key/date/2019/html/ecb.sp190625~6d33411cff.en.html> accessed on 1/6/20.

<sup>196</sup> *Ibid.*

<sup>197</sup> "European Banking Study – Navigating the Road Ahead – Market Trends & Strategic Options for European Banks – 2018" by ZEB Consultants for the European Banking Federation.

<sup>198</sup> *Ibid.*

<sup>199</sup> <https://www.oecd.org/trade/topics/export-credits/documents/cre-crc-historical-internet-english.pdf>.

- Latvia has received CRC ratings of 2 and above.
- Malta has received CRC ratings of 2 and above.

The Federal Reserve's stress tests do cover the scenario of weakened economic conditions in the EU. For example, the results of the 2019 stress tests<sup>200</sup> describe the "market shock" component (which is applied to the 11 firms with large trading and private equity portfolios) of the severely adverse scenario as follows:

*The global market shock component for the severely adverse scenario features a significant weakening in European economic conditions and spillover effects that lead to sell-offs in financial assets more broadly. The European distress leads to global market dislocations, affecting U.S. and developing Asian and other emerging markets. There is a sudden increase in implied volatilities broadly, a large decline in industrial and energy commodity prices, and a significant widening in credit spreads, with an associated decline in market liquidity....*

*Flight-to-quality capital flows push interest rates down across the term structure in the U.S. and certain European countries, while emerging markets and countries that are part of the European periphery experience sharp increases in government yields. Countries that are affected by flight-to-quality experience currency appreciation, while European and emerging market currencies experience currency depreciation against the U.S. dollar.*

The scenarios and the market shock change from year to year. As the Fed further explained:

*The major differences relative to the 2018 severely adverse scenario include a heightened stress to European assets; a decline in the U.S. yield curve; an appreciation of the U.S. dollar relative to most other currencies; and more muted shocks to U.S. based assets, such as U.S. agency and municipal products. These differences are intended to reflect the more Europe-focused nature of the stress and a general flight-to-quality to U.S. markets.*

The key problem with these scenarios is that they involve "general purpose" economic shocks that could apply equally to any other economic region in the world, such as South America or SE Asia. They do not come close to modelling the huge Eurozone-specific risks that we have identified in this paper. In February 2020, the Fed announced its 2020 stress test scenario: "[t]he harshest scenario includes a severe global recession with heightened stresses in corporate debt markets and commercial real estate, and for banks with large trading operations, additional pressure on leveraged loans".<sup>201</sup> The Fed's 2020 assumptions recognise a relatively greater degree of economic vulnerability in the Eurozone compared to the UK, for example, but only at a high level, and without acknowledging the additional risk to the global economy deriving from Eurozone financial risk.<sup>202</sup>

<sup>200</sup> Board of Governors of the Federal Reserve System, Stress Test 2019: Supervisory Stress Test Results, June 2019; <https://www.federalreserve.gov/publications/files/2019-dfast-results-20190621.pdf>.

<sup>201</sup> Federal Reserve Board releases hypothetical scenarios for its 2020 stress test exercises, press release, 6 February 2020; <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200206a.htm>.

<sup>202</sup> The stress test scope is the 34 large banks in the USA with more than \$100 billion in total assets (<https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200206a.htm>, accessed on 2/8/20). The 34 banks include the US subsidiaries of Barclays, HSBC, BNP-Paribas, Santander, Deutsche Bank, and UBS, and the US operation of the German DWS investment management group. RBS exited its ownership of Citizens Financial Group, which is on the list, in 2015 (<https://investor.citizensbank.com/about-us/newsroom/latest-news/2015/2015-11-03-190856894.aspx>, accessed on 2/8/20).

There are two scenarios for the tests (2020 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule, Board of Governors of the Federal Reserve System). They are based on specific data points of domestic and international economic performance going back to 2000 (Tables 1A+B). The Fed then supplies, in Tables 2A+B and 3A+B, the variations to these data points for 2020 to 2023, upon which the two stress test scenarios will be run.

The baseline scenario, to which Tables 2A+B apply, "follows a profile similar to average projections from a survey of economic forecasters" (p3). The other, "Severely Adverse" scenario, to which Tables 3A+B apply, "features a slightly

## 7.5 Conclusion on the current management of Eurozone risk

The Bank of England's approach is characterised by comprehensiveness, diligence, clarity, good governance, and coherence. There are no filtration points between the raw data and the data as used,<sup>203</sup> and there is one output – a CCyB applicable to all – and set by a single regulator. The Bank also has a structurally easier task in gaining a complete overview of the UK financial market, including the important matters of the liquidity and price performance of the types B and C of collateral,<sup>204</sup> that are ineligible as payment system collateral or for operational standing facilities or short-term repurchase agreements.

The Eurozone approach is not as clear, has certain measures set by the ECB and some set nationally, and some data sourced directly and some sourced through national bodies and subject to possible filtration – with the yardstick for identifying O-SIIs being the clearest indicator of inconsistency – followed by the range of O-SII buffers set. There are also multiple regulators across the member states. Further, the EU has yet to implement some elements of the Basel III capital standards, implying that "the euro-area banking system may be less able to cushion future shocks".<sup>205</sup>

So despite the fact that the UK has made considerable efforts to protect itself and the global financial system from Eurozone risk, it is clear that a significant amount of this risk remains hidden and unmanaged in the Eurozone itself, in the UK and in the wider global financial system. What is particularly concerning is that the US does not appear to be aware of the extent of the risk and instead treats Eurozone members in the same way that it treats other OECD members.

## 8. Can the EU fix the problem?

There are a number of measures that the EU might consider in an attempt to fix the problem.

### 8.1 Rectifying the EU's capital rules

As discussed above, following the Basel Rules in the normal way would mean that EU banks and investment firms would be required to apply the analogue position (in terms of risk and capital costs) contained in the Basel Rules for municipal debts or debts of public sector entities, which do not have sovereign backing.<sup>206</sup> The risk-weighting would then be significantly higher, starting at 20%, as

---

greater increase in the unemployment rate in the United States compared to last year's severely adverse scenario". The worsening of the data for 2020 compared to 2019 is caused, not by any opinion of the Fed, but the policy framework: it "reflects the Board's Policy Statement on the Scenario Design Framework for Stress Testing, which calls for a more pronounced economic downturn when current conditions are stronger".

The international variables (Table 3B) in the "Severely Adverse" scenario show Eurozone real GDP growth in the four quarters of 2020 as -6.9%, -8.0%, -5.9% and -4.0%, compared to the UK variables for the same period of -5.1%, -6.2%, -5.0% and -3.6%.

<sup>203</sup> A filtration point is an intermediary point in the data collection process where someone can apply an editorial decision on what to include and how to include it. This could lead to a potential inconsistency with the base data supplied by different sources. In this case, this would typically be happening at one of the Eurozone NCBs. This is always a risk with a decentralised system, where the centre (i.e., ECB and EBA) relies on national supervisors. It can materialise however strict the data definitions.

<sup>204</sup> See <https://www.bankofengland.co.uk/markets/eligible-collateral>.

<sup>205</sup> European Central Bank, *Financial Stability Review*, November 2019 <https://www.ecb.europa.eu/pub/financial-stability/fsr/html/ecb.fsr201911~facad0251f.en.html#toc1>.

<sup>206</sup> Basel Committee on Banking Supervision, *Basel III: Finalising Post-crisis Reforms*, December 2017. The Basel standard generally applies a material risk-weighting for bank exposures to all non-central government public sector entities (PSEs), although it exceptionally allows a national discretion for exposures to PSEs in that jurisdiction to be treated as sovereign exposures, instead of as an exposure to a PSE. There is no hard and fast rule as to when governments may exercise that discretion. However, the guidance incorporated in the Basel III framework suggests that PSEs would receive a similar treatment to claims on the sovereign or central government only if the government is standing behind the PSE. For example, factors to be considered in the exercise of the discretion are the extent of any guarantees provided by the government or whether the PSEs have revenue-raising powers and arrangements in place which effectively reduce the risk of default.

Jurisdictions may therefore choose to apply risk-weights according to either (1) the rating afforded the PSE, or (2) the sovereign. The Eurozone does not stand behind member state debt and so sovereign treatment would appear to be

opposed to the 0% rating for exposures to the most creditworthy sovereigns, and going up to 150%. However, such an approach would most likely face political resistance within the EU and Eurozone (particularly amongst its weaker members, such as Italy, Spain and Greece) since it would, if adopted, hamper the ability of Eurozone member states to borrow. Apart from the costs of finding new capital, a proper approach would mean that banks and investment firms within the EU would be able to acquire far less Eurozone member state government debt and those governments would most likely be unable to issue anything like the current levels of debt to finance their activities at current yields.

Further, having enjoyed the benefits of the privileged risk-weighting rules for some time, the Eurozone banking system would likely take actions, in the event that the Basel Rules were applied without such privilege, that would, in turn, cause other problems. Its banks would cut back other lending as many routes to raising capital are closed off. The Eurozone would grow even more slowly than it has since the euro was introduced in 1999. The ECB would have to buy more government bonds through QE. These bonds would move from bank to ECB balance sheets, while private credit would contract. QE would fail to prevent falling money supply. The result is that even if all these Eurozone banks were to recapitalise according to the Basel Rules genuinely applied, it is not clear that the Eurozone would be in better shape. In the end, it is perhaps the case that there is no regulatory answer to the economic transition required by the iterative formation of the Eurozone. In the meantime, the Eurozone's structure threatens another crisis which would spread financial and the economic damage to the rest of the world. The only viable answer in the longer term is to create a genuine Eurozone sovereign, but that would require a degree of political will, the current absence of which Mr. Scholz's failed EDIS proposals demonstrate.<sup>207</sup>

There is ample evidence for the lack of political will within the EU. This is compounded by the potential lack of legitimacy of actions already taken by or proposed by the EU. For example, there has been legal action challenging the exercise of powers that the ECB has used so far under its QE programme, as well as further challenges to its plan for a programme of Outright Monetary Transactions (OMT). The ECB outlined OMT in 2012, but it has not yet implemented it, primarily as a result of the *Gauweiler* case,<sup>208</sup> heard in front of the German constitutional court, the Bundesverfassungsgericht (BVG). The BVG first ruled that implementing OMT was outside the competence of the ECB but made a preliminary reference to the Court of Justice of the European Union (CJEU) ahead of its final ruling.<sup>209</sup> The CJEU ruled that OMT was within the ECB's powers, subject to certain loose conditions on its exercise. Once the case was back in the German courts, the BVG upheld the legality of implementing the OMT programme but interpreted the CJEU's conditions on its exercise in a stricter manner than the CJEU itself.<sup>210</sup> Crucially, the BVG ordered the Bundesbank not to participate in any OMT offering unless "the volume of the purchases is limited from the outset". Although not widely reported at the time, the apparent intention of this part of the judgment was to weaken severely the ECB's latitude to mobilise OMT as a means for fighting a crisis situation. In practice, such obstacles were easily overcome by the ECB, which simply set a stated, but very high, limit "from the outset".<sup>211</sup>

---

unwarranted. However, even where the rating of the sovereign is used, the risk-weight is: AAA to AA-: 20%; A+ to A-: 50%; BBB+ to BBB-: 100%; BB+ to BB-: 100%; below B-: 150%; unrated: 100%. That is, in every case, this is meaningfully higher than applying 0%.

Article 116(4) of the CRR allows exposures to PSEs to be treated as central government, regional government or local authority exposures only in "exceptional circumstances" and where the competent authority deems that "there is no difference in risk between such exposures because of the existence of an appropriate guarantee by the central government, regional government or local authority". Bonds that are not guaranteed by the government in such a way are assigned a higher risk weight.

<sup>207</sup> See fn. 166 above. A study for the Economic and Monetary Affairs Committee of the European Parliament has proposed the EU should introduce regulatory disincentives against highly concentrated sovereign exposures of euro area banks, proposing a Sovereign Concentration Charges Regulation (SCCR): *Sovereign Concentration Charges: A New Regime for Banks' Sovereign Exposures*, Véron, November 2017. Like the Scholtz proposals, this fails to grasp the magnitude of the problem, but instead attempts to limit its impact.

<sup>208</sup> *Gauweiler I*, BVerfGE 134, 366 - 2 BvR 2728/13 (2014).

<sup>209</sup> *Gauweiler v Deutscher Bundestag* (2015) C-62/14.

<sup>210</sup> *Gauweiler II*, BVerfG, Judgement of the Second Senate of June 21, 2016 - 2 BvR 2728/13.

<sup>211</sup> See Yowell P., "Why the ECB Cannot Save the Euro" in Wolf-Georg Ringe and Peter M. Huber (eds). *Legal Challenges in the Global Financial Crisis. Bailouts, the Euro and Regulations*, Hart Publishing Ltd, 2014, pp. 81–119.

Subsequent challenges to the exercise of powers by the ECB have also come in front of the BVG in the first instance, and been referred up to the CJEU and back. A report in the *Sueddeutsche Zeitung*<sup>212</sup> gives a summary of the main points raised in the most recent hearing on QE, in which the plaintiffs maintain that the ECB has exceeded its powers by instituting the Public Sector Purchase Programme (PSPP) element of QE, thereby pursuing economic policy and monetary financing of public debt. The plaintiffs maintain that the CJEU has exceeded its powers by permitting the ECB to do this or, put another way, by not blocking the ECB from instituting QE.

## 8.2 Joint-and-several liability – and political integration

The solution in the longer term would be fiscal and political integration within the Eurozone, with the issuance of pan-Eurozone debt backed jointly and severally by Eurozone member states. While this is consistent with "ever closer union" – as laid out in the Treaty on European Union<sup>213</sup> – it is not, as we have seen above, currently a very popular aim amongst the EU population. Insights into the economic dangers arising from the Eurozone and some degree of support for an integration-based route out of the current situation can be obtained from several recent studies, albeit none has examined the legal aspects considered here.

For example, Baum et al. (2016) provide evidence that, while member state downgrades and negative outlook announcements by credit rating agencies had no impact on the value of the euro currency, they increased the yields of French, Italian and Spanish bonds and even affected the yields on German bonds.<sup>214</sup> This means that the standard transmission of rating shocks to currency value and sovereign bond yields is not operating within the Eurozone. The entire shock is absorbed by an internal repricing of sovereign bonds, giving a false sense of security for the euro currency itself. De Grauwe and Ji (2012) argue that there is systematic mispricing of sovereign risk in the Eurozone which has intensified macroeconomic instability, leading to bubbles in good years and excessive austerity in bad years.<sup>215</sup> De Grauwe (2012) recognises the significance of one of the key points we have discussed earlier: "[w]hen entering a monetary union, member countries change the nature of their sovereign debt in a fundamental way; that is, they cease to have control over the currency in which their debt is issued. As a result, financial markets can force these countries' sovereigns into defaulting. This makes the monetary union fragile and vulnerable to changing market sentiments". He argues that, to reduce this fragility, the governance of the Eurozone needs to change, with the ECB becoming a lender of last resort, as is standard with other central banks, and with Eurozone member states accepting budgetary union in addition to monetary union.<sup>216</sup>

The establishment of joint-and-several liability on the part of Eurozone member states for Eurozone member state government debt would justify the current regulatory capital treatment of those bonds.<sup>217</sup> However, with the northern European member states strongly opposed to "picking up the tab" for what they see as southern member states' fiscal profligacy,<sup>218</sup> such an outcome is highly unlikely, at least in the near future. It would involve mutualising the exposures of member states and allowing the national balance sheets of the northern member states, especially Germany, to support the weaker member states. As a clear indication of the difficulties that would arise from such a proposition, the (relatively modest) Scholz proposal for a Eurozone-wide bank deposit scheme was shot down.<sup>219</sup> And, of course, this by no means addressed the sub-sovereignty issue, which could only be dealt with by mutual guarantees. The Eurozone structure is both inherently unsound and, in practice, very difficult to fix.

<sup>212</sup> <https://www.sueddeutsche.de/politik/bundesverfassungsgericht-griff-nach-der-seifenblase-1.4547814>, accessed on 28/12/19.

<sup>213</sup> 13 December 2007. Formerly, the Treaty of Rome.

<sup>214</sup> Baum, C., Schäfer, D., and Stephan, A., "Credit Rating Agency Downgrades and the Eurozone Sovereign Debt Crises", *Journal of Financial Stability*, 24, 2016, 117–131.

<sup>215</sup> De Grauwe, P. and Ji, Y., "Mispricing of Sovereign Risk and Macroeconomic Stability in the Eurozone", *Journal of Common Market Studies*, 50, 2012, 866–880.

<sup>216</sup> De Grauwe, P., "The Governance of a Fragile Eurozone", *Australian Economic Review*, 45, 2012, 255–268.

<sup>217</sup> Cf. the EU itself, which has an internationally accepted 0% risk weighting.

<sup>218</sup> Koukakis N., "Facing slow to no growth, EU's poor nations plot next move", CNBC, 9 September 2018.

<sup>219</sup> See fns. 166 and 167 above.

### 8.3 In the short term, EU27 supervisors cannot be relied upon to fix the problem

EU27 supervisors cannot be left to supervise the current risks in the Eurozone. There is a single conflict of interest, lying at the heart of the Eurosystem, that is unprecedented in modern times.

Given the existing regulatory capital treatment of Eurozone member state government debt and the political incentives to maintain this treatment, it is apparent that Eurozone member states, the Eurozone<sup>220</sup> and EU authorities have a conflict of interest between protecting the Eurosystem (and the EU), on the one hand, and applying normal regulatory practices to ensure the financial markets are safe for users, taxpayers and others affected around the world, on the other. Member state authorities face an inherent desire to keep their local banks in business, almost whatever the cost, given the role of those banks as key purchasers and market-makers in the primary and secondary markets of their member state government debt. As we have seen, the EU's approach to rulemaking focuses on protecting the euro project as its absolute and overriding priority.<sup>221</sup> This has led to an (unsuccessful) attempt to remove supervisory discretions within EU member states, specifically in the case of the UK, restricting supervisors so far as possible from having an ability to impose higher regulatory capital requirements.<sup>222</sup> The UK has resisted the EU's attempts to constrain its powers to impose additional capital requirements on businesses incorporated in the UK on a discretionary basis.<sup>223</sup> The UK has imposed higher capital standards than the EU and, through an application of Basel Pillar 2,<sup>224</sup> protected against risk that is not properly captured through the Pillar 1 non-discretionary element of the Basel Rules.<sup>225</sup> This is the purpose of Pillar 2. The two Pillars of the Basel Rules, together, seek to ensure that risks arising from the state, from the markets and elsewhere are acknowledged and addressed. The EU's conflict of interest has led to perverse argumentation and promotes questionable regulatory outcomes, increasing the risks for Eurozone banks – as well as the whole global financial system.

The conflict of interest extends to the implementation of Basel III. As Deloitte points out: "EU regulators (led by the EBA and the ECB's Single Supervisory Mechanism (SSM)) have emphasised the importance of the EU not deviating from the rules agreed by the BCBS [Basel Committee] in December 2017. There is, however, increasing pressure for the EU to modify the Basel III framework in implementation in order to mitigate the expected capital impact of the revised rules (projected by the EBA's August report to be a 24.4% increase in minimum capital requirements for EU banks)".<sup>226</sup>

The EU faces a difficult choice over the forthcoming years. Were the Basel regulatory capital framework to be normally applied in a manner which captures the risk arising from Eurozone member state government debts, this would give rise to significant financial difficulties for the zone. In the meantime, the markets cannot sensibly assume that Eurozone member state authorities will apply an objective non-conflicted approach to their regulatory discretions, including to elements of the chain that links the Eurozone to the rest of the global financial system.

---

<sup>220</sup> See fn 6 above.

<sup>221</sup> Eg <https://www.thisismoney.co.uk/money/news/article-4613874/Countdown-Brexit-London-lose-euro-trading.html>, where Christian Noyer, the former Governor of the Banque de France makes an interesting point about managing clearing houses' margining policies to "protect the euro area".

<sup>222</sup> See fns 224 and 225 below.

<sup>223</sup> *Ibid.*

<sup>224</sup> See, eg, the Financial Times article of 8 November 2011: <https://www.ft.com/content/5471afde-096a-11e1-a20c-00144feabdc0>. And Financial Times, 2 May 2012: <https://www.ft.com/content/82eab320-949c-11e1-bb0d-00144feab49a>.

<sup>225</sup> <https://ftalphaville.ft.com/2012/05/03/986921/basel-iii-bunfight-is-this-the-beginning-of-the-end/>.

<sup>226</sup> Implementing Basel III in the European Union: Preparing for the legislative proposal of 'CRD6/CRR3' in 2020, Deloitte Regulatory News Alert, 2 December 2019; <https://www2.deloitte.com/lu/en/pages/risk/articles/implementing-basel-iii-in-european-union.html>.

## 9. Enhanced Equivalence: a comprehensive solution for dealing with the EU's sovereignty problem

It would be possible for the *status quo* to be maintained by way of a permanent new UK-EU arrangement in financial services after Brexit, allowing the UK to continue addressing Eurozone risk in the way it does now. This can be achieved by enhancing the existing EU law concept of "equivalence", using drafting already produced and ready to be finalised, whose framework and rationale has been set out at length in previous publications.<sup>227</sup> Such an arrangement would be in conformity with WTO and international law norms. The key amendments that would require to be made to the existing equivalence regime have been set out above, in pages 9 to 11 of this paper.<sup>228</sup> These include the need for data sharing on the level and extent of Eurozone/EU27 risk.

Unlike the passport regime, where mutual recognition is premised on home and host states applying identical rules through a common rulebook, the equivalence concept provides for the recognition of home state regimes where the home state rules achieve similar high-level outcomes to those of the host state. Thus, the UK and EU could recognise each other's laws as equivalent in achieving certain high level Basel-driven outcomes. The existing passporting regime, with its common rulebook, would not work as a solution because it would introduce systemic risk into the UK markets by requiring UK regulators to give up sovereignty in rule-making, which is a key element in the supervision of safe markets. The Bank of England has already made its views clear on that possibility.<sup>229</sup>

An Enhanced Equivalence arrangement would reduce the costs to EU27 businesses. It would allow global financial businesses located in the UK to continue to provide services cross-border to EU27 customers under (solely) UK law and regulation, in the manner they do now. This would avoid the establishment and operation of unnecessary business presences for those financial institutions in the EU27 and would avoid the redundant costs of duplicative regulation and supervision by those EU27 authorities where the customers are located. Such a system is already in use by the EU with dozens of countries around the world.<sup>230</sup> It would minimise disruption to existing customer service models.

The Enhanced Equivalence model would also permit EU banks and investment firms to operate in the global financial markets by means of branches established in the City of London, avoiding the massive costs of managing separately capitalised and collateralised subsidiaries. Their regulatory capital and collateral arrangements would be governed by EU law and would not be subject, any more than now (under the EU's passporting regime), to the UK's Basel Pillar 2 top-up capital requirements and more intrusive prudential supervision. It has to be acknowledged that this would continue to put German, French and other EU banks at a competitive advantage by continuing to allow them, as now, to operate on the basis of the hugely advantageous EU assumptions on Eurozone sovereign risk, without mitigating those assumptions through the UK's supervisory discretions. This is because under Enhanced Equivalence, were inward branching to be permitted in the manner it is permitted under the passport regime, regulatory capital and other prudential regulatory matters would be subject to a firm's home state jurisdiction and supervision.

The question arises as to whether the UK should be willing to permit such risk to be injected into the global market through an Enhanced Equivalence arrangement. It is our view that it should do so, subject

<sup>227</sup> Reynolds B., *A Template for Enhanced Equivalence: Creating a Lasting Relationship in Financial Services between the EU and the UK*, Politeia, 10 July 2017. The enhanced equivalence model was subsequently adopted by the UK Government in the post-Chequers White Paper and forms the basis for the future UK-EU legal and regulatory relationship in financial services. See also: Reynolds B., *EU-UK Financial Services After Brexit: Enhanced Equivalence – A Win Proposition*, Politeia, 14 March 2018, and Reynolds B., *Free Trade in UK-EU Financial Services: How Best to Structure a Brexit Trade Deal*, Politeia, 17 October 2018.

<sup>228</sup> See section headed 'An Enhanced Equivalence Agreement could address the problem in full', which starts on page 9.

<sup>229</sup> "Stylish Regulation", speech by Sam Woods, Deputy Governor for Prudential Regulation and Chief Executive Officer, PRA, 16 May 2019: <https://www.bankofengland.co.uk/speech/2019/sam-woods-ubs-20th-annual-financial-institutions-conference-lausanne>. This was reaffirmed by the outgoing Bank of England Governor, Mark Carney, in a Financial Times interview on 8 January 2020, when he said that "[i]t is not desirable at all to align our approaches, to tie our hands and to outsource regulation and effectively supervision of the world's leading complex financial system to another jurisdiction".

<sup>230</sup> A summary of the regime can be found in Reynolds B., *A Blueprint for Brexit: The Future of Global Financial Services and Markets in the UK*, Politeia, 2 November 2016.

to very careful management of the position of the global market and also to careful oversight of the local UK branches of EU banks and investment firms. The UK has managed successfully to mitigate Eurozone risk under the passporting regime, despite its obligations under the passport to defer to the notional application of the EU's regulatory capital rules by regulators elsewhere in the EU, and regardless of the efficacy of EU27 supervision. After Brexit, under Enhanced Equivalence, the UK can more openly manage Eurozone risk and ensure that the global markets are protected sufficiently from the false assumptions embedded in the EU's regulatory capital and accounting regimes. This does give EU banks and investment firms a competitive advantage. However, the point would be out in the open and the Enhanced Equivalence arrangement would be an accommodation to the EU to allow it gradually to complete the euro project and to access global capital flows in the most efficient manner to facilitate its growth, pending its ability to pay for the system it is attempting to create. Such an outcome is in the interests of the world at large since a low-growth EU, isolated from the global markets and running unnecessary frictional costs for financial services would be a more explosive risk for the rest of the world.

Three additional points should be noted. First, any such UK-EU deal should also contain a continuity of contracts provision, ensuring that if the future trade treaty, whether in the form of a Free Trade Agreement or otherwise, is terminated (in whole or part), all contracts in existence at that moment in time can continue to be performed in accordance with their terms. This would ensure that never again would there be any discussion of a "cliff edge" for "in-flight" contracts akin to the discussion over the continuity of existing contracts in the event of a so-called "no-deal" (or "hard") Brexit. It is highly questionable whether these concerns were actually valid, given the international law on "acquired rights" and the European Convention on Human Rights and the EU's Charter of Fundamental Rights provisions on the rights to property.<sup>231</sup> It is also likely to be the case that the threat of a reversion to no market access is inconsistent with GATT and the WTO and contrary to the intentions of international trade law.<sup>232</sup> However, the mere possibility of an interpretation of the law which involves ambiguity on this point has led to considerable market uncertainty and expensive manoeuvres by business to protect themselves.<sup>233</sup> Such a situation cannot be allowed to repeat itself. Secondly, certain other longer-term exposures to the Eurozone, particularly through the EIB, should be addressed.<sup>234</sup> Thirdly,

<sup>231</sup> The protection of contractual rights by the right to property under the European Convention of Human Rights and the EU Charter of Fundamental Rights, and the doctrine of "acquired rights" under public international law, is explained in "Continuity of Contracts and Business on a "Hard" Brexit: Human Rights and Reverse Solicitation to the Rescue!", Shearman & Sterling LLP, 31 October 2017:

<https://www.shearman.com/perspectives/2017/10/continuity-contracts-business-on-hard-brexite>.

<sup>232</sup> The history and intention of GATT are discussed in Grant, T. D., "Brexit and the World Trade Organization", Briefings for Brexit, 12 July 2019; Grant, T. D., "Brexit, Tariffs, and GATT's original intent: Why a forgotten MFN exemption merits a closer look", Briefings for Brexit, 9 July 2019, and Grant, T. D., "Leave as You Entered Brexit in International Law", Politeia, 2019.

<sup>233</sup> Bank of England, Financial Policy Summary and Record of the Financial Policy Committee Meeting on 20 and 27 November 2018, and again in Financial Policy Summary and Record of the Financial Policy Committee Meeting on 2 October 2019. The Financial Policy Committee notes that extensive Brexit preparations have been made by the private sector. See also Ring, S., Mayes, J. Seal, T., Dakers, M., Suzara, P. and Scott Diamond, S., "How Businesses Are Preparing for Brexit, Deal or No Deal", Bloomberg, 24 October 2019.

<sup>234</sup> In relation to the EIB, the Report of the House of Lords (2019), Brexit: the European Investment Bank, January 31st, stated: "[u]nder the Withdrawal Agreement, the UK will, over a period of 12 years, receive the €3.5 billion of capital it has paid in to the EIB. However, the UK will not receive any share of the profits that the EIB has accumulated, nor any interest or dividends, [which] could amount to €7.6 billion. ...As the EIB's shareholders, member states have committed to €243.3 billion in capital. Of this, €1.7 billion is paid in, the rest callable by the Board of Directors in the event of this being necessary for the EIB to meet its obligations. ...The UK will remain liable throughout the period for the uncalled subscribed capital. The amount for which the UK will be liable will depend on the underlying events that trigger the liability, specifically whether they are attributable to financial operations approved by the EIB before the entry into force of the Withdrawal Agreement (calculations are also included for liabilities that will not reduce over time)". The House of Lords recognised that this was a poor outcome for the UK: "The EIB has been profitable over its life, raising the question of whether the UK might be expected to benefit from a share of these profits. We asked the Minister whether the Government had attempted to secure any share of the retained earnings of the EIB, which at the end of 2017 stood at approximately €47.3 billion. A 16.1 percent share of those retained earnings would have amounted to approximately €7.6 billion, more than twice the paid-in capital. David Lunn, Director of EU Exit, HM Treasury, told us that the UK's capital could not be compared to an investment in a private sector entity, emphasising that 'there is nothing in the treaty and the EIB statutes that says what happens when the shareholder leaves the bank, and how the shareholder gets his money back'. He was then pressed further on this point: 'Clearly, we are aware of how you would value a shareholding

any deal should also contain a provision similar to that in the EU-Singapore Investor Protection Agreement, 2019, protecting UK holders of EU sovereign debt by giving equal treatment to sovereign debt holders inside and outside the EU.<sup>235</sup>

## 10. What is the fallback option for the UK and US if the EU does not cooperate in managing the risk it has created?

If the EU does not agree to an Enhanced Equivalence arrangement as discussed in section 1 above, it is of crucial importance that the UK works with the US, as the other host of the global financial market, to counteract Eurozone risk and to protect against any impending Eurozone crisis. The EU's opening response to the post-Brexit negotiations on the future UK-EU relationship has been overwhelmingly negative when it comes to financial services in particular. In January 2020, it was reported that European Commission officials had told EU diplomats they had identified 40 different types of UK financial services that could be frozen out of the EU's single market.<sup>236</sup> These relate to the 40 areas where the EU has equivalence arrangements with third countries.<sup>237</sup>

The UK has already indicated that the preferential 0% treatment for EU member state government bonds will come to an end on Brexit,<sup>238</sup> but it has yet to determine its future approach. The protective measures that should be taken have been set out in pages 12 to 16 of this paper.<sup>239</sup> In preparation for taking those protective measures, there should be an evaluation of the exposures of global financial institutions to Eurozone government bonds, directly through Eurozone member state issuers and indirectly through interactions (direct or indirect) with Eurozone banks and other financial institutions. This should be followed by an evaluation of the methods and options used to assess and manage the exposures of global banks to EU27 banks. Consideration should also be given to the extent to which global financial institutions may be exposed to the supervision and regulatory architecture of Eurozone or Eurozone-connected bodies, such as the Eurozone member state regulators, the ECB and the ESAs,<sup>240</sup> and the risks posed by the conflicts of interest embedded within that regulatory architecture. There should be an assessment of the extent to which the UK and US should recognise the legal validity of any locally executed resolution of a Eurozone financial institution under local Eurozone member state law, Eurozone or pan-EU law. There should be an evaluation of whether CCPs and banks should be permitted to accept Eurozone member state government bonds as collateral and, if so, which of those bonds and what the appropriate collateral discounts or haircuts should be on a dynamically adjusted basis.

Finally, it should be recognised that it is perfectly possible for the global financial markets to service Eurozone customers without meaningful exposure to the Eurosystem and Eurozone regulators. This

---

in a conventional organisation. All I can say is that this is not a conventional organisation, and the negotiation was driven by the statute and our rights under that statute. I am not sure that there is much more I can say'. ...While we recognise that this was part of a complex and wide-ranging negotiation on the financial settlement, and that the EIB's statute is silent on the issue, we regret that the Government failed to provide a cogent explanation of the rationale for the position taken in the negotiations".

<sup>235</sup> See fn 142 above.

<sup>236</sup> Crisp, J., "Brussels draws up hit list of UK financial services as row over EU rules after Brexit intensifies", Daily Telegraph, 22 January 2020.

<sup>237</sup> European Commission (2019) *Equivalence in the Area of Financial Services*, Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee and the Committee of the Regions, COM(2019) 349 final, July 29th, Brussels, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52019DC0349>.

<sup>238</sup> Article 114 of the Capital Requirements (Amendment) (EU Exit) Regulations 2018 (SI 2018/1408) removes the 0% treatment for EU member state government bonds after Brexit – a step recommended in Reynolds B., *The Art of the No Deal*, Politeia, 29 November 2017. A consolidated mark-up of the UK's CRR is available on the Shearman & Sterling LLP Brexit Resource page, <https://www.shearman.com/key-issues/brexit-resource-center>.

<sup>239</sup> See the section headed '*UK/US Regulators must mitigate risk jointly if no agreement on Enhanced Equivalence*', which starts on page 12.

<sup>240</sup> The ESAs comprise the EBA, ESMA and the European Insurance and Occupational Pensions Authority (EIOPA). They were each established by their own founding EU regulation, common components of which are the establishment of a single rulebook for financial services and harmonising the approach of national regulators across the EU.

requires the adoption of a cross-border and financial centre-based approach to global financial market activity that avoids a presence on-the-ground within the Eurozone or EU and hence preserves the safety and soundness of the global financial system.<sup>241</sup> The default scenario, if the EU fails to agree to a mutual recognition and mutual access arrangement on the basis of "Enhanced Equivalence", is for the UK to revert to its traditional "financial centre" model, where EU customers come to the market, as they already do from the rest of the world, and historically did so from the EU before the early-stage beginnings of the financial services passport in 1995.<sup>242</sup> This would involve EU customers accessing financial services in the City through the "reverse solicitation", which permits EU customers to reach outside the EU regulatory perimeter where, instead of being protected by EU regulation, they are protected by UK law and regulation. Customers could also be encouraged to set up UK presences from which they could access the UK's markets solely within the UK's jurisdiction. The UK's regulators would need to work with their US counterparts to reverse out the effects of the EU's treatment of sub-sovereign bonds as sovereign, and also of the consequent over-estimation of the creditworthiness of state-connected bonds whose value depends on that of their member state sovereign. The regulators, applying the global rules, will need to apply a normalised Basel approach to the risks arising from the EU and the Eurozone, counteracting the treatments adopted by the EU itself.

For some types of business, such as lending and primary insurance, the remote management of subsidiaries based in the EU27 will be required. In those cases, international businesses continuing to serve EU27 customers will need to do so from on-the-ground EU27-incorporated subsidiaries. EU27 supervision is conflicted and cannot be expected to undo the effects of EU regulation of sub-sovereign state debt. In practice, global financial institutions do not allow their locally incorporated and regulated entities to go bankrupt and to walk away from those entities for reputational reasons. So, the UK and US will need to ensure the amount of risk taken on by EU27 incorporated subsidiaries is minimised and that exposures of the global market to EU27-incorporated entities is instead addressed through capital, collateral and liquidity treatments in their headquarters which apply properly to neutralise the risk that arises from within the EU27. Reliance cannot be placed to a meaningful degree on EU27 on-the-ground supervision, so risk will need to be backed out to the UK or US for management there.

## **11. The UK and US, the UK's European Connectivity and the importance to the financial markets of the common law 'method'**

The UK is a tried-and-tested host for such business. It was unable fully to prevent some of the effects of the 2007-8 financial crisis, but at that time it operated under EU regulation which, at least in part, drove certain regulatory distortions which exacerbated the situation. For instance, although there was a pan-EU financial regulatory regime at the time, it was applied by a small number of member states in a manner designed to attract business rather than to regulate safely. Some states offered not to apply pan-EU rules at all or to apply them in a very lax manner if businesses relocated there.<sup>243</sup> The UK responded with a "light touch" approach to regulation. Although this did not cause the financial crisis, which was instead caused by the lack of proactive management by the world's central banks of systemic risk arising from Californian sub-prime debt, the overall effect was that the ability to identify and manage risk in the financial system across Europe was distorted. In fact, as can be seen from this paper,

<sup>241</sup> Various law-based solutions are set out in Reynolds B., *The Art of the No Deal*, Politeia, 29 November 2017.

<sup>242</sup> With the Investment Services Directive (Council Directive 93/22/EEC). This provided for the mutual recognition of home state prudential rules for investment firms. A similar regime was introduced for banking (Council Directive 93/6/EEC and Directive 2000/12/EC). Full recognition of prudential and conduct of business rules was introduced in 2007 with the Markets in Financial Instruments Directive (Commission Directive 2006/73/EC) and also for banking (Directive 2006/49/EC and Directive 2006/48/EC) and insurance (Solvency II - Directive 2009/138/EC; Insurance Mediation Directive II - Directive 2016/97/EC). Summaries of these regimes can be found in Reynolds B., *The Art of the No Deal*, Politeia, 29 November 2017 and Reynolds B., *A Blueprint for Brexit: The Future of Global Financial Services and Markets in the UK*, Politeia, 2 November 2016.

<sup>243</sup> For commentary of this see: House of Lords EU Committee's *The post-crisis EU financial regulatory framework: do the pieces fit?* This discusses how the post-crisis framework allowed Member States to compete with each other on different levels of regulation; <https://publications.parliament.uk/pa/ld201415/ldselect/ldcom/103/103.pdf>.

the EU's overly prescriptive approach to regulation<sup>244</sup> – which is contrary to the UK's common law method and often seen as anti-market – and its desire to control perceptions of the euro's true value<sup>245</sup> actually injects huge systemic risk into the market.

The main other global financial centre, the US, is not the natural host for the management of this business. This is so, in part, because of its time zone and the fact that much financial business (and its management) is face-to-face. In part, it is also because the UK's methods of managing risk do not require US levels of disclosure or involve unpredictable liability, such as exposure to penal regulatory fines and punitive damages, including in class actions, which can potentially put businesses into bankruptcy or cause unanticipated knock-on consequences for bank investors and counterparties. Such exposure could, in fact, be counterproductive in terms of injecting more systemic risk into the market. The US regime operates well to protect US consumers but the punitive liabilities nevertheless exacerbate systemic risk. The UK's regime achieves its results instead through highly proactive supervision and a legal regime which provides for damages for those suffering loss, but not at a penal level.

Within the EU, it had become increasingly difficult for the UK to mitigate let alone manage Eurozone risk on the basis of reliance on EU supervisors, given the conflicts of interest to which those supervisors are subject,<sup>246</sup> and given the imperfect information which is provided by the Eurozone. Some of these issues were under discussion by UK Prime Minister David Cameron when he was seeking to renegotiate the intra-EU arrangements in 2015-16. One of the goals was to create a situation in which the Eurozone recognised the equal coexistence of sterling.<sup>247</sup> Those attempts were ultimately rejected by the EU and subsequently by the UK in the Brexit Referendum on 23 June 2016. Brexit now precipitates a much-needed re-think. The Eurozone needs a stable environment in which it can benefit from the 20–30 years (at least) that it needs to complete the project.

Following the Brexit Referendum, some in the EU sought to lure more financial companies to the EU, or even introduce rules to require them to relocate, such that more financial business is booked and located within the EU27 – seeking to take advantage of Brexit to fulfil ambitions to attract financial services business and control over Europe's financial markets.<sup>248</sup> There has even been a wish to pull euro clearing into the EU in order to be in a position to control the margining on euro exposures and thereby to manage the value of the currency.<sup>249</sup>

In view of our analysis above, it is clear that this would be very risky. It needs to be acknowledged that the systemic risks described above are only contained as a result of the fact that the majority of financial transactions in the EU take place in and from the UK, in the global financial markets which it hosts, and that the UK successfully mitigates and oversees Eurozone risk and has done so since the euro started.<sup>250</sup> Given the scale of systemic risk introduced by the false assumption of Eurozone member state sovereignty, it is important that no material amount of global financial business is re-booked or located within the EU27, and in particular the Eurozone, and that this business continues to be

---

<sup>244</sup> Eg <https://www.ft.com/content/5471afde-096a-11e1-a20c-00144feabdc0>.

<sup>245</sup> See fn 161 above and surrounding text, and fn 221 above.

<sup>246</sup> For instance, the EU wishes to control every aspect of regulation, including the haircutting of Eurozone debt and the application of Basel Pillar 2 capital requirements: see fns 221, 224 and 225 above.

<sup>247</sup> European Council press release, 2 February 2016, "Letter by President Donald Tusk to the Members of the European Council on his proposal for a new settlement for the United Kingdom within the European Union" (with links to the proposed agreements); Prime Minister's statement on EU renegotiation: 3 February 2016 and PM Commons statement on EU reform and referendum: 22 February 2016. This issue is also discussed in Reynolds B., *A Blueprint for Brexit: The Future of Global Financial Services and Markets in the UK*, Politeia, 2 November 2016.

<sup>248</sup> For a recent example of this see: Brunnsden, J., Fleming, S., and Stafford, P., "EU chief issues Brexit warning over City of London access: Dombrovskis says UK could be cut out if it diverges from Brussels standards", *Financial Times*, 2 December 2019; <https://www.ft.com/content/59569142-12c9-11ea-a7e6-62bf4f9e548a>.

<sup>249</sup> Reynolds, B., "EU-managed control of euro clearing is not viable", *Financial Times*, 15 May 2017, <https://www.ft.com/content/64f5d320-3403-11e7-99bd-13beb0903fa3>.

<sup>250</sup> *The Impact of the UK's Withdrawal on EU Integration*, Policy Department for Citizens' Rights and Constitutional Affairs, June 2018, describes the UK's role, particularly in the euro's early years, as the "de facto banker of much of the Eurozone"; [http://www.europarl.europa.eu/RegData/etudes/STUD/2018/604973/IPOL\\_STU\(2018\)604973\\_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2018/604973/IPOL_STU(2018)604973_EN.pdf).

conducted elsewhere. A technical ring-fencing of Eurozone risk in EU27 subsidiaries of global financial institutions cannot be relied upon to contain the risk since global businesses tend, in practice, to stand behind their subsidiaries. Nor can the EU be relied upon to supervise its regulated financial businesses in a manner that would counteract the entire regulatory and accounting edifice it has created.

The Eurozone's use of financial services needs to be transacted and monitored in real time and based in a compatible time zone. The advantages of financial centre hubs are well-known and require no detailed exposition here. The only realistic place where that can happen is the UK, with its sophisticated legal and regulatory framework, democratically accountable system and skilled workforce. The UK's manner of lawmaking and regulation is based on the common law, which is "self-executing" in the sense that the law is sufficiently clear for its requirements to be capable of accurate independent analysis and the exercise of reliable predictive judgement, in most cases, as to the application of the law to new situations. Any such judgement will be considered in independent courts if challenged by officials, with no bias favouring the view expressed by officials. The common law regime permits financial innovation but legislates for restrictions that make it safe. It should be noted that all four major global financial centres are located in common law jurisdictions.<sup>251</sup> Further, the financial markets sector as a whole has expressed a clear preference for common law systems, with many international contracts subject to English law.

The common law approach is entirely different from the civil law and EU approach of legislating for rights, as well as restrictions. An analysis as to whether a common law or civil law system is "better" has been considered many times and at greater length than can be developed here. The two systems have often sat awkwardly together during the period of the UK's EU membership, and the resulting tension has led to uncertainties to be resolved through determination of the lawmakers' "purposes" at the CJEU. The UK's approach is just different. It is interlinked with those of other common law jurisdictions such as the US and most of the Commonwealth. After Brexit, the uncomfortable juxtaposition of the UK and EU systems will come to an end and the UK's regime will need to operate autonomously in its own manner. The question is how it can continue to connect with, and thus provide a realistic service to, the EU system after Brexit. Enhanced Equivalence provides the best solution.

Financial regulation is at its best when it occurs in a manner that is connected to dynamic, democratically accountable lawmaking that allows the market to flourish, while addressing the risks borne by individual institutions as well as systemic risk. A false narrative was allowed to develop after the financial crisis of 2007-8 that somehow the UK "Anglo-Saxon" market model was responsible and needed to be reined in by the EU and, ultimately, by the financial services division of the European Commission led then by internal market Commissioner Michel Barnier.<sup>252</sup> In fact, the issue was one of systemic risk, which had been allowed to build up by all central banks, arising in particular from Californian sub-prime debt. The result of this false narrative has been a major programme of EU lawmaking in financial services. This has included the creation in 2010 of EU federal oversight bodies, the ESAs, to oversee national regulators.<sup>253</sup> The EU has also been implementing an ambition to create a single financial services rulebook across the EU.<sup>254</sup> This regime has severely strained the UK's ability to mitigate, let alone manage, Eurozone risk and has in fact involved the enhancement of Eurozone systemic risk.

---

<sup>251</sup> The top four financial centres are New York, London, Singapore and Hong Kong, according to The Global Financial Centres Index, 26 September 2019.

<sup>252</sup> Christine Lagarde, French Minister of Finance when the ESAs were introduced, said at a conference one of the authors spoke at in New York after the 2007 financial crash: "I can't tell you how much it means to me for the City of London to be regulated in Paris". This is because the main ESA is ESMA, which is based in Paris.

<sup>253</sup> Each of the ESA's specific oversight responsibilities are summarised in the European Parliament's Fact Sheet on the European System of Financial Supervision, available at: <https://www.europarl.europa.eu/factsheets/en/sheet/84/european-system-of-financial-supervision-esfs>.

<sup>254</sup> The Council of the European Union first recommended the establishment of a single rulebook for financial services in its cover note to the 18/19 June 2009 Presidency Conclusions, 11225/2/09, REV 2, 10 July 2009.

## Conclusions

At the heart of the problem has been an attempt to create a sovereign EU-wide currency without accepting and addressing the resulting loss of sovereignty at the member state level and the consequences for each member state's banking system. The situation has created extraordinary systemic risk in the financial market. The EU has attempted to use financial regulation and accounting treatments to protect the euro project and to control the financial market's reaction to possible events, minimising potential shifts in perception of the creditworthiness of Eurozone member states and the Eurosystem. However, in doing so it has created further systemic risk.

The underlying political obstacles are too fundamental for there to be a simple workable fix. Instead, it needs to be accepted that the Eurozone is incomplete and will remain so for the foreseeable future. This incompleteness leads to a market in Eurozone debt that is characterised by heightened risk and diminished transparency, thereby elevating the risks for those global investors and financial institutions that operate within it or who are indirectly affected by it. That must be unacceptable to the participants in the global market. The solution, however, is straightforward. As part of a post-Brexit UK-EU trade deal, "Enhanced Equivalence" arrangements should be established to allow the UK to continue safely mitigating and indeed managing this risk on behalf of the global financial system.

The problem has meant that much more Eurozone government debt is issued and at lower costs by weaker member states than is justified by their credit ratings. The regulatory framework of the EU and Eurozone is not capable of properly addressing the systemic risk that results from this debt, nor can it address the resulting risk of contagion if the markets begin to question the safety and soundness of institutions within the financial system as a result of this unmanaged risk.

Over and above this, the assets of the Eurozone banking system, including its NPLs, are overvalued.<sup>255</sup> The Eurozone banking system is currently able to meet its liabilities as they fall due only thanks to the ECB's QE programme of €2.9 trn and the Eurosystem's lending to banks of €3.1 trn, totalling €6 trn of monetary support from the European authorities. All this is compounded by the opaqueness of the EU accounting system.

It might be argued that the EU is not unique in having a central bank with an overstretched balance sheet. As one commentator observes: "[a]ssets of major central banks—the US Federal Reserve, the ECB and the Bank of Japan—collectively stood at \$14.5 trn in November 2019, which is...more than 3.5 times the pre-crisis level of \$4 trn. A similar conclusion comes from scaling assets by the size of their respective economies: Japan leads the way at 102% of nominal GDP, followed by the ECB at 39%, and the Fed at a mere 17%".<sup>256</sup> However, there is a crucial difference. The Bank of Japan and the Federal Reserve Bank are backed by sovereign states that control their own currency; the Eurozone's central bank is not. *This is the key irrefutable point of this paper.*

The implications of this for the global economy are enormous, as another commentator recognises: "Europe looks more like a basket case. Americans and Asians scratch their heads and wonder whether the EU will ever get its act together. It wasted a decade trying to save its dysfunctional monetary union.... The world watched amazed as the EU authorities pushed the Eurozone into a double-dip recession through fiscal and monetary overkill when everybody else was recovering from the Lehman crisis, and gasped as the ECB compounded a debt-deflation crisis by failing to act as lender-of-last resort to illiquid sovereign states for three grueling years. The legacy of those errors remains: the Eurozone is stuck in a deflationary trap with interest rates at minus 0.5% and exhausted monetary

<sup>255</sup> For reasons explained in fn. 21 above.

<sup>256</sup> Roach, S. (2019) "Playing the fool's game: predicting the 2020 crisis", Financial News, 27<sup>th</sup> December: <https://www.fnlonon.com/articles/playing-the-fools-game-predicting-the-2020-crisis-20191227>.

policy, paralysed on the fiscal front as well by the Stability Pact and rigid rules embedded in EU treaty law. In short, it is a sitting duck waiting for the next global downturn".<sup>257</sup>

And the next global downturn could actually begin in Germany: "The nation once known as Europe's powerhouse, and the locomotive of the entire Eurozone, is slowly turning into its sick man instead. ...Germany's stagnating economy will make the Eurozone more unstable than ever, it will make the European Union more protectionist, it will destabilise global trade at the worst possible time, and may well trigger a financial crisis. It is going to be one of the most dangerous trends of the 2020s. When Germany released its industrial production figures yesterday, they were predictably awful. Output dropped by 5.3% over the same month a year ago, the worst reading since the depths of the last recession in 2009".<sup>258</sup>

Finally, we should recall that in the last forty years, there have been three massive debt waves whose economic impact spread across the whole global economy. These followed periods of low interest rates, allowing governments to borrow heavily, building up debts that could not be serviced when interest rates subsequently rose. The first happened in 1982, when Mexico informed the IMF that it could no longer repay its international loans. This created a domino effect which led to 16 Latin American countries and 11 other developing countries being forced to reschedule their debts. The second happened in 1997, when Indonesia, Malaysia, South Korea and Thailand – which similarly increased their debts during the 1990s when interest rates were again low – went into recession with falling exchange rates, making international debt servicing impossible, again with global repercussions. The third was, of course, the 2008 US subprime mortgage crisis, which led to the Global Financial Crisis, followed by the Great Recession. The World Bank has just warned of a fourth debt wave that could be even bigger – again precipitated by low interest rates.<sup>259</sup> It points out that in emerging economies the debt-to-GDP ratio is at a record 170%.<sup>260</sup> But what the World Bank does not do is highlight the scale of the debt in the Eurozone, where Italy and Spain have similar high debt ratios, up to 167% and 138%, respectively. Given the size of the Eurozone economy relative those of emerging markets, if the debt wave lands on the shores of the Eurozone, the domino effect will be much larger than in the previous three cases. We should not forget that there was a huge Eurozone sovereign debt crisis in 2011-12.

---

<sup>257</sup> Evans-Pritchard, A., "Our Brexit destiny in the 21st Century is a watershed philosophical choice, far beyond immediate trade", Daily Telegraph, 31 January 2020; <https://www.telegraph.co.uk/business/2020/01/31/brexit-destiny-21st-century-watershed-philosophical-choice-far/>.

<sup>258</sup> Lynn, M., "Germany's troubled economy a warning to the EU and beyond", Daily Telegraph, 7 December 2019; <https://www.telegraph.co.uk/business/2019/12/07/germanys-economy-deep-trouble-wont-country-suffer/>

<sup>259</sup> World Bank, *Global Waves of Debt: Causes and Consequences*, 19 December 2019; <https://www.worldbank.org/en/research/publication/waves-of-debt>.

<sup>260</sup> Basu, K., Where will the approaching global debt wave make landfall?, Financial News, 10 February 2020.

## Annex 1: Shortcomings of Information and Areas of Enquiry into the Eurosystem

### 1.1 Summary

In summary, the sources of data for understanding the financial state of the Eurosystem are as follows:

SOURCE	BONDS					LOANS				
	Supra	Sov	Sub- sov	Other PSE	Bank/ Corp	Supra	Sov	Sub- sov	Other PSE	Bank/ Corp
Eurostat	x	✓	✓	x	x	x	✓	✓	x	x
Eligible collateral list	✓	✓	✓	✓	✓	x	x	x	x	x
QE	x	✓	✓	✓	✓	x	x	x	x	x
EIB loans	x	x	x	x	x	x	✓	✓	✓	✓

There are numerous missing data points that would need to be known in order to achieve a full picture of Eurozone public sector indebtedness by member state. This would require the research set out below in this Annex to be undertaken in order to achieve an understanding of the situation regarding:

1. Bonds issued by "other public sector entity";
2. EIB loans to "other public sector entity";
3. Loans from other lenders to "other public sector entity";
4. Downstream guarantees issued by sovereigns, sub-sovereigns or an "other public sector entity" for bonds and loans where the borrower is a bank or corporate (such as a securitisation vehicle for bank's NPLs); and
5. Upstream guarantees issued by sovereigns, sub-sovereigns or an "other public sector entity" for bonds and loans where the borrower is a supra-sovereign.

It is not necessary to discern the guarantees issued by sovereigns, sub-sovereigns or an "other public sector entity" for one another's bonds and loans, as these will be captured by the other measures.

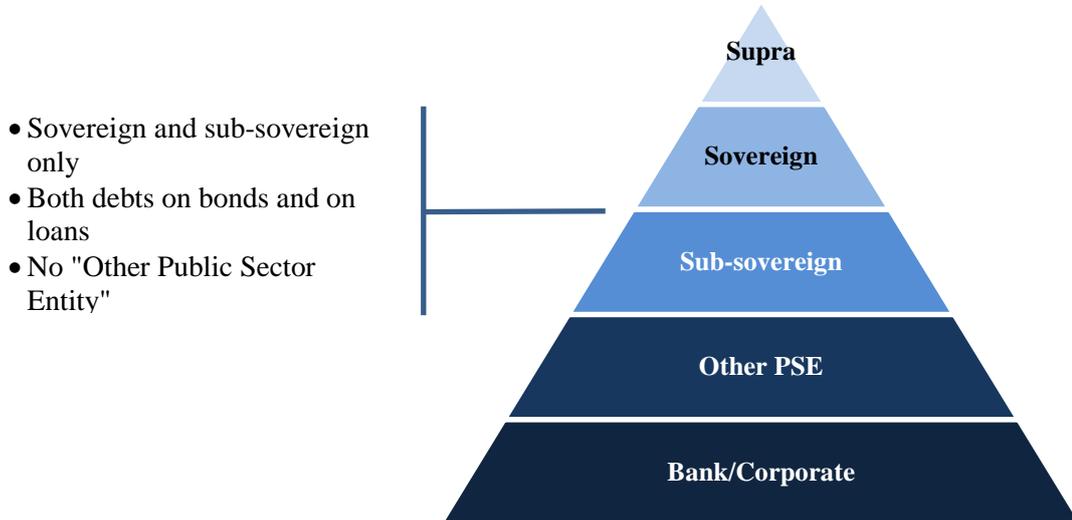
The liabilities of sovereigns for pay-in of subscribed-but-not-called capital of the supra-sovereigns ESM and EIB are known, as are the liabilities of sovereigns to meet the Commitments Appropriation of the EU Budget.

There is currently no liability for sovereigns (acting through their central banks) for pay-in of subscribed-but-not-called capital of the ECB, as their entire subscribed capital has been called.

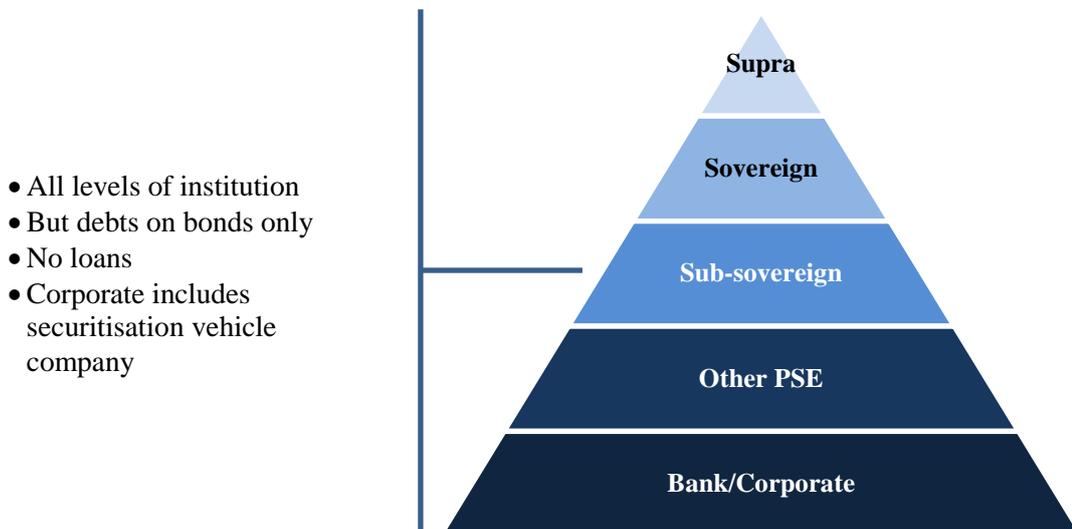
In diagrammatical form, the scope of the main information sources can be depicted as follows:

Figure 17: scope of the main information sources

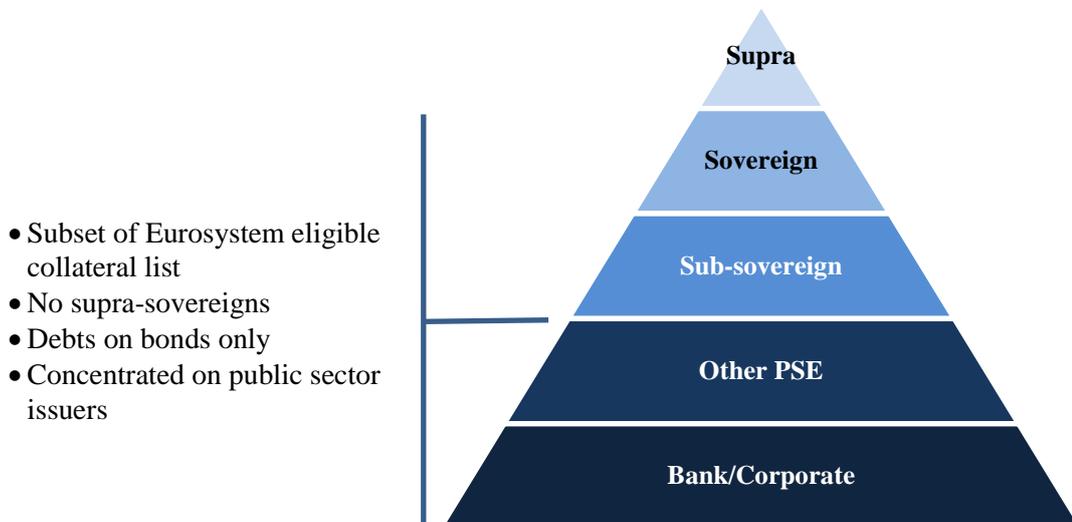
Scope of Eurostat database on Eurozone  
"general government debt"



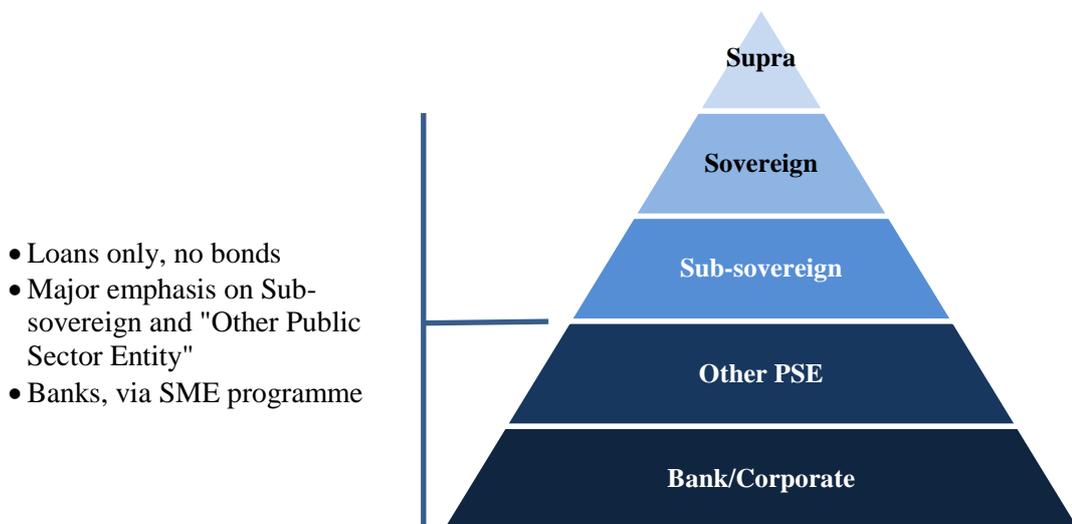
Scope of Eurosystem eligible collateral list:



**Eurosystem QE programme**



**EIB loans**



The following areas should be examined in order to complete the picture as to the situation within the Eurosystem.

**1.2 Further inquiries required**

(a) Eurosystem eligible asset list

The collateral arrangements for Eurosystem monetary and payment operations are laid out in this section of the ECB's website:  
<https://www.ecb.europa.eu/mopo/assets/html/index.en.html>.

The arrangements are explained in the ECB's Occasional Paper Series issue 189 of May 2017: "The Eurosystem collateral framework explained".

A first question is whether all the assets on the list can be used as collateral against credit at every NCB, and not just at the one where the issuer resides. Ever since 1 January 1999, there have been assets that could be used for credit at any NCB, but to start with, there was a subsidiary list of assets that could only be used in one country. In other words, not all assets were *de iure* mobilisable anywhere in the Eurosystem. This rule seems to have been removed, although the ECB website contains a section named "Cross-border collateral in Eurosystem credit operations"<sup>261</sup> as if there were a separate classification of "National collateral in Eurosystem credit operations". There is no indication within the database of eligible assets whether a particular asset can be mobilised only in one country or at any NCB. This point needs to be clarified.

Even if assets are *de iure* mobilisable at any NCB, it is a moot point whether they are liquid in any market but one. For example, bonds of Stad Ronse, a town in Belgium, cannot be necessarily considered as liquid anywhere except in Belgium and through one of the secondary market-makers in Belgium. In that case, this bond should be considered as *de facto* national collateral, and the concept of a single Eurosystem-wide haircut as is carried on the list is unrealistic: the bond should have one haircut when used as collateral at the National Bank of Belgium, and a much larger one if used at any other NCB.

The eligible assets list of the Eurosystem runs to around 25,000+ bond issues, with the issuers falling into the categories of Eurozone sovereigns, supranational entities, public sector entities/state, regional and municipal authorities, public sector entities/national government agencies, public sector entities/publicly controlled private companies (such as transport, water, electricity and gas utilities), banks, non-bank financial institutions and special purpose securitisation vehicle companies. It is uncertain, without more detailed study, whether the list also contains private corporates and the type of public sector entity which has been established solely to undertake the construction and offtake of supply to another public sector entity. This would be a Private Finance Initiative structure in the UK; in the EU, it could be a structure into which the EIB is injecting funds both through its normal portfolio and also taking a higher level of risk as a financing within the so-called EFSI.

The eligible assets list does state the respective haircut in its Column T, but it states neither the size of each issue, nor the credit rating of the issuer, nor any totals across categories such as issuer, country, rating grade, issuer type and so on.

An enquiry would need to establish how many of these issues, not actually issued by the sovereign borrower in the country concerned, were being treated as quasi-sovereigns, enjoying a haircut in the list on a level with sovereign issuers, and in consequence being accorded a 0% risk-weighting by banks, allowing banks then to give them a 100% weighting as an HQLA for LCR purposes. As it is, the haircuts in column T appear low if they are meant to cater for both credit risk (deterioration in the credit quality of the bond's issuer) and market risk (changes in absolute interest rates and in the shape of the yield curve). An under-weighting of the credit risk element in the haircut would be another result of the misleading application of the Basel Rules. It would be a major concern were the misleading application of Basel Rules for Eurozone sovereigns to have been allowed to trickle down into the other categories of public sector entity and to have trickled into banks' IRB methodologies and LCR computations.

A further enquiry would need to establish the degree to which the bonds on the list were actually liquid and traded actively, and with narrow bid-offer spreads, in the secondary market. ESMA is just beginning to make bond liquidity data available. ESMA's website states that "there are currently 520 liquid bonds subject to MiFID II transparency requirements", which intimates that the scope of their reports will be limited to this small subset of the list.

---

<sup>261</sup> [https://www.ecb.europa.eu/stats/payment\\_statistics/cross-border\\_collateral/html/index.en.html](https://www.ecb.europa.eu/stats/payment_statistics/cross-border_collateral/html/index.en.html).

ESMA's reports will consist of "a quarterly assessment of quantitative liquidity criteria, which include the daily average trading activity (trades and notional amount) and percentage of days traded per quarter", as if a bond might still be classified as liquid even if there were one or more business days upon which there were no trades in it. What is needed is not a report on a small subset of the list, but a report on the whole list, deriving from an application of market-based indicators of liquidity to every issue on the list. That report should then be cross-checked against the liquidity returns (e.g. for the purposes of the LCR) filed by market actors. One could then see the degree to which market actors are classifying – as HQLAs – bonds that fail the market-based indicators of liquidity, putting in question the substance of those actors' claims to be meeting their regulatory claims to being liquid, and in turn putting into question the entire regulatory framework for ensuring the liquidity of the Eurozone banking system.

- (b) Amount of Eurozone sovereign bonds owned or controlled (as collateral) by the Eurosystem

Financial commentators normally attest that the Eurosystem had a QE portfolio as at 31/12/18 of €2.6 trn, and it is commonly assumed that this is all invested in Eurozone sovereign bonds, ones that all appear in the Eurosystem eligible assets list. However, the exact make-up of the QE portfolio is unclear.

Financial commentators accept the QE figure as being €2.6 trn: position 7.1 in the Eurosystem consolidated balance sheet of 31/12/18. The Eurosystem aggregated balance sheet on 30/8/19, though, showed the Eurosystem owning €2.9 trn of "debt securities issued by euro area residents", being €2.2 trn issued by "central government", €57 bn issued by "other euro area residents" and €422 bn issued by "monetary financial institutions". Did QE go down to €2.2 trn because all of QE is invested in sovereign bonds? Or did it increase to €2.9 trn because it is invested in other types of security as well?

It is assumed as well that the QE holdings are in every case a subset of the figure that Eurostat issues for the "general government gross debt" of a Eurozone country, and for three reasons. First, the Eurostat figures (€9.9 trn as at 31/12/18) embrace the debts of at least state, regional and municipal authorities as well as those of the sovereign, if not also of national government agencies. Secondly, the Eurostat figures are for debts based on loans and on bonds, and QE is invested solely in bonds. Thirdly, the QE rules dictate that the programme cannot own more than 33% of the outstanding bonds of any one Eurozone sovereign. QE of €2.6 trn was 26% of Eurostat's €9.9 trn on 31/12/18.

As well as owning bonds through QE, the Eurosystem also accepts them as collateral, and the Eurosystem aggregated balance sheet on 30/8/19 showed "loans to euro area residents" of €3.2 trn, of which only €10 bn were to "central government" and €2 bn were to "other euro area residents". That left €3.1 trn to "monetary financial institutions", which cannot be NCBs or else the figures would have been netted, as the TARGET2 balances are. Instead, they must be to banks. It is possible that "longer-term refinancing operations" may be included in this figure (and these stood at €723 bn on 31/12/18 as per position 5.2 in the Eurosystem consolidated balance sheet). Either way, the Eurosystem is lending €3.1 trn to banks, and they are only allowed to do this against eligible collateral.

Assuming that €723 bn of this is through Long-Term Refinancing Operations, by a process of elimination, the remaining €2.4 trn must be being lent through modules of TARGET2, because the Eurosystem does not have any other lending programmes.

There are three modules of TARGET2 through which NCBs take deposits and make loans with the banks they have sponsored into the system, whether or not those banks have their TARGET2 RTGS account<sup>262</sup> directly on the TARGET2 Single Shared Platform or have it with their sponsoring NCB.

The modules are "Proprietary Home Account", "Home Accounts Module" and "Standing Facilities". Banks have their RTGS account and all their TARGET2 payments debited or credited to this account. At end-of-day, the RTGS account is zero-balanced and banks must maintain their Minimum Reserves in one of these other three modules: they may have to borrow to do that, and, in effect, borrow from their NCB in order to re-deposit with it. Indeed, they could borrow through "Standing Facilities" and redeposit into "Proprietary Home Account" or "Home Accounts Module", of which a bank will have one or the other but not both.

Through QE and this lending to banks, the Eurosystem owns €2.9 trn of debt securities and controls collateral to secure loans of €3.2 trn – meaning that even with a haircut as low as 5%, the face value of securities held as collateral must be €3.4 trn. This adds up to €6.3 trn owned or controlled.

We may ask, but we do not know, what the make-up of these portfolios is, how much of Eurostat's reported "general government gross debt" is owned or controlled by the Eurosystem (when the total for the 19 Eurozone countries as at 31/12/18 was €9.9 trn), and indeed what the total nominal amount of the eligible assets list is, and what their total value is as collateral (nominal multiplied by the stated haircut).

This is vital information for a proper risk assessment of the Eurozone but it is not provided in the data issued by the Eurozone financial authorities.

As it is, one can say that the Eurosystem owns or controls as collateral an amount that equates to 64% of the "general government gross debt" of the 19 Eurozone countries as at 31/12/18, granting that we do not know if all of the QE and all of the collateral consists of Eurozone sovereign bonds, or of a blend of the many different types of debt security on the eligible asset list.

(c) Public sector entity debt supplied by the EIB

The debts of the supranational borrower EIB are 0% risk-weighted for banks that hold them and count as a Level 1 HQLA, and a further, detailed investigation is required here.

The EIB's loan portfolio is predominantly to public sector entities across all of the types listed above, including into structures where the EIB takes a higher degree of risk through the EFSI. The borrower in this latter case would be a special purpose entity established solely to undertake the construction of an asset, say for power generation, and sell the supply so created to another public sector entity. The financing template would involve the EIB injecting one of its normal senior unsecured loans and then a junior-subordinated unsecured loan enabled by a guarantee (second loss) or "equity commitment" (first loss) issued by its subsidiary, the EIF. The presence of the EIF-backed financing as a first- or second-loss absorber after the shareholders is intended to encourage the participation of third-loss absorbers in the shape of suppliers of senior-subordinated financing. The EIF's commitment, though, contains significant facility risk due to its subordinated position, long term and lack of security. The EIF's

<sup>262</sup> An institution's TARGET2 RTGS account is the one to which the payments it orders are debited and to which payments are credited that are due either to it as beneficiary or to payment service users for whom the institution is acting as Account Servicing Institution.

commitment is also off-balance sheet, both its own balance sheet and that of the EIB, but it enables a very significant amount of funding to be raised.

The EIB does not have significant loans to Eurozone sovereigns, although a portion of its loans to public sector entities said to be is guaranteed by the respective sovereign in the same country.

The balance of the EIB's loans is under its small- and medium-sized enterprises (SME) programme, where the EIB lends (and takes the credit risk on) a major commercial bank in an EU member state, and the bank on-lends to its SME clients. The default risk on the SME client lies with the bank; the default risk on the bank lies with the EIB.

The EIB's annual report gives no transparency on which banks it has lent to and their individual credit ratings, but they will, perforce, be the largest banks in each EU member state, and on whose individual credit rating the credit rating of the sovereign borrower acts as a ceiling.

The Moody's rating report on the EIB (referenced above) gives some measure of breakdown where the EIB has a sovereign guarantee on a loan to a public sector entity, but not indicating if this is occurring on the EIB's loans inside the EU, or the ones outside it. There is also mention of separate security being taken in some cases but the detail is absent for what security has been taken, on which loans, and to secure what portion of the loan.

The EIB benefits from first-loss guarantees from the EU (under the EU's Commitments Appropriation and established in each case through an EU legal instrument) for the EIB's loans to borrowers outside the EU, and for the EIB's loans in the context of the EFSI. These guarantees will find a place as a credit enhancement within the EIB's IRB model but overrating the enhancement because the claim on the EU is a claim on the same member states as are the EIB's shareholders.

The EIB's loans are also long-term. The typical profile would be a two-year availability period and then a repayment in equal semi-annual instalments starting six months or a year from full drawdown. The average duration of the loan would be around nine years. The loans are also on a fixed rate of interest, which amplifies the risk since, if the borrower defaulted, the EIB would have to redeploy the funds it had borrowed itself to make that loan and might not achieve the same return on them. These two elements indicate both a significant facility risk and a market risk, independent of the risk on the counterparty. The two elements should result in a conservative CCF through which the loan's face value is converted to its risk-weighted asset value within the EIB's IRB methodology.

In the case of the EIF's financings in the context of the EFSIs, the EIF's commitment is subordinated as well, and the EFSI-related portion of the EIB's loan portfolio should attract a larger CCF than its normal loans direct to public sector entities because the borrower in an EFSI structure is a special purpose company, even if it has a supply contract with a public sector entity. The EIF, not being a bank, does not have to maintain regulatory capital. By having the EIF make the high-risk commitments that would attract a large CCF if the EIB had made them, the EIB manages to limit the appearance of the risks in the business it and its subsidiary are undertaking.

The EIB also had derivatives, swaps and forward foreign exchange in a nominal amount of €1,041 bn at 31/12/18, and the purpose of the portfolio is to match the currency and interest rate basis of the EIB's funding with that of its loans. As such, the duration of this portfolio will approximate to that of the loans, meaning it carries a

significant market risk, and should be converted through a commensurate CCF into a substantial risk-weighted asset. The original counterparty of the majority of this portfolio will have been other financial institutions, not one of the EIB's public sector borrowers. It is opaque what proportion was contracted with a CCP as opposed to with a financial institution, and it is opaque what proportion of the contracts entered into with a financial institution has been novated to a CCP for clearing and settlement. As such, it is opaque what the risk profile is of the counterparties to this portfolio of off-balance sheet business, as well as of the portfolio itself due to its intrinsic characteristics.

However, we can calculate the average CCF that the EIB applies to all of its business. The EIB's 2018 annual report showed its Own funds (Capital, Reserves and 2018 unappropriated Profit & Loss account) as being €71 bn on 31/12/18. With total on-balance sheet assets of €556 bn and off-balance sheet contracts in a nominal amount of €1,041 bn, the EIB claimed to have a CET1 ratio of 35.1%.

This means that the EIB's RWA were €202.3 bn ( $€71 \text{ bn} / 35.1\%$ ), when the aggregate nominal value of its loans and off-balance sheet contracts was €1,597 bn. The average CCF applied to each loan and contract was 12.73% ( $€202.3 \text{ bn} / €1,597 \text{ bn}$ ).

The off-balance sheet contracts include its subscribed-but-not-called capital in the EIF of €1.1 bn, and the paid-in capital in EIF €28 mn appears on the EIB's balance sheet, but it is opaque what size of risk-weighted asset each converts into and whether this is realistic given the amount of debt (€300 bn) that the projects have contracted from other financiers where the EIF sits in either the first-loss position ("equity commitments" of €15 bn) or second-loss (guarantees of €27 bn). A conservative risk-weighted asset for a "capital commitment" would be 1-to-1, as capital sits in the first loss position. The guideline for this treatment is the way in which Basel rules insist that a bank deduct back from its own capital the capital it holds in other banks, thereby reducing the amount of its own capital that it can leverage up with deposits. The risk-weighted asset for EIF's guarantees must differ from the way a commercial bank weights its guarantees (such as rent guarantees, performance guarantees, bid bonds and standby letters of credit), because EIF guarantees correspond to a second-loss position in an EFSI financing. A weighting of 0.75-to-1 would be realistic. The EIF should thus hold a risk-weighted asset of €15 bn + €20.25 bn = €35.25 bn, or else the EIB should hold that amount due to consolidation as the EIF's owner, but it is opaque whether either is holding an appropriate loss-absorption cushion, or whether they are both relying on the EU's first-loss guarantee.

The CCF on the EIB's business should be substantial across the board if much of it runs out to 15 years with nine years' average life, and because the EIB's loan book is by no means all collateralised with tangible security, the facility and market risks are substantial. Certain parts of the loan book are secured with first-loss guarantees from the EU: first, €36 billion for loans made to borrowers outside the EU under previous Multiannual Financial Frameworks (MFFs), an amount which would run off if total loans outstanding to such borrowers had fallen beneath this figure. Secondly, €16 billion for loans made to borrowers outside the EU under this MFF through to the end of 2020: it would be surprising if this whole amount was not already outstanding, and as medium-/long-term loans.<sup>263</sup> Finally, there is €26 billion for loans under the EFSI, and this figure has certainly been drawn and more. The EIB thus benefits from up to

<sup>263</sup> Loans outside the EU are invariably to public sector borrowers, and the loan term will match the project profile, with loans having final maturities out to 30 years: <https://www.eib.org/en/products/loans/public-sector.htm>, accessed on 1/6/20.

€82 billion of EU guarantees on loans outstanding of €451 billion and loans committed but not drawn of €106 billion as at 31/12/18.

The preface to the EIB 2018 Financial Report states that "on July 18, 2018, the EIB and the European Commission announced that EFSI had exceeded its original €15 bn investment target. In 2017, given EFSI's success, the European Council and the European Parliament had agreed to extend its capacity and duration to total investments of €500 bn by end-2020". This confirms that the first-loss guarantee of €26 billion has been fully mobilised and, by implication, that a new EU legislative instrument will be passed before the end of 2020 to put in place a new first-loss guarantee from the EU, and within the ceiling of the current MFF. The table on page 10 of the same document shows that the UK had the lowest signatures for EFSI funding of any member state. Nevertheless, the increased first-loss guarantee—from which the UK will draw no benefits—would form part of the UK's commitments obligation under the Withdrawal Agreement.

The existence of the EU guarantees should not distract attention from where the EIB has lent most of its money and to whom. The EIB's loan book at 31/12/18 was for 18.4% into Spain, where the sovereign was rated BBB+, and for 11.6% into Italy, where the sovereign was rated BBB-. These ratings at the sovereign level set the ceiling for ratings of public sector entities in the same countries—the EIB's borrowers—and those ratings can only be lower.

However substantial are the components in a calculation of RWA for facility and counterparty risk, they are brought to nought if the counterparty risk component is unrealistically low. This has to be happening at the EIB: the facility and counterparty risks are substantial, due to the term of their business and the lack of tangible security. An average CCF of 12.73% is only possible, given those other two factors, if counterparty risk receives an extremely low weighting – which does not reflect the true extent of the risk borne by the EIB.

The *prima facie* conclusion is that the misleading application of the Basel Rules at the Eurozone sovereign level has trickled down into the IRB methodology employed by the EIB, leading to a substantial understatement of the credit risk the EIB is taking and an overstatement of its CET1 ratio.

(d) Amounts of other public sector entity debt controlled as collateral by the Eurosystem

The Eurosystem list of eligible collateral contains many bonds issued by public borrowers, both the ones whose debts are within the Eurostat figures and the other public sector entities whose debts fall outside.

The Eurosystem makes loans between Eurosystem members, and loans by Eurosystem members to banks, accepting these public sector bonds as collateral.

The amounts of the loans are on top of the QE amount of bonds—drawn from the same list of eligible collateral—which the Eurosystem owns.

We can thus say that the Eurosystem owns or controls as collateral an amount that equates to 64% of the "general government gross debt" of the 19 Eurozone countries as at 31/12/18, but we do not know if all of the QE and all of the collateral consists of Eurozone sovereign bonds, or of a blend of the many different types of debt security on the eligible asset list. Logically, it must be the latter, at least in the case of the collateral taken by NCBs in exchange for the credit they have extended to banks.

As a result, we have no insight into the quality of the collateral lodged by any one bank in terms of the type of issuer and the issue's credit rating.

- (e) The true extent of the imbalances in the TARGET2 system and the efficacy of the legal means by which the gross balances are reduced to what the ECB reports

The ECB's monthly reports of TARGET2 balances broadly show NCBs having long balances of €1.2 trn and short balances of €1 trn, with only the difference between them being shown by the ECB on its balance sheet at year-end. The ECB's accounting treatment thereby denies its responsibility for the entire €1.2 trn of liabilities.

This does not tally with the supposed legal arrangements for converting the balances on the 600 TARGET2 accounts<sup>264</sup> into the one asset or liability of each NCB towards the ECB that the ECB reports. This conversion is achieved firstly by Article 6 of the 2012 TARGET guideline, which supposedly combines the balances on the nostro and vostro accounts that each NCB holds with every other NCB into one bilateral balance. Then, specifically at end-of-day, the Multilateral Netting Agreement kicks in, which purports first to novate each bilateral NCB-to-NCB balance into two balances: an asset of one NCB towards the ECB, and a liability of the other NCB towards the ECB. This results in each NCB having 23 positions towards the ECB. Finally, these are combined with the balances that the NCB has on its nostro and vostro directly with the ECB, to produce the figures the ECB reports.

Under the combination of Article 6 and the Multilateral Netting Agreement, the ECB should become the obligor of the TARGET2 liabilities in full, since they are novated to it, and the ECB should carry an extra €1 trn of assets and liabilities on its balance sheet, rather than netting off the amount by which the assets and liabilities match. There is no clause in the Multilateral Netting Agreement stating that the ECB is allowed to implement this final element of netting. The NCBs are not a "single counterparty" and are not made one vis-à-vis the ECB under the terms of the agreement.

This is just one anomaly in the agreement that needs further investigation.

Another is whether balances on the 600 TARGET2 NCB/ECB accounts remain intact as they stand at the close of the normal processing day and are legally reconstrued through the documents only or are zero-balanced overnight and are reconstrued both operationally by accounting entries and legally through the documents. If it is the latter, it is unclear both what the construction of the zero-balancing arrangement is and whether the operational treatment and the documentation are symmetrical (i.e., whether every operation can be tracked back to a clause in the agreement).

The Multilateral Netting Agreement contains no mention of zero-balancing, but it has been explained to us verbally by the TARGET2-responsible director at an NCB that the 23 vostro accounts held by NCBs at any one NCB (e.g., the 23 TARGET2 vostro accounts held by other NCBs at the Banque de France) are zero-balanced into the vostro account that the ECB holds at that NCB (e.g., the ECB's vostro account at the Banque de France) and that there are therefore 24 zero-balance structures running in parallel, with every zero-balancing at end-of-day being reversed as the first movement of the following day.

This begs the question of what the balances are intraday, since the Multilateral Netting Agreement specifically limits its validity to the end-of-day balances, TARGET2 is only

<sup>264</sup> These are the nostro and vostro accounts held by the 24 TARGET2 participating NCBs with one another, plus the 24 nostro accounts of these NCBs with the ECB, and the ECB's 24 vostro accounts held with the NCBs.

closed for an hour or so each evening, and the operating manual sets out the order in which different zero-balancing cycles are undertaken and then reversed. It is possible that the situation as reported by the ECB may only be valid for 20 minutes each day. Indeed, since the ECB's reports are only ever for the final business day of the month, it would be important to know what the situation was at the close of the remaining business days, as well as intraday on all of them.

This brings us on to some questions which need to be asked of the Multilateral Netting Agreement itself. It contains only three pages of legal text and is governed by the laws of whichever country the ECB is located in from time to time. This means that it is currently subject to German law, although it could become subject to the laws of any Eurozone member state that the ECB moved to, apparently without review.

The agreement contains no representations and warranties from the participants, such as that they are duly empowered to enter into the agreement, and that nothing in their own constitution restrains them from executing the agreement and fulfilling its terms.

Participants are not required to furnish an external legal opinion covering such issues as the lack of or inapplicability of laws governing the participant that might frustrate the accomplishment of the agreement, notably a law that precluded the participant from allowing its different balances held with other NCBs to be novated and netted.

In a corporate banking situation, and to achieve the endpoint the ECB presents in its accounts from the startpoint, extensive representations and warranties would be required of the participants, and each participant would need to furnish a legal opinion that met several criteria. In addition, the legal opinion would need to be refreshed regularly to ensure continuing validity.

One of the related problems that arises from the zero-balancing (assuming it does occur within the construction as explained verbally to us) is that the physical balances come to reside on the vostro accounts of the ECB at each NCB, in its books, rather than on the nostro accounts of the NCBs in the ECB's books. The balances then reside on accounts that are subject to the laws and regulations of the country of that NCB, not on accounts that are subject to the governing law of the agreement and of the ECB. There is the potential for a conflict of law as a result.

The novation construct is an unusual one to adopt for dealing with balances on current accounts, where the accounts themselves remain open and the balances are returned to them, and especially where the current accounts are established in 24 different jurisdictions<sup>265</sup> and subject to local terms and conditions and governing law.

Novation is much more common in the area of exchange-traded derivatives where the contract is a finite item, is subject to a single governing law (whoever is buying and selling the contract), and the contract is traded over an exchange located in the country of that same law. The contract under no circumstances is reversed the next day: it runs to maturity in its original form.

The TARGET2 legal construct appears to be at risk of conflict of law, and this area needs to be thoroughly investigated.

The final point is obvious: if the ECB reports long balances of €1.2 trn and short balances of €1 trn as being the result of both the application of Article 6 of the 2012 TARGET2 Guideline and the Multilateral Netting Agreement, the original balances on

---

<sup>265</sup> Germany for the ECB and the Bundesbank, then the 23 others where the national central bank participates in TARGET2: the other 18 Eurozone countries and five non-Eurozone ones.

the 600 nostro and vostro accounts that the NCBs and the ECB maintain for processing TARGET2 payments must be larger than this, at the end of the normal processing day on the final business day of the month. This multi-stage netting can only have the effect of reducing the balances from what they were at that point. The balances prior to the netting—intraday and at the close of the processing day—need to be revealed on every TARGET2 opening day, not just the last one of the month.

## Annex 2: The European Investment Fund

The European Investment Fund (EIF) is the subsidiary of the EIB that is responsible for equity investments and the issuance of guarantees to other financiers in order that projects are able to obtain the entire financing they need. Equity investments are mainly made into funds, which then make investments into projects. It is known that these funds are leveraged, i.e., that they take on debt to supplement their equity in order to make larger investments.

Although the EIF existed long before the EFSI was set up, the EIF is the vehicle through which the EIB makes its permitted EFSI commitments to high-risk tranches of finance in the manner described in Annex 3. The scale of EIF's operations has expanded rapidly since the creation of the EFSI.

The EFSI was established specifically to insert European funding into projects at a junior level, in order to furnish a cushion of credit enhancement for the greater comfort other lenders, who would thereby be induced to supply funds at a more senior level into the same project. This is the leverage effect, and EIF annual reports testify to the EIF's own transaction and then to the amount of finance "leveraged" by that transaction. This will include the EIB's loans into the same project, which meet EIB's underwriting criteria in part thanks to the insertion of credit enhancement by the EIB's own subsidiary.

If the EIF's financings fail, they can claim more money from their shareholders—including the EIB and the EU—and if the claim on the EIB derives from failed EFSI financings, the EIB can claim from the EU up to €26 bn under a first-loss guarantee from the Commitments Appropriation of the EU Budget.

The EIF is owned for 58.645% by the EIB, for 29.710% by the EU, and for 11.645% by 33 financial institutions. EIF's total subscribed capital is €4.5 bn, but only €900 mn of that is paid-in. There is a further €438 mn of share premium and €553 mn of reserves, retained earnings and unallocated profits, resulting in an on-balance sheet capital of €1,991 mn.

EIF uses the same structure for its share capital as the ECB, EIB and ESM: in the EIF's case, the part-paid portion is 20% and the subscribed-but-not-called portion is 80%. The financial institutions shareholders appear to have pre-deposited that 80% already in the form of the €438 mn of share premium. Were a call to be made on the part-paid shares, the EIF would convert the share premium into paid-in capital without having a credit risk on the financial institutions.

The credit risk on the remaining shareholders—the EIB and EU—is considered acceptable as they are both AAA-rated. The 80% callable from the EIB would then be  $80\% \times 58.645\% \times €4.5 \text{ bn} = €2.1 \text{ bn}$ , and from the EU  $80\% \times 29.710\% \times €4.5 \text{ bn} = €1.1 \text{ bn}$ . The subscribed-but-not-called portion acts as a reserve fund of €3.3 bn.

The EIF is thus another creature of the EU, enjoying high credit ratings because of the line of recourse:

- to the EU Budget and then to the member states for 29.71% of the callable capital;
- to the EIB and then to the member states for 58.645% of the callable capital; and
- to the EU Budget through the EIB for losses on EFSI transactions of up to €26 bn, as long as this amount had not already been exhausted by the EIB's losses of its own on EFSI transactions.

The original EFSI programme which Annex 3 describes had reached its funding total of €315 bn by mid-2018. This was later extended to €500 bn by 2020. The EIB Group now enjoys, complemented

by a €7.5 bn allocation of the EIB's own capital, a total of €33.5 bn that it is permitted to commit in the context of EFSI financings.<sup>266</sup>

The key point about the EIF is that it is the EIB's (and the EU's) vehicle for enabling the higher-risk portions of EFSI financings.

EIF does not advance these funds: indeed it owns only €790 mn of investments, €570 mn being private equity holdings and €200 mn being debt investments.<sup>267</sup> Instead, EIF enables these financings by issuing guarantees in favour of banks and by making so-called "equity commitments".

Regarding guarantees and judging from the list of guarantee beneficiaries (a list of new signatures for the year is included in the EIF annual report), the beneficiaries are banks who will then be willing to make a loan into the project concerned at a junior level. This enables the same bank, other banks and the EIB itself to make further loans but at a level senior to the one enabled by the EIF. EIF takes a high-risk tranche; not necessarily the highest-risk equity tranche, but certainly a tranche subordinated to senior lenders. The resultant amount of financing enabled by the EIF guarantee is then the guarantee amount plus the "leveraged amount" stated in the EIF's annual report. This reading is the logical one, although it is not explicitly stated that the guarantee amount and the "leveraged amount" are cumulative.

The total nominal amount of guarantees issued has not been given since the 2010 annual report where, on p. 43, it was stated as €14.7 bn. What we are given instead is an on-balance sheet provision for the likelihood of losses under guarantees (only €47,370 in the 2018 annual report) and a statement of the "exposure at risk". This is determined through the EIF's IRB model, which presumably will bear great similarity to the EIB's one.

As can be seen below from the tracking of the EIF's portfolio of guarantees from 2009 to 2018, the volume of new issuance has increased sharply, and so has the average maturity – the percentage of guarantees of maturity over five years was 17.49% in 2014 but had risen to 80.89% in 2018 – see Table 11.

Table 11: EIF portfolio of guarantees from 2009 to 2018

<b>Guarantees – with run-off – in Euro millions</b>											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
New nominal written	191	611	1,126	1,180	1,844	1,616	4,697	6,153	5,905	6,500	2,982
Balance sheet provision	65	107	162	175	177	146	82	29	15	0	96
"Exposure at Risk" on entire portfolio	3,588	3,329	4,372	4,696	3,281	3,121	3,511	5,959	6,712	8,537	4,711
Percentage with life over 5 years	4.31%	9.58%	1.97%	25.81%	17.61%	17.49%	81.03%	67.18%	75.19%	80.89%	38.10%
Cumulative new nominal written	191	802	1,928	3,108	4,952	6,568	11,265	17,418	23,323	29,823	n/a
Increment to "Exposure at Risk"	n/a	-259	1,043	324	-1,415	-160	390	2,448	753	1,825	n/a
Leveraged amount	0	3,138	6,061	5,111	8,611	5,574	16,628	23,587	18,995	23,900	11,161
Total finance enabled	191	3,749	7,187	6,291	10,455	7,190	21,325	29,740	24,900	30,400	14,143
Estimated total of EIF guarantees book – 9 years of the average of new nominal written											26,842
Estimated book of finance enabled – average of Total of finance enabled multiplied by 9 years											127,285

<sup>266</sup> <https://www.eib.org/en/efsi/what-is-efsi/index.htm>.

<sup>267</sup> EIF 2018 Annual Report p.11 of the accounts/p.97 out of 184 in the document.

The increments to the "exposure at risk" figure, however, do not correlate to the rising volume of new business being written, especially given the increasing maturity of the new business.

Our extrapolation of the current total size of the guarantees book—based on nine years of the average of new nominal written amount to take some account of the increase in scope and maturity since 2015—is €26.8 bn, double the last amount stated in an EIF annual report in 2010.

This book delivers a total of finance enabled by EIF guarantees of €27.2 bn, based the average annual total finance enabled (€4.1 bn), multiplied by nine years to take account of the expansionary trajectory.

As regards the so-called "equity commitments", the type of operation involved is not explained in detail. The EIF supposedly commits to buy equity—in funds and not directly in projects—but the nominal amounts it commits are a large multiple of the equity investments that appear in the EIF balance sheet. The most plausible explanation of this is that the EIF uses the technique favoured by itself, the EIB, ECB and ESM: the EIF buys part-paid shares, in which the paid portion is very low. The EIF does not commit cash, but the subscribed-but-not-called portion of its shares acts as a reserve fund for the fund the shares are in. The EIF, being a shareholder, takes the highest slice of risk and makes the first loss. Again, it can claim these amounts back through a capital call of its own, or through a call by the EIB on the EU's EFSI guarantee – as long as the EIB has not exhausted the guarantee with claims of its own.

Once again, we assume that the fund that has issued the shares can make borrowings of its own, first against the EIF's subscribed-but-not-called capital at a junior level and then further borrowings at a more senior level from banks and from the EIB. We take these further borrowings to be the "leveraged amount" stated by the EIF in its annual reports and that the total amount of finance enabled is the "leveraged amount" plus the EIF's "equity commitment".

We have extrapolated the development of the book, the part-paid percentage and the callable amounts from the EIF's 2009–2018 annual reports as follows– see Table 12.

*Table 12: EIF Part-Paid Percentage and Callable Amounts*

<b>Equity Commitments – without run-off other than via sale or failure – in Euro millions</b>											
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
New nominal written	733	930	1,126	1,350	1,468	1,650	2,180	3,171	3,324	3,500	1,943
Book value at end of year	165	194	212	243	270	315	346	387	466	570	317
Book value at start of year	159	165	194	212	243	270	315	346	387	466	276
Change in book value during year	6	29	18	31	27	45	31	41	79	104	41
Estimated part-paid amount	6	29	18	31	27	45	31	41	79	104	41
Estimated callable amount	727	901	1,108	1,319	1,441	1,605	2,149	3,130	3,245	3,396	1,902
Percentage of part-paid to nominal	0.82%	3.12%	1.60%	2.30%	1.84%	2.73%	1.42%	1.29%	2.38%	2.97%	2.05%
Percentage of callable to nominal	99.18%	96.88%	98.40%	97.70%	98.16%	97.27%	98.58%	98.71%	97.62%	97.03%	97.95%
Leveraged amount	0	4,589	6,061	7,078	7,147	8,200	9,841	18,507	15,727	19,000	9,615
Total finance enabled	733	5,519	7,187	8,428	8,615	9,850	12,021	21,678	19,051	22,500	11,558
Estimated total of EIF equity book – average book value at end of year divided by average part-paid to nominal											15,483
Estimated book of finance enabled – average of total finance enabled multiplied by 15 years due to no run-off											173,373

This portion of the EIF's book is even more highly leveraged than the guarantees: equity commitments of €15.4 bn enabled total finance of €73.4 bn to be raised.

Totalling the EIF's guarantees and equities books and the totals of finance enabled by both results in:

Overall estimate total of EIF book – aggregate of estimated total of EIF guarantees and equity books										42,324
Estimated total book of finance enabled – aggregate of estimated books of finance enabled by EIF guarantees and equity books										300,658

The total book of finance enabled at €300.1 bn is not far from the size of the initial EFSI, which is supposed to have reached its initial target of €315 bn in 2018. This would be consistent with a picture where the EIF's smaller, pre-EFSI business was running off, with the initial EFSI moving rapidly towards filling its initial target in 2018 and then being extended in 2019.

In fact, our extrapolation may be slightly conservative, as it was reported that the EFSI had reached its initial target by mid-2018, and would then have expanded beyond that in the second half of 2018.

Whatever the detail, the overall trajectory is clear – rapid expansion, with the member states bearing the first loss either through the EU's EFSI guarantee of €26 bn or through capital calls on the EIB and the EU if the first-loss EU guarantee does not cover the problem.

The degree of risk being taken is opaque as regards "equity commitments" because the shares are shares in funds, and the EIF annual report provides no clues about what projects the funds have invested in. As a shareholder, the EIF has no recourse to any party involved in the project if the project fails.

The degree of risk being taken is opaque as regards guarantees as well because the list of new signatures (e.g., pp. 73–75 in the 2018 annual report) is of guarantee beneficiaries (also known as the EIF "deal name") which is not the same as the "Account Party" – the party that asked for the guarantee to be issued and that signs the EIF's counter-indemnity (presuming they have one), and which must reimburse the EIF for any call on the guarantee. This would normally be the project sponsor, and the EIF would retain recourse to that sponsor if the project failed and the guarantee was called. The EIF annual report does not provide a list of Account Parties for its guarantees.

In both cases, we are entitled to make an assumption based on the criteria of the EFSI:

- EFSI projects follow the pattern of the creation of an asset by a special-purpose company, whose shares are owned in the private sector.
- The asset is leased to a public enterprise in a contract where the public enterprise must use and pay for the asset until the funding taken on by the special-purpose company is repaid.
- The special-purpose company, while off-balance sheet for the Eurostat figures for national debt, is in substance an "other public sector entity".
- The debts of the public enterprise that uses the asset may fall within the scope of the Eurostat figures, but what it signs with the special-purpose company is a commercial contract, not a loan agreement or a bond indenture.
- This is the important accounting point: whether or not the public enterprise that uses the asset has its debts classified as within the scope of the Eurostat figures, what it enters into with the special-purpose company is not a debt agreement and so will be excluded from the Eurostat figures.

- Likewise, the special-purpose company does not fall within the definition of the entities whose debts are captured by the Eurostat figures, and it is the special-purpose company that takes on the debt.
- Nevertheless, the debt service owed by the special-purpose company can only be covered if the public enterprise makes the payments due under the commercial contract.
- The debt taken on is dependent upon the financial capacity of the public sector, but accounting and disclosure conventions exclude the debt from the normally accepted measure of public sector debt.
- The debt classifies itself into the level "other public sector entity" in our taxonomy.
- A prime objective of the EFSI is to complement the efforts of the EIB to reflate the Eurozone economy after 2011/13.
- The EFSI structure, to which the EIF is central, enables more debt to be raised and spent on public sector work, without the debts counting into the Eurostat figures.

Nor do the debts greatly impinge upon the balance sheets of the EU, EIB or EIF. The liabilities of these entities are all contingent ones, predominantly off-balance sheet.

The EU's liabilities—under its callable capital in the EIF and its €26 bn EFSI guarantee—are marked against the Commitments Appropriation of the EU Budget.

Both the guarantees and the "equity commitments" are off-balance sheet for the EIF, except for the Provision for guarantee liabilities of €47,370 and the private equity investments of €570 mn.

The EIB can hold its paid-in capital in the EIF of €28 mn as an equity investment in its unconsolidated figures. Given that EIF's major business is off-balance sheet and that its balance sheet footings are only €2.7 bn, consolidating EIF only adds €2.2 bn to its own footings, which are €56 bn.

As regards the EIB having to recognise the risks being taken in the EIF and reduce its own lending on account of that, the EIB is assisted by the EIF not being a bank. The EIB is not required to deduct its capital in the EIF from its own capital before determining the EIB's ability to lend itself. That ability is limited in two ways: to 20 times the EIB's on-balance sheet capital under the Basel Rules Leverage Ratio and to the amount, after the application of the EIB's IRB methodology and taking into consideration the EIB's regulatory capital fraction, which causes the EIB to have a surplus over its minimum CET1 ratio.

Since the capital in the EIF is part-paid, and 80% unpaid, this 80% is not considered in the EIB's Leverage Ratio, and given that the EIB calculates its own Leverage Ratio with respect to its subscribed capital and not to the 10% that is the part-paid portion, the EIB would still meet its Leverage Ratio, even if it factored all of its subscribed capital in the EIF into asset side of its Leverage Ratio in the same way it factors all of the capital subscribed by its shareholders into the capital side of its Leverage Ratio.

As regards the EIB's capital adequacy treatment of its investment in the EIF, it should hold a risk-weighted asset against both the paid-in capital and its commitment to meet the balance. The one does appear in its 2018 Balance Sheet on p. 32 of its Financial Report, and the other is the first item in the list of off-balance sheet business on p. 34.

It is not possible, though, to see how these amounts are put through the EIB's IRB model to determine the respective risk-weighted asset and whether these amounts then equate to 58.645% (EIB's shareholding) of the EIF's calculations of its "exposure at risk", for which we have the figures for the guarantees but not for the "equity commitments".

If the "exposure at risk" for the guarantees was €5.5 bn at the end of 2018, it would be reasonable to posit that the figure for the "equity commitments" was the same, given that they have no run-off date, are more highly leveraged than the guarantees and represent the first-loss position in their respective financing, despite their lower quantum. This would put EIF's total "exposure at risk" at €19 bn, of which EIB's portion would be €1 bn. The EIB might be able to set part of the EU first-loss guarantee for EFSI operations against that exposure, since the guarantee is written in the EIB's favour. The EIB's "exposure at risk" could not be reduced to zero, because the guarantee covers all of the EIB's EFSI business, including its direct loans into the same projects, and so the EIB could lose more than €6 bn on both its own EFSI loans and its business through EIF.

As it is, we do not know what RWA the EIB holds in respect of its asset and its contingent liability regarding the EIF. We can posit, though, that the EIB risk-weights its exposure based on the EIF's public credit rating, which is AAA, due to the recourse the EIF has to the EU and EIB, which are also both AAA-rated.

On that basis, the EIB could accord a very low risk-weighting to its capital in EIF, as long as it overlooked the fact that it was itself a significant source of support to the EIF's rating. If, on the other hand, the EIB considered the quality of the EIF's portfolio as exemplified by the contents of pages 69 to 77 in the EIF 2018 Annual Report, and if the EIB considered the level of subordination of the EIF's loans and investments in its customers (as shown in Annex 3 regarding the EFSI), then the EIB should apply a very high risk-weighting to its paid-in capital in the EIF of €28 mn, and should carry a substantial risk-weighted asset to take account of the off-balance sheet liability to pay in the callable capital of €1 bn.

The EFSI, constructed on the EIF and enabling the EIB to lend directly to the same projects, has created an extra block of public sector debt which is outside the scope of the Eurostat figures. Nevertheless, the debt service is entirely dependent upon the public sector.

The EFSI operates EU-wide, but it is possible to track the size of its investments down to the Eurozone member state level. The total finance enabled by EFSI—over €300 bn by the end of 2018—can be tracked to the member state in which a public sector entity has agreed to use the resulting asset, and should therefore be added to the state's public sector debt, the borrower ranking as an "other public sector entity".

A chart on p. 140 of the EIF 2018 annual report gives a geographical breakdown of the "exposure at risk" under guarantees: 18.4% is into Italy and 11.0% into Spain. If we use these percentages as markers for how much of the total finance enabled by the EIF has been added as new, invisible, public sector debt in those two countries, it is €55 bn in Italy and €33 bn in Spain.

### Annex 3: The European Fund for Strategic Investments

#### 3.1 More volumes of EIB lending and at higher risk<sup>268</sup>

The EFSI was established by Regulation (EU) 2015/1017 of the European Parliament and of the Council of 25/06/15. That Regulation permits the EU to issue a guarantee of €16 billion in favour of the EIB, and it permits the EIB to engage in loans and other financial instruments not within the terms of its normal business, up to specified limits.

The European Commission felt it had identified an "investment gap", in the form of a shortage of a certain type of capital, which was stopping projects from getting off the ground and holding back economic growth and employment creation in Europe as a whole.

The type of capital concerned would be of the "mezzanine debt" or "subordinated debt" types on the creditor ladder – ranking above "shareholders equity" but below "preferred creditors", "secured creditors" and "senior unsecured creditors". This type of capital would act as a "credit enhancement" for the suppliers of levels of capitalisation ranking higher on the creditor ladder.

The lack of this type of capital was held to be inhibiting the availability of "senior unsecured debt", in the amounts a project would need to take on. This would be a multiple of the amount of "mezzanine debt", "subordinated debt" or "shareholders equity", so that a relatively small injection of "mezzanine debt" or "subordinated debt" from the EFSI would enable very large projects to get underway.

This concept is termed the "multiplier effect":

- €1 billion in the top-slice of risk: "mezzanine debt", "subordinated debt" or "preference share capital" from the EFSI enables...
- The EIB to lend a middle-slice of risk of €40 billion on its normal terms as regards interest rate and final maturity but not seniority on the creditor ladder, which enables...
- The same projects to borrow €254 billion of "senior unsecured debt" from private sources.

The total amount raised would be €315 billion, all enabled by EU/EIB taking a high-risk position of €21 billion and a medium-risk position of €40 billion.

In order for this multiplier effect to be realised, the EIB would have to inject its medium-risk position of €40 billion at a lower rung on the creditor ladder than the €254 billion of "senior unsecured debt" from private sources. The EIB's total position of €61 billion then acts as a credit enhancement towards the suppliers of the €254 billion: the EIB is in a first-loss position and would lose all its money before the suppliers of the €254 billion lost anything.

This is a major departure from the EIB's risk policy up to now: to be a preferred creditor and at the top of the creditor ladder. Indeed, the EIB's ability to provide this sort of credit argues against its preferred creditor status being enshrined in law in all EU member states for all types of borrower.

€315 billion—the total financing—represents 64% of the EIB's "loans signed for EU borrowers" as at 31/12/14, so this is a big increase in the EIB's business, but not of its capital base.

---

<sup>268</sup> Excerpt from Lyddon B (2016), *The UK's liabilities to the financial mechanisms of the European Union*, Bruges Group Paper.

The EFSI is not a "fund" but, rather, an expansion of the EIB's loan portfolio in four aspects:

1. The EIB benefits from a €16 billion guarantee from the EU of loans made by the EIB into specific situations, where the EIB will either make a loan into a higher-risk project and/or subscribe to another form of capital in the project which ranks below the claims of other creditors – far lower down on the creditor ladder from its normal "preferred" status or at least "senior unsecured" status.
2. The EIB can then more easily lend its own money on its normal terms into the same project because this second loan is protected by the "credit enhancement" of the loan that is under the EU guarantee and which ranks below the EIB's normal loan on the creditor ladder: the EU would lose all its money in the project before the EIB lost anything.
3. A special €5 billion "permission" to the EIB to inject its funds into higher-risk projects and/or into lower-ranking forms of capital, with the EIB's subsidiary the EIF acting as the conduit for this money.
4. Once again, the EIB can then more easily lend its own money on its normal terms into the same project because this loan is protected by the "credit enhancement" of the EIF engagement, which ranks below the EIB's "normal" loan on the creditor ladder.

The big picture is that the EFSI puts up EU money into higher-risk projects and/or into higher-risk financing levels, such as mezzanine debt, subordinated debt and preference shares, and it enables the EIB to lend a larger amount on the same capital base. In all cases, the EIB is the financier. The EFSI is not a legal person and is not part of the contracting chain.

The EIB fronts-up €1 billion of financing in two slices, one counter-guaranteed by the EU (€1 billion) and one at its own risk (€10 billion). The EU ranks junior to the EIB, so the EU would lose its money before the EIB did, and both would lose their money before the private lenders did.

This distinction under which the EIB is protected by the EU does not matter at all because behind the EU and EIB stand the same member states.

The EFSI is a way of enabling more volumes of EIB loans for projects, in this case higher-risk ones, using the "credit enhancement" of the guarantees of the EU member states, with the greatest reliance placed on the largest and strongest, like the UK. Table 13 shows EFSI funding agreed since launch.

*Table 13: EFSI funding agreed since launch – drawn from EFSI Country Factsheets*

COUNTRY	FUNDING IN €BILLION
Germany	0.2
UK	1.4
France	1.2
Italy	1.3
Spain	0.5
Netherlands	0.1
Belgium	0.2
Poland	18.5
Denmark	0.1
Total	23.5

The EFSI is still in its infancy and can be expected to grow strongly over the coming years.

### 3.2 The EIB – the UK's maximum possible loss under its contractual commitments

The UK's maximum possible loss under current commitments is €39.2 billion, being the loss of our paid-in capital of €3.5 billion plus the obligation to pay in—and then the subsequent loss of—our subscribed-but-uncalled capital of €35.7 billion.

### 3.3 The EIB – likelihood of the UK's maximum possible loss materialising or even being exceeded

The EIB, by its own admission, is acting aggressively and in a counter-cyclical manner to create economic activity where it has sagged during the Eurozone crisis.

This means lending more within its traditional brief and then, in the context of the EFSI, engaging in higher-risk projects either by simply lending outside its traditional criteria or by subscribing to levels of capitalisation in projects that rank lower on the creditor ladder in a liquidation, or both.

In the EFSI, the EIB benefits from a first-loss guarantee of €16 billion from the EU in respect of its engagements and can risk up to €5 billion of its own resources through the European Investment Fund, for which it has no external guarantee.

These facts should be of no comfort to the EIB's shareholders which are also the guarantors of the EU Budget:

- Transferring the highest slice of risk from the EIB to the EU under the EU's first-loss guarantee merely alters the nature of the member state liability from several-but-not-joint through the EIB to joint-and-several through the EU.
- The fact that the EIF is directly investing in higher-risk projects and low-ranking levels of capital makes a loss more likely, that tracks back to the EIB – and makes a call on the EIB's uncalled capital more likely.
- The "multiplier" effect of the EFSI means that, because the "traditional loans" department of the EIB can see "investors" subscribing to the higher-risk levels of capital, the EIB is willing to commit "traditional loans" to the same project.
- It does not seem to interrupt the logic chain that these "investors" are the EIB itself either acting directly and under EU guarantee or at the EIB's own risk through the EIF.
- The EIB "traditional loans" are only the first multiplying effect – the second one is that the injection of both the EFSI bottom-slice and then the EIB "traditional loans" middle-slice enables the project to raise further private loan finance in a top-slice: "top" meaning highest-ranking on the creditor ladder;
- In both the EFSI bottom-slice and the EIB "traditional loans" middle-slice, the EIB explicitly gives up the preferential status on the creditor ladder which, elsewhere, it cites as a reason for its own creditworthiness.
- These circumstances make losses for the EIB on EFSI-backed projects far more likely than losses on traditional EIB loans.

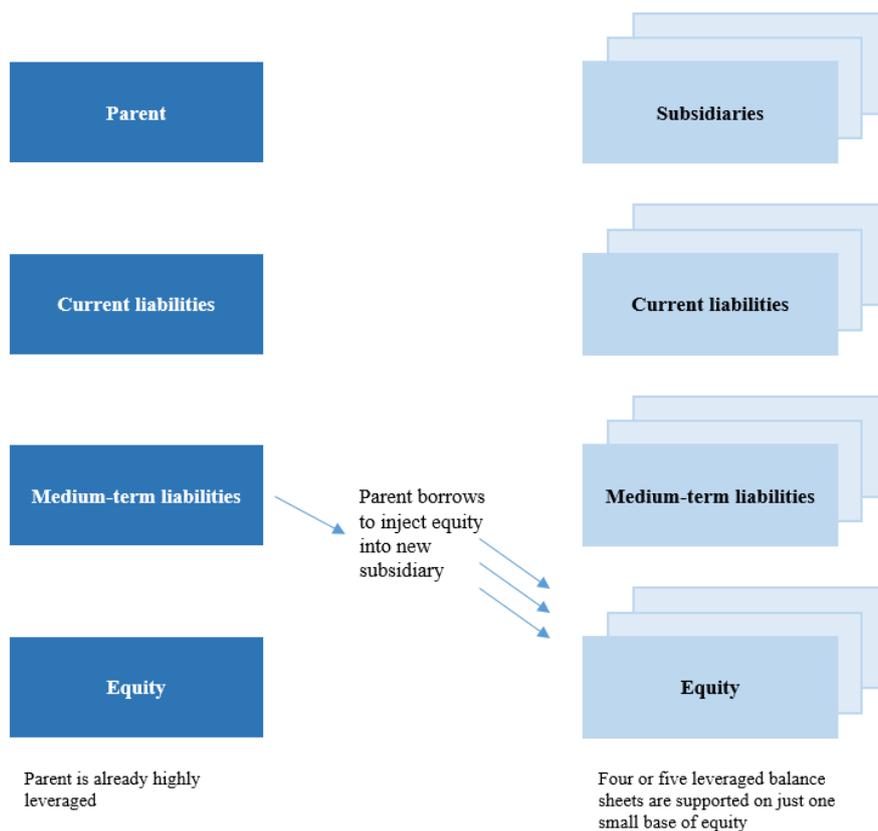
The multiplier effect in the EFSI works as shows in Table 14.

Table 14: EFSI Multiplier Effect

LEVEL/MULTIPLIER	AMOUNT
EFSI funding/bottom-slice	€1 billion
First-level Multiplier	190%
EIB "traditional loans"/middle-slice	€40 billion
EFSI and EIB funding combined on EIB balance sheet	€61 billion
Second-level multiplier	416%
Private loans/top-slice	€254 billion
Total funding raised	€315 billion
Leverage of Total funding to EFSI funding	15 times
Leverage of Total funding to EFSI+EIB Loans funding	5.2 times

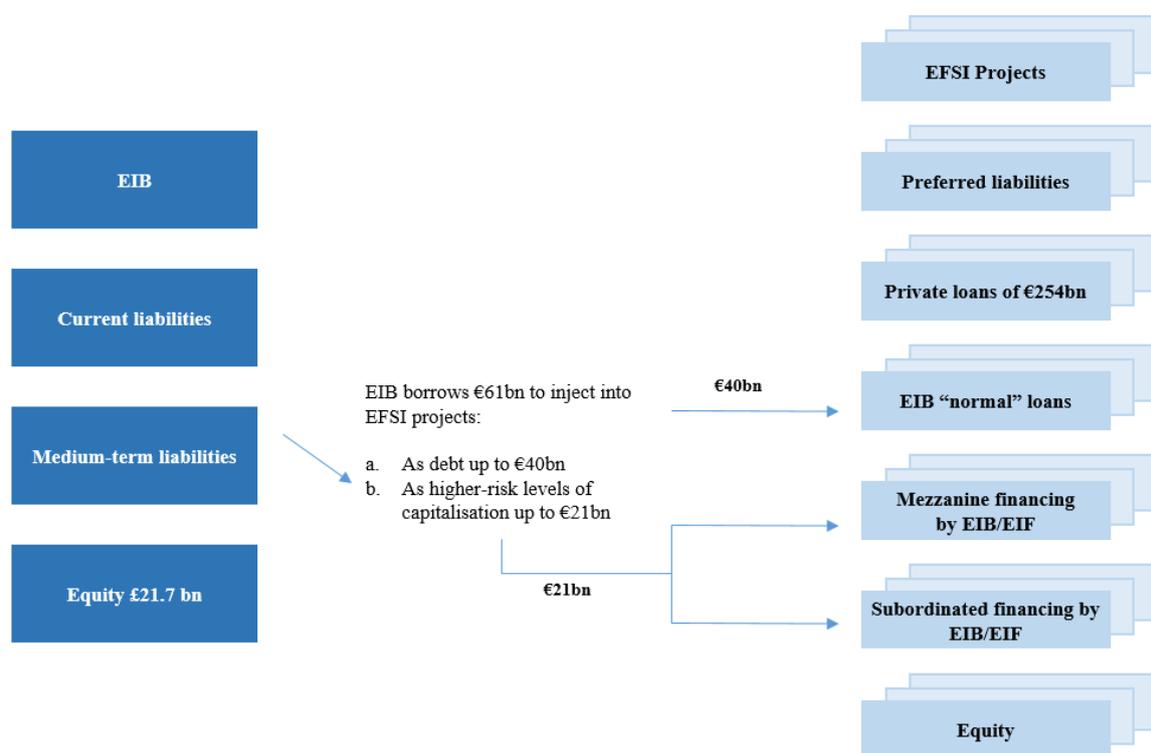
This is a clear Enron-like example of double-leveraging the same capital. The Enron parent company was already highly leveraged itself, and then it used borrowings at the parent level to inject capital into subsidiaries, which then in turn borrowed on a similar multiple of loans-to-capital – see Figure 18.

Figure 18: Enron Structure



In the context of the EFSI, the EIB will borrow an extra €61 billion itself and then inject it into EFSI projects, either itself as "normal" loans, as mezzanine or subordinated financing itself or through the EIF. The projects will then borrow €254 billion themselves, just as the Enron subsidiaries did – see Figure 19.

Figure 19: EFSI Structure



Seventy or eighty balance sheets are created and leveraged, all on the basis of the EIB's current capital base, as well as the EIB over-leveraging itself

Table 15 shows the figures for the total leverage being created in the EIB and EFSI.

Table 15: Total Leverage in the EIB and EFSI

CAPITAL/DEBT/LEVERAGE	FIGURE
EIB current called capital	€1.7 billion
EIB current debts	€453 billion
Current leverage	2088%
Extra EIB debts raised to fund the EFSI bottom-slice	€21 billion
Extra EIB debts raised to fund the EFSI middle-slice	€40 billion
Extra debts raised through EFSI	€254 billion
Total future debts threatening integrity of EU capital	€768 billion
Total future debts as a function of EIB current called capital	3539%

While the EIB's direct position in the bottom-slice is counter-guaranteed by the EU (€6 billion), whereas its indirect position in that same slice through the EIF is not (€5 billion), it is worth considering how much of a loss would have to be booked in the EFSI projects in order to eliminate the EIB's capital, even if they could turn around and claim €6 billion from the EU Budget.

This distinction—that the EIB could lose €6 billion on the EFSI before it had to book the loss against its own capital—is of little comfort when the loss would met by the member states through the EU Budget or by the same member states through a call by the EIB for more capital.

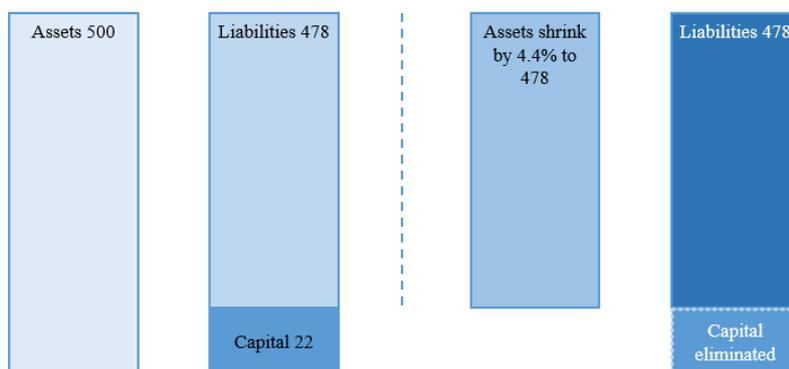
It is of equally little comfort that the lenders of the extra, private loans that are raised by EFSI-backed projects will not be able to press those claims on either the EU, the EIF or the EIB in a liquidation, at least as long as the contracts for each project say that they cannot.

What is important is how much the projects have to pay out to someone else before the claims of the EIB/EU are met and how much the assets of the projects would have to shrink for the EIB/EU to receive zero-cents-in-the-euro in a liquidation. That comes down to whether the EFSI projects are themselves highly leveraged. They are: €254 billion divided by €61 billion is 416%.

The high level of leverage in the EFSI projects raises the likelihood that the EFSI funding (the bottom-slice) and the EIB traditional loans (the middle-slice) will not be paid back in full in a liquidation of an EFSI project.

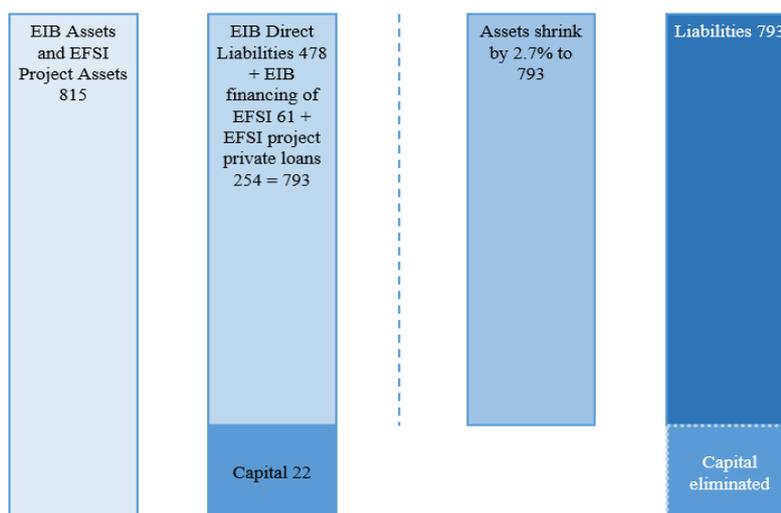
Before the EFSI and looking at the EIB on its own as at 31/12/14, it would have required a 4.4% shrinkage of the value of the EIB's assets to eliminate the EIB's capital – see Figure 20.

Figure 20: Percentage Loss on EIB Loans Needed to Eliminate EIB Capital pre-EFSI



With the addition of the EFSI but no raising of the EIB capital, it would require only a 2.7% shrinkage in the combined value of the EIB direct assets and EFSI project assets to eliminate the value of EIB/EIF engagements in EFSI and the EIB capital as a whole – see Figure 21.

Figure 21: Percentage Loss on EIB Loans and EFSI Projects Needed to Eliminate EIB Capital



The existence of the EFSI renders it more likely that there will either be another call for capital from the EIB and/or that there will be a need for extra member state payments into the EU Budget to meet a call from the EIB on the EU under the EU's EFSI guarantee in the EIB's favour.

Either way, the member states pay.

## Annex 4: EBA Stress Tests

The EBA stress tests have to be put into context firstly in the SSM and the Single Resolution Mechanism (SRM) as a supposedly complete solution to the issues raised by the Eurozone financial crisis, and secondly in the framework of attempts by financial regulators to ensure overall soundness by focusing on the most significant institutions – globally through the GSIFI list, nationally through identification of institutions that are systemically important at that level and transnationally by applying the SSM to the Eurozone.

The objectives of the SSM, as set out on the ECB's website,<sup>269</sup> can be taken as doing service for the objectives of the entire Eurozone solution, as they are to:

- "ensure the safety and soundness of the European banking system [i.e., the Eurozone banking system];
- increase financial integration and stability; [and]
- ensure consistent supervision".

The role of the SRM,<sup>270</sup> if a bank fails, is:

- "ensuring the orderly resolution of failing banks with minimum impact on the real economy and the public finances of banking union countries; [and]
- managing the Single Resolution Fund".

Based on the outcome so far, this has failed. Institutions under the SSM and stress tests have still failed. Other institutions limp along thanks to official support and with their underlying problems uncured. The markets—to judge by the market-to-book deficits of Eurozone banks—are unconvinced that the banking system is sound.

Stress tests have been conducted in 2014, 2016 and 2018, based on banks' figures and portfolios as at the preceding year-end: 31 December 2013, 2015 and 2017. A further round of stress tests is being launched by the EBA in January 2020, based on figures and portfolios as at 31 December 2019, with results published by the end of June 2020.<sup>271</sup>

Obvious weaknesses are that the tests are carried out retrospectively and on a snapshot at a point-in-time, and indeed at a point-in-time known to the participants well in advance and for which they can prepare their inputs. A second weakness is that December 31st is the least likely day in the financial calendar for stressed markets to occur and is a day susceptible to "window-dressing".

There is also the question of what is being tested: the methodology and results look impressive on paper but, as Peter Lee commented in 2018 in *Euromoney*<sup>272</sup>, "stress test results are meant to reassure on bank resilience, but they no longer seem to address banks' key risks".

He continued: "this now looks like a test that the examiners—the EBA, the European Central Bank (ECB), national central banks—have designed for their charges to pass easily and which is chiefly intended to reassure investors what a wonderful job the examiners have done in forcing banks to hold larger amounts of higher quality capital to protect against a severe downturn. The EBA says the adverse

<sup>269</sup> <https://www.bankingsupervision.europa.eu/about/thessm/html/index.en.html>, accessed on 1/1/20.

<sup>270</sup> [https://ec.europa.eu/info/business-economy-euro/banking-and-finance/banking-union/single-resolution-mechanism\\_en](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/banking-union/single-resolution-mechanism_en), accessed on 1/1/20.

<sup>271</sup> <https://eba.europa.eu/eba-publishes-2020-eu-wide-stress-test-methodology-and-draft-templates>, accessed on 1/1/20.

<sup>272</sup> <https://www.euromoney.com/article/b1bqf7cs87j17l/eba-stress-tests-are-past-their-sell-by-date>, accessed on 1/1/20.

scenario for the 2018 test was more severe than for any previous such EU-wide exercise. Maybe it is. Investors can decide for themselves how dystopian is a cumulative fall in GDP over three years by 2.7%, with unemployment reaching 9.7% by 2020, and houses prices and commercial real-estate values falling by around 20%".

The stress tests highlight the measure of CET1 capital in the test results: the results are announced as a deficit or surplus percentage of CET1 capital, rather than as a pass or fail, but the announcement gives only half the story, as the percentage is of the bank's RWA – calculated, of course, using the bank's own IRB methodology and incorporating benevolent weightings for the types of asset discussed in this paper.

That, thus far, all banks which were required to raise more capital have either done so or remained in business was meant to provide reassurance, but it might have provided greater reassurance if some banks had actually been put out of business directly as a result of a stress test. The message from such a response would have been that banks whose failure at an unknown future point in time might trigger a systemic collapse cannot be allowed to contaminate the financial system and have to be closed (or resolved) at once.

The acid test of investor reassurance would be that Eurozone banks' market capitalisation was at least their book value but this is not the case: Eurozone banks as a generality show a market-to-book deficit, inferring that investors do not believe that the banks' accounts accurately report the value of and risks residing in their assets and off-balance sheet business. Mr Andrea Enria, the ECB's head of banking supervision, admitted in his introductory statement in January 2020 to the unveiling of the Supervisory Report Evaluation Process that many banks "do not earn their cost of capital, and valuations remain low. From a supervisory perspective, this means low organic generation of capital, and lower capacity to raise equity in markets under challenging economic conditions". The market does thus not believe in the "safety and soundness of the European banking system", meaning that the objectives not only of the stress tests have not been fulfilled but also those of the SSM. The SRM's objectives have not been fulfilled because, as we have shown elsewhere in this paper, failing banks have not been resolved in line with the SRM.

In sum, no part of the Eurozone's solution is currently doing what it was supposed to do.

The first list of banks subject to the SSM<sup>273</sup> that we were able to find, dated 4 September 2014, contained all of the notable failures in the meantime, as well as names against which stand significant question marks, such as the well-publicised case of Monte dei Paschi di Siena. An earlier list of SSM institutions will have given rise to the institutions subject to the 2014 stress tests.

This analysis focuses on the list of SSM institutions current in 2015 at the same time as the EBA issued the first list of O-SIIs. We have also used the list of GSIFIs that was current at the same time, this being the list of November 2014, which was valid until November 2015. We try to reconcile the lists, and go on to follow the fate of a number of individual institutions, whether or not they were required to raise extra capital as a result of the first stress test.

We have a confusing overlay in the form of the EU's version of the Basel Committee's category D-SIBs<sup>274</sup> which the EU has called "O-SIIs"<sup>275</sup>. The O-SII lists covers the whole of the EU and, within the Eurozone, contains a handful of names that are not subject to the SSM. More significantly, the SSM contains 41 institutions not regarded as systemically important by national authorities in any one member state, but which pass the tests for inclusion in the SSM.

The list of O-SIIs is nominated by national authorities on the basis of importance to their national financial system. By contrast, the SSM banks are selected based on meeting a €30bn asset hurdle or

<sup>273</sup> [ssm-listofsupervisedentities1409en.pdf](#), accessed from the EBA website.

<sup>274</sup> [https://en.wikipedia.org/wiki/List\\_of\\_systemically\\_important\\_banks](https://en.wikipedia.org/wiki/List_of_systemically_important_banks) accessed on 1/1/20: note – could be incomplete and is not drawn from the central bank of the country concerned.

<sup>275</sup> <https://eba.europa.eu/risk-analysis-and-data/other-systemically-important-institutions-o-siis->, accessed on 1/3/20.

failing that, either (1) having "significant cross-border assets" (e.g., Bank Degroof, Belgium); (2) having assets in excess of 20% of the GDP of the member state they are in (e.g., AS SEB Pank, Estonia); or (3) being "among the three largest credit institutions in the Member State" (e.g., Slovenská sporiteľna, Slovakia).

The O-SII list tends to have the important subsidiaries of transnational banking groups in every country where they are significant: the SSM list is based on the location of the group's headquarters and then lists all of the Eurozone banking operations that are part of the group, not just the ones that are locally significant. However, it does not include the operations in non-Eurozone countries of the same institutions, even where they are significant. The SSM list is far longer than the O-SII list when one includes the lists of subsidiaries.

Surely these lists should at least be structured in the same way, e.g., based on an institution's home member state as the SSM is, identifying the subsidiaries both within the Eurozone and within other EU countries and identifying the subset of subsidiaries that are of national systemic importance in another member state: the national list from that member state should then pick up the subsidiaries which are of national systemic importance there.

There really should not be an O-SII outside the SSM, just as no Eurozone-parented GSIFI is outside the SSM.

There should be a clear incremental relationship between O-SII status and GSIFI status, whereas currently they overlap: indeed, in several cases, the extra CET1 buffer for O-SII status in a certain member state is higher than the same bank's global extra CET1 buffer for GSIFI status.

Indeed the ECB sees no issue in O-SII buffers being higher than GSIFI buffers. This is justified by the ECB in their slide deck unveiling the 2019 SREP outcome, on the basis that "G-SIBs [GSIFIs] face lower P2G [Pillar 2 Guidance] reflecting higher resilience in the stress tests". This turns the logic for having GSIFIs on its head. The status GSIFI should cause banks, upon whom the financial system depends, to have more capital than other banks, and the stress tests should confirm GSIFIs do hold this extra buffer as a function of their RWA. The stress tests should test, and not act as a justification for lowering hurdles.

O-SII buffers are indeed the central issue but have gone somewhat under the radar. They are set nationally and give rise to considerable differences in CET1 hurdles. This undermines the concept of there being an SSM at all. The requirements should be consistent, regardless of the member state in which the institution is headquartered. The requirements should then trickle down consistently into each subsidiary bank of an SSM bank, both nationally and in other EU member states, including non-Eurozone ones. If institutions did not wish to hold capital in each entity, there are legal formats that could be adopted that overcome this.

The situation at present is far removed from this, however.

The EBA states that "the O-SII identification process reflect the 12 principles in the global framework provided by the Basel Committee to deal with Domestic Systemically Important Banks (D-SIBs). The higher loss absorbency requirements set by the relevant authorities and resulting from this identification process are also included and with the obligation for these institutions to maintain a CET1 capital buffer of up to 2% of the total risk exposure amount, as laid down in Article 131 (5) of Directive 2013/36/EU. The O-SIIs identification process started in 2015 and takes place on a yearly basis. The CET1 O-SII buffer requirement should also be re-assessed every year on the basis of this yearly identification exercise and the O-SIIs scores".

It is national authorities who are the "relevant authorities" that set the "higher loss absorbency requirements" of "up to [our emphasis] 2% of the total risk exposure amount", who run the annual

process for O-SII identification and who reassess the CET1 O-SII buffer requirement. EBA lists of O-SIIs exist now for 2015, 2016, 2017 and 2018, although not yet for 2019 or 2020.

Some of the O-SIIs are also GSIFIs, but the GSIFIs amongst them do not have the preponderance of ownerships of O-SIIs in other member states than their home one. Several non-GSIFIs have pan-European networks.

It is furthermore not the case that all subsidiary banks in any member state of a GSIFI are captured in the O-SII lists as a matter of course.

The 2015 O-SII list contained 173 names in all, with CET1 O-SII buffers (where set system-wide by a national authority) ranging from 0% (Czech Republic, Denmark, Italy, Latvia, the UK) to 2% (Sweden) and going as low as 0.2% (for three banks in Croatia) and 0.25% (for four banks in Slovenia) where different rates were set by a national authority for different banks falling under their purview. Three banks each from Iceland and Norway were included, even though they are not EU member states. There were no lists from the other two EEA member states, Liechtenstein and Switzerland, or (as noted above) from Bulgaria or Poland. O-SII buffers have now evolved to a point where there is greater differentiation by institution, rather than the national supervisor setting one buffer for all its O-SIIs.

As the names are selected by national authorities and notified to EBA, anomalies exist. For example, a GSIFI may appear on the O-SII lists for certain member states, each with different O-SII buffers compared to its GSIFI buffer.

An institution can be mentioned multiple times in the O-SII list, whilst it should only appear once in the SSM list as a main heading, and, as noted above, have its Eurozone banking operations listed underneath it. The lists are mismatched, with 173 institutions on the 2015 O-SII list including significant duplications, but only 121 main headings in the 2015 SSM list.

16 banking groups had more than one institution on the O-SII list: KBC, Santander, Unicredit, Intesa SanPaolo, Société Générale, BNP Paribas, Raiffeisen International (Austria), Die Erste (Austria), Deutsche, ING, Nordea, Danske, Swedbank, SEB, HSBC and DNB of Norway. In total, these groups had 58 institutions included. After reversing out the 42 doubled-counted institutions, as well as the three banks each from Norway (including DNB) and Iceland, we have 125 O-SII groups.

Going through the same exercise on the SSM list, we find that we have 121 groups on the initial list, but this is a coincidence and the mismatches are far more significant than this difference in numbers of five would infer.

No non-Eurozone countries are included in the SSM, which eliminates 66 O-SIIs. On the other hand, important local operations of non-Eurozone institutions are captured in the form of Royal Bank of Canada Investor Services and State Street in Luxembourg, Bank of New York Mellon in Belgium, Barclays in Italy, RBS Group in the Republic of Ireland and the Netherlands and HSBC in France. It does not follow, however, that Eurozone operations of GSIFIs are automatically included: no operations of any of the other non-Eurozone GSIFIs are included (JPMorgan Chase, Citigroup, Bank of America, Credit Suisse, Goldman Sachs, Mitsubishi-UFJ, Morgan Stanley, Agricultural Bank of China, Bank of China, Industrial and Commercial Bank of China Limited, Mizuho, Standard Chartered Sumitomo, UBS). RBC was not a GSIFI at the time, but State Street was.

All Eurozone-parented GSIFIs are part of the SSM, as one would expect. In 2015, these were BNP Paribas, Deutsche, BBVA, Groupe BPCE, Credit Agricole, ING, Santander, Société Générale and Unicredit.

Nevertheless, there remain anomalies, such as where subsidiaries of non-Eurozone subsidiaries of EU banks are included in their own rights or the exclusion of banks that play a pivotal role in securities custody and settlement.

A much bigger anomaly is why it is that so many institutions are large enough in absolute terms or in relation to size of their country to be included in the SSM but are not O-SIIs.

Making all SSM banks and any of their major EU subsidiaries (inside and outside the Eurozone) O-SIIs would infer that many more banks should have been nominated as O-SIIs and been subject to the CET1 O-SII extra buffer requirement, albeit that this was set at 0% in some countries. As it is, 42 SSM institutions at the group level are spared the CET1 O-SII extra buffer requirement (see right-hand column in the table below).

Here is a reconciliation between the 2015 O-SIIs list and the introductory SSM list:

Country	# O-SIIs	O-SIIs not in SSM	# O-SIIs in SSM	# SSM	SSM banks that are not O-SIIs
--	A	B	$C = A - B$	D	$E = \Delta$ between C & D
AT	7	Raiffeisen Bank International Unicredit Bank Austria	5	8	Öesterreichische Volksbanken Sberbank Europe VTB Bank
BE	8	BNP Paribas Fortis Euroclear Bank ING Belgium	5	7	Banque Degroof Dexia
CY	6	Eurobank Ergasias Alpha Bank	4	4	0
CZ	7	7 – not Eurozone	0	0	N/A – not Eurozone
DE	16	Unicredit Bank AG ING DiBa AG	14	20	Aareal Bank Deut. Apoteker- und Ärzttebank Hamburger Sparkasse Hypo Real Estate/DePFA Münchener Hypotekenbank SEB AG
DK	6	6 – not Eurozone	0	0	N/A – not Eurozone
EE	2	0	2	2	0
ES	6	0	6	15	Banco Mare Nostrum Bank Inter Ibercaja Banco Banco de Credito Social/Coop Catalunya Banc Kutxabank Liberbank Banesco Unicaja Banco
FI	4	Municipality Finance	3	3	0
FR	6	0	6	10	Bpifrance Caisse de Refinance de l'Habitat Societe de Financement Locale HSBC France
GR	4	0	4	4	0

Country	# O-SIIs	O-SIIs not in SSM	# O-SIIs in SSM	# SSM	SSM banks that are not O-SIIs
--	A	B	C = A – B	D	E = Δ between C & D
HR	9	9 – not Eurozone	0	0	N/A – not Eurozone
HU	9	9 – not Eurozone	0	0	N/A – not Eurozone
IE	2	0	2	4	Permanent TSB Ulster Bank
IS	3	3 – not Eurozone	0	0	N/A – not Eurozone
IT	3	0	3	14	Carige Banco Popolare Banca Pop – Emilia/Romagna Banca Pop – Milano Banca Pop – Sondrio Banca Pop – Vicenza Barclays ICCREA Mediobanca Unione de Banche Italiane Veneto Banca
LT	4	AB Siauly bankas	3	3	0
LU	6	Deutsche Bank Luxembourg Société Générale Bnk & Trust BGL BNP Paribas CACEIS Bank	2	4	RBC Investor Services State Street
LV	6	Citadele banka Rietumu banka AS DNB banka	3	3	0
MT	3	Medifin Holdings	2	3	Deutsche Bank (Malta)
NL	5	0	5	7	Nederland. Waterschapsbank Royal Bank of Scotland NV
NO	3	3 – not Eurozone	0	0	N/A – not Eurozone
PT	6	Santander Totta Caixa Economica Montepio	4	4	0
RO	9	9 – not Eurozone	0	0	N/A – not Eurozone
SE	4	4 – not Eurozone	0	0	N/A – not Eurozone
SI	8	SID Abanka SKB Sberbank Banka Koper	3	3	0
SK	5	CSOB Postova Banka	3	3	0
UK	16	16 – not Eurozone	0	0	N/A – not Eurozone
Totals	173	94	79	121	42

The introductory SSM list gave rise to the list of institutions (supposedly 130) who were subjected to the initial stress test, and this, in turn, gave rise to the list of 24 institutions which needed to raise more capital, based on their figures and portfolios as at 31 December 2013 (see below).

At best, one can state that there has been broad overlap between the SSM list and the stress tests list over time but not between either of these lists and the O-SII list.

The O-SII lists give an appearance of unevenness even after allowing for double counting, with, for example, the Czech Republic nominating seven institutions but Italy only three.

Given (1) the extra CET1 buffer defined by national authorities of 2% being a maximum, not a minimum, nor even a guideline; (2) the lower level set by several national authorities; and (3) the fact that the extra CET1 buffer is, as usual, a function "of RWA", an institution's being designated as an O-SII can have had little incremental effect on the institution concerned and, by consequence, on the soundness of that country's banking system.

The main significance of designation as an O-SII may have been to protect the institution from US sanctions under the Patriot Act. Before the Financial Crime Enforcement Network (FinCen) of the US Treasury can issue a 311 Notice against a foreign financial institution, it has to determine whether the institution is systemically important either globally or in its own country.

The SSM, meanwhile, has acted as the supervision framework for the following institutions, all of which are on the September 2014 list:

ENTITY	COUNTRY	FATE
Deutsche Bank	Germany	Launched a restructuring plan in 2019. Shares trade at a market-to-book discount of over 80%
HSH Nordbank <sup>276</sup>	Germany	Sold in 2018 by the states of Hamburg and Schleswig-Holstein to US private equity companies after amassing NPLs
Hypo Real Estate Holding <sup>277</sup>	Germany	Former international real estate business of Hypovereinsbank, spun off in 2002. Restructured in 2008 and nationalised by the German Financial Markets Stabilisation Fund in 2009. Deutsche Pfandbriefbank AG remained as the only outward-facing entity operating in financial markets and is now the entity that is within the scope of the SSM and the stress tests, with total assets as at 31/12/18 of €57.8bn and a claimed CET1 ratio of 18.5%
Eurobank Ergasias	Greece	Prospective major beneficiary of Project Hercules <sup>278</sup> to relieve it of NPLs through a securitisation template
National Bank of Greece	Greece	Prospective major beneficiary of Project Hercules to relieve it of NPLs through a securitisation template
Piraeus Bank	Greece	Prospective major beneficiary of Project Hercules to relieve it of NPLs through a securitisation template
Banco Popular Espanol	Spain	Sold to Banco Santander in 2017 for a nominal amount after it had experienced a high rate of deposit withdrawals <sup>279</sup>
Banca Carige S.p.A. – Cassa di Risparmio di Genova e Imperia	Italy	On 2 January 2019, the ECB appointed administrators to run the bank after it was unable to raise €400 million of new share capital at the end of 2018. The bank carries a large portfolio of NPLs. The situation remains unstable but the bank has not been put into resolution, although it is clearly potentially unviable
Monte dei Paschi di Siena	Italy	Has continued to trade despite carrying a large portfolio of NPLs and being clearly potentially unviable. Has twice received overt state aid, in 2016 from the Bank of Italy and in 2018 from the Italian Ministry of Economy and Finance
Banca Popolare di Vicenza	Italy	Taken over in 2017 by Intesa SanPaolo in a transaction involving Veneto Banca under which the Republic of Italy supplied state cash and a promise of guarantees to assist with securitisation of NPLs <sup>280</sup>

<sup>276</sup> <https://safety4sea.com/hsh-nordbank-sale-officially-completed/>, accessed on 1/2/20.

<sup>277</sup> [https://ec.europa.eu/competition/publications/cpn/2011\\_3\\_9\\_en.pdf](https://ec.europa.eu/competition/publications/cpn/2011_3_9_en.pdf).

<sup>278</sup> See factor 4 in section 1 on NPL securitisation.

<sup>279</sup> See factor 1 in section 1 on resolutions not done in accordance with the BBRD.

<sup>280</sup> See factor 4 in section 1 on NPL securitisation.

ENTITY	COUNTRY	FATE
Veneto Banca	Italy	Taken over in 2017 by Intesa SanPaolo in a transaction involving Banca Popolare di Vicenza under which the Republic of Italy supplied state cash and a promise of guarantees to assist with securitisation of NPLs <sup>281</sup>
Bank of Cyprus	Cyprus	Had €8bn face value of NPLs as at 31 March 2018, written down to a "carrying value" of €4bn. NPLs had only been kept down to €8bn face value thanks to the usage of "forbearance" and "restructuring" techniques and not by recoveries, as shown by the bank's quarterly report to 31 March 2018 <sup>282</sup> . A "carrying value" of 50% of face for a portfolio consisting of loans classed as "Bad" or "Unlikely to pay" is over-optimistic. A more realistic valuation would be 20% of face, necessitating a further write-down of 30%, or €2.4bn. Page 5 of the same report showed the bank's capital as being €2.3bn, so this write-down would have caused the bank to have negative capital. Its claimed CET1 ratio on the same date of 12% is palpably unrealistic, since the bank was only being allowed to survive thanks to its NPLs being overvalued. On 23 July 2018, it was announced that the bank was lining up a transaction to sell off a block of its NPLs in "Project Helix" to private equity investors listed as Apollo, Pimco and Lone Star <sup>283</sup>
Co-Operative Central Bank	Cyprus	Merged into Hellenic Bank in 2018 <sup>284</sup>
Hellenic Bank	Cyprus	Now owns a disproportionate quantity of sector NPLs after its takeover of Co-Operative Central Bank and because Bank of Cyprus nominally relieved itself of some of its NPLs through Project Helix. Both banks have made usage of "forbearance" and "restructuring" actions to return NPLs to performing status. The Cyprus Business Mail <sup>285</sup> reported on 18 December 2019, that NPLs in the Cypriot banking system were €9.7bn at the end of July 2019, as compared to €9.9bn at the end of March 2018. If Hellenic is holding 40% of sector NPLs, that amounts to €3.9bn, compared to its capital and reserves of €1.1bn <sup>286</sup> , upon which it claims a CET1 ratio of 19% as at 30 September 2019. <sup>287</sup> Loans were stated as €6.1bn, so on this metric, over half are on NPL status and the bank is bankrupt, notwithstanding its claimed CET1 ratio
ABLV Bank	Latvia	Subject to a Section 311 Notice <sup>288</sup> from the Financial Crime Enforcement Network of the US Treasury in December 2018 denying it direct and indirect correspondent banking facilities in US dollars, effectively cutting it off from the international banking system. It was deemed not systemically important to the domestic banking system in Latvia, despite being the third largest bank, an SSM participant and an O-SII, on the grounds that a majority of its business was offshore and conducted with non-residents, a factor in its being considered as an institution of "primary money laundering concern".

None of the institutions that failed did so due to their inability to withstand stressed market conditions.

<sup>281</sup> See factor 4 in section 1 on NPL securitisation.

<sup>282</sup> [https://www.bankofcyprus.com/globalassets/investor-relations/press-releases/eng/20180529-1q2018-financialresultsannouncement\\_eng\\_final.pdf](https://www.bankofcyprus.com/globalassets/investor-relations/press-releases/eng/20180529-1q2018-financialresultsannouncement_eng_final.pdf), sections F1 to F8 on pages 28 to 35.

<sup>283</sup> <https://cyprus-mail.com/2018/07/23/three-us-firms-eying-e5bn-in-boc-npls/>, accessed on 1/2/20.

<sup>284</sup> See factor 1 in section 1 on resolutions not done in accordance with the BBRD.

<sup>285</sup> <https://cyprus-mail.com/2019/12/18/npes-in-cyprus-banks-down-to-e9-7-billion-in-july/>, accessed on 1/2/20.

<sup>286</sup> Page 7 Hellenic Consolidated Financial Statements at 30 September 2019.

<sup>287</sup> <https://www.hellenicbank.com/portalserver/hb-en-portal/en/about-us/investor-relations/show-me/financial-results>, accessed on 1/2/20.

<sup>288</sup> ABLV NPRM 20180212 (Final for FR Submission) document of FinCen announcing 311 Notice.

The institutions in the table that have not failed remain in business despite their potential unviability caused by their large portfolios of NPLs. Several have been flagged up by stress tests as requiring extra capital, but obtaining or not obtaining that extra capital has neither resulted in closure nor a return to good health.

These institutions are kept in business and have not been resolved thanks to a mixture of state support, supervisor tolerance of "forbearance" and "restructuring" techniques to reverse loans out of NPL status into performing status and the usage of the common template for the securitisation of NPLs.

The reasons for failure or unresolved unviability are more basic than external stress events and include compliance as a cause of instability – specifically the failure of compliance with applicable regulations to combat money laundering and the financing of terrorism. Now there is pressure for the creation of an EU-level supervisor for these matters, but it is noteworthy that this pressure has not come from the SSM or the EBA, but from member states.<sup>289</sup>

As regards the stress tests themselves, their customary result is to call for a subset of banks examined to raise more capital, the meaning of which judgement is that these banks have inadequate CET1 capital to withstand the stress scenarios. The BBC reported the results of the first test in 2014,<sup>290</sup> based on data as at 31 December 2013. The BBC noted that 24 banks "failed" and that 10 of them had taken the necessary measures before the results were announced. All of the residual 14 banks were in the Eurozone:

Country	Bank
Austria	Öesterreichische Volksbanken
Belgium	AXA Bank Europe
Belgium	Dexia
Cyprus	Hellenic
Greece	Eurobank Ergasias
Greece	National Bank of Greece
Ireland	Permanent TSB
Italy	Banca Carige
Italy	Monte dei Paschi di Siena
Italy	Banca Popolare di Milano
Italy	Banca Popolare di Vicenza
Portugal	Banco Comercial Portugues
Slovenia	Nova Kreditna Banka Maribor
Slovenia	Nova Ljubljanska Banka

Some of these banks have failed in the meantime, despite being allowed by regulators to continue to trade. Hellenic, Eurobank Ergasias, National Bank of Greece and Monte dei Paschi di Siena have been allowed to continue, and do so still, while remaining questionable.

It is possible that other banks not included on this list are harbouring serious issues but have managed to avoid a public call under the stress tests to raise more capital.

It is concerning how the techniques for keeping banks in business and evading resolution are so common between Italy, Greece and Cyprus. It is almost as if the SSM and the banking union have succeeded in the objective of "consistent supervision" by propagating, not best practice, but—especially in the area

<sup>289</sup> <https://www.reuters.com/article/us-eu-moneylaundering-reform/eu-heavyweight-states-push-for-joint-supervisor-against-money-laundering-idUSKBN1XJ04D>, accessed on 1/2/20.

<sup>290</sup> <https://www.bbc.co.uk/news/business-29777589>, accessed on 1/2/20.

of the treatment of NPLs—poor practice, enabling dubious techniques to become acceptable everywhere once they have been established somewhere.

Permitting "forbearance" and "restructuring" techniques to reverse loans out of NPL status into Performing status succeeds in creating "zombie" "performing loans" that risk falling back into NPL status at any time.

The common template for the securitisation of NPLs causes an exchange of a block of overvalued, bad loans for two 0% RWA: 10% cash and 90% bonds guaranteed by a Eurozone sovereign. The latter is a typical example of an asset benefitting from the erroneous Basel treatment that is the subject of this paper. Underlying the transaction is the same block of overvalued, bad loans.

In addition, if the SSM and SRM are the main manifestations of the banking union, then current calls for the "completion of the banking union" follow a familiar path:

1. An organisation or a process is established with a given rationale and set of objectives;
2. In due course, the creation of the organisation and/or the implementation of the process are feted as achievements in themselves, rather than their being judged on the achievement of their objectives and the fulfilment of their rationale for existing; and
3. An argument is built that these latter criteria can only be fulfilled by the establishment of further organisations or processes, and so the advance and expansion of European institutions continues, driven by its own logic that parts company with the market's logic.

Looked at without the ambition of enhancing pan-European powers, institutions and processes, what has been achieved up to now has not met the original objectives.

## **Annex 5: ECB Supervisory Review and Evaluation Process (SREP) 2019 Outcome**

The outputs from the 2019 SREP are an introductory statement by Mr Andrea Enria,<sup>291</sup> a publication of the results for significant institutions,<sup>292</sup> and an "Aggregate SREP outcome for 2019".<sup>293</sup>

The key messages in the "Aggregate SREP outcome for 2019" include concerns about banks' business model sustainability and governance. To this latter point, the ECB refers to "deteriorating scores driven by limited effectiveness of management bodies, weaknesses in internal controls, poor data aggregation capabilities and weak outsourcing arrangements".

CET1 ratios have generally been static in 2018, which is curious when NPLs have been so much reduced, or at least claimed to be. Reductions in NPLs should have a direct and positive impact in CET1 ratios.

Point 4.1 on "Evolution of Scores" attests that "90% of overall SREP scores remained constant in the period 2018-19, however the high spread of weak governance and operational risk scores are a concern to supervisors", and that "The number of banks receiving 'weaker' (score 3) overall scores has been increasing in recent years". No bank scores a 1.

The statistics are thus mildly negative at a time of relative economic calm. i.e., in unstressed conditions. Mr Enria's Introductory Statement sums up this situation as follows: "Almost all banks have adequate levels of capital, in excess of all requirements, including the systemic and countercyclical buffers. At the end of the third quarter of 2019, six banks had capital levels below the Pillar 2 guidance set for 2020. In four cases, that shortfall had already been remedied by the end of 2019. The two remaining banks have been requested to take remedial actions within a well-defined timeline".

However, his statement shows that the rules are about to be undermined: "The upcoming revision of European banking regulation will allow banks to fulfil Pillar 2 requirements partly with capital of lower quality, and hence lower loss-absorbing capacity, than CET1. According to our calculations, from 2021 onwards, CET1 requirements will thus fall by around 90 basis points as a consequence of this reform".

Mr Enria makes specific mention of issues raised in this paper, low profitability and low share valuations: "Another prominent area of supervisory concern is the low level of profitability of European banks. Many of them do not earn their cost of capital, and valuations remain low. From a supervisory perspective, this means low organic generation of capital, and lower capacity to raise equity in markets under challenging economic conditions".

But there is a rejection that the ECB's own interest rate policy can be blamed for this, and an exhortation to banks to work on their business models: "Banks tend to blame the lack of profitability on external conditions, pointing to negative interest rate policies, stringent regulatory requirements, tougher competition including from companies that employ new technologies, and sluggish growth in the euro area. While it is undeniable that the external environment is challenging, this is not going to change in the short term. Banks need to sharpen their managerial efforts to refocus their business models, deploy effective strategies on digitalisation and achieve more radical improvements in cost efficiency. Consolidation could also prove helpful in achieving these goals".

Mr Enria goes on to state that "one of our priorities this year is to assess banks' future resilience and the sustainability of their business models". There is an inference of on-going internal stress in banks

---

<sup>291</sup> <https://www.bankingsupervision.europa.eu/press/speeches/date/2020/html/ssm.sp200128~886dbc9984.en.html> accessed on 29/1/20.

<sup>292</sup> [https://www.bankingsupervision.europa.eu/press/speeches/date/2020/html/ssm.sp200128\\_annex~2268324186.en.pdf](https://www.bankingsupervision.europa.eu/press/speeches/date/2020/html/ssm.sp200128_annex~2268324186.en.pdf).

<sup>293</sup> [https://www.bankingsupervision.europa.eu/banking/srep/srep\\_2019/html/aggregate\\_results\\_2019.en.html#toc1](https://www.bankingsupervision.europa.eu/banking/srep/srep_2019/html/aggregate_results_2019.en.html#toc1) accessed on 29/1/20.

caused by a range of challenging internal factors or, put another way, the banks are running out of road with no prospect of relief from an improvement in conditions externally.

Mr Enria finishes by referring to NPLs, and the achievements in reducing them so far, without referring to the methods used to bring about the reductions. He also addresses banks' plans to reduce them even further: "this planned reduction targets in particular very old NPLs, which tend to be the most difficult to cure or dispose of". In other words, banks are holding NPLs that are old, have had no debt service, and cannot be securitised, "restructured" or subjected to "forbearance". In other words, these NPLs are in reality worthless and ought to be completely written off.

Mr Enria states that "in 2014, non-performing loans (NPLs) in the euro area stood at €1 trillion, 8% of total loans. Since then, we have taken various supervisory measures, and the banks have put a lot of work into bringing down NPLs. And these efforts have been successful: since 2014, the volume of NPLs has shrunk by almost half, to €43 billion, and the NPL ratio has fallen to 3.4%".

€43 bn divided by 3.4% implies a loan amount of €15.97 trn. This updates the ECB's statement in June, which we have quoted above, that NPLs at that time were €80 bn and amounted to 3.8% of all loans. That implied a loan amount of €15.26 trn.

Both implied loan amounts are higher than the figures for total loans in the ECB statistical database<sup>294</sup>, where loans were €1.91 trn at the end of June 2019 and €1.98 trn at the end of September. Presumably the ECB statistical database, like the ECB's SREP statistics page, cover only the SSM banks (113 of them as at September 2019) whilst the NPL figures are for the whole market.

The total assets of the SRM banks were €2.7 trn at the end of June 2019 and €3.3 trn at the end of September, inferring a ratio of loans to total assets of around 52%. Studying the ratios of 8 major Eurozone gave a group of indicators around 56%, with two French banks (BNPP and Societe Generale) nearer 34%, because they carry their insurance business on the same balance sheet as their banking business.

We are entitled to conclude that the figures for total loans implied by the NPL calculations point to total assets in the range of €28-29 trn for the entire banking market, and that the SSM addresses banks that make up around 80% of the market.

If Mr Enria's description is correct of the type of loans still residing as NPLs in Eurozone bank balance sheets, €43 billion of NPLs – 3.4% of the Eurosystem's banking loan assets – are worthless and should be written off against capital, in the same timeframe as European banking reforms will reduce CET1 capital ratios by 0.9%.

One might infer that the total reduction in CET1 capital would then be 4.5%. However this is not necessarily the case, since the NPL amounts are Carrying Values (the loan's nominal amount less any write-offs taken so far), and the Carrying Values are assigned a risk-weighting through the bank's IRB model, as if the Carrying Value were a performing loan.

The SRM banks only have €1.5 trn of equity in total, to cover all of their assets and their off-balance sheet business, which is not mentioned in the ECB statistics at all. The equity amount is only adequate if the loans are risk-weighted at 40% and the off-balance sheet business at 15%, assuming the nominal of the latter is 75% of the nominal of the former (the EIB's off-balance sheet business as at 31/12/18 had a nominal value of €1.045 trn compared to its loans of €56 bn). If the off-balance sheet business has a larger nominal, it would cause the capital buffer to be inadequate, unless the risk-weightings on both on- and off-balance sheet business were revised to compensate.

<sup>294</sup> <https://www.euro-area-statistics.org/> accessed on 29/1/20.

If the SRM banks are 80% of the market, then the market will have at most €1.88 trillion of equity, as the non-SRM institutions have lower hurdles to meet.

If the Carrying Values are being translated through IRB models as if they were performing loans, these NPLs will not represent a very large RWA against which the banks can claim CET1 ratios of 12-14-16%.

But if these NPLs really are the residue at the bottom of the barrel that has thus far proven immune to curing through securitisation, restructuring or forbearance, then a €43 bn write-off may on the one hand be a write-off of only €90 bn of RWAs (if an NPL was risk-weighted at 35% on its Carrying Value), but on the other hand it is write-off of 30% of the sector's equity, and the write-off goes straight against that equity 1-for-1.

A write-off of that magnitude is a bigger percentage of equity than a reduction of 3.4% in the CET1 ratio for all banks with a CET1 ratio of 11.33% or more (3.4% divided by 30%), and that is the vast majority of SSM banks, given the chart on slide 4 of the SREP results pdf. It appears that only six or seven institutions of the 113 have a CET1 ratio of less than 11.33%.

So Mr Enria's statements are important in disclosing the very poor quality of the remaining NPLs that are even admitted to, and the method of presenting them underweights their threat to CET1 ratios. We also know that securitisation, restructuring and forbearance are the main reasons for the reduction of NPLs down to these levels, with write-offs coming a distant fourth, and borrowers curing their arrears with cash barely featuring.

The absence of any discussion of these matters by the ECB indicates the weak foundation upon which its supervision approach is built, not forgetting as well the degree to which its own remit is limited to 113 credit institutions out of 4,472 in the Eurozone in December 2019.<sup>295</sup> This is a higher percentage – at 2.4% - than the Bank of England's stress tests on 6 institutions out of 400 in the UK, but over 300 of those 400 are foreign banks, and include the UK operations of institutions based in the Eurozone and part of the ECB's remit. The 6 UK banks constitute a 75% share of the domestic market, whilst the SSM appears to address an 80% share of the Eurozone market, with the capital levels and risks in the other 4.363 institutions lying outside of their remit.

---

<sup>295</sup> [https://www.ecb.europa.eu/stats/ecb\\_statistics/escb/html/table.en.html?id=JDF\\_MFI\\_MFI\\_LIST](https://www.ecb.europa.eu/stats/ecb_statistics/escb/html/table.en.html?id=JDF_MFI_MFI_LIST) accessed on 29/1/20.

## Annex 6: The Eurozone Liquidity Problem

The liquidity problem extends to the functioning of the Eurozone bond market as a whole. First, there is a question of the market's size. Eurostat points to the "general government gross debt" of the Eurozone as being €9.9 trn. This figure can be mistaken for the Eurozone bond market size, as it includes the loan debts as well as the bond debts of a subset of public sector issuers, but excludes the loan and bond debts of other types of public sector issuers and of all non-public entities. A better marker would be the total nominal amount of the 25,000+ bond issues on the Eurosystem list of eligible collateral, were that to be available.

All of the bonds in the ECB's QE portfolio of €2.6 trn should be drawn from issues on this list of eligible collateral. ECB QE is a buy-and-hold portfolio: the bonds in it have been taken out of circulation in the secondary market, directly reducing liquidity in those issues. For example, the portion of QE that is the "Public Sector Purchase Programme" has reduced the public sector bonds in active circulation by around 33%, since this is the ceiling for how much of each member state's public debt can be bought up into the QE programme, and the ECB has reported that this threshold has been reached.

It is opaque, though, exactly which bonds are tied up in QE, or otherwise under the control of the Eurozone NCBs as pledged collateral either to secure their €3.1 trn of loans to "monetary financial institutions" (i.e. banks), or to secure their TARGET2 debts with one another (the gross size of which is undisclosed). The bonds pledged behind both programmes must perforce be on the list of eligible collateral. However, only the net TARGET2 debts – after two stages of netting - are disclosed by the ECB, and they amount to around €1 trn. Of course, if the Eurosystem's loans total €4.1 trn, the bonds pledged must exceed this amount by a factor in order to offer a security margin. Even if the margin is only 3%, the combined collateral needed to secure the Eurosystem's loans is €4.2 trn – and more if the gross TARGET2 balances are larger than €1 trn. Put that collateral amount together with the QE amount and you have €6.8 trn of bonds tied up and illiquid within the Eurosystem, leaving issues of availability of supply to meet the needs of the rest of the market.

Various commentators have remarked upon liquidity problems in the Eurozone bond market. ESMA, on p4 of its Working Paper 1 of 2018, noted that "Market analysts continue to point at an overall reduction of liquidity, at changes in the role of banks as market makers and at their willingness and ability to facilitate liquidity as reflected by the decrease of market makers' inventories in particular in the corporate bond segment."<sup>296</sup> DWS, the German fund management group, issued a paper on the sub-market of Covered Bonds in February 2019.<sup>297</sup> In it they identify, on p2, the Eurosystem as the dominant buyer owning 40% of the supply, with the share of private investors having decreased from holdings in 2014 of €700 bn out of a total supply of €800 bn, to a share of €400 bn out of €700 bn now. They note that all the bonds in question are on the Eurosystem eligible collateral list. The Eurosystem's intervention appears to have reduced the absolute market size, tied 40% of the remainder into its QE programme, and caused private investor interest to fall by 43%. There is also a telling remark at the foot of p3: "Anecdotal evidence suggests that...it became more difficult for potential investors to source bonds (at least without increasing market prices significantly)". In other words, this sub-market cannot meet the legitimate investment requirements of private investors because the Eurosystem has squeezed them out, unless the private investors overpay to obtain supply.

The immediate prospects for market liquidity are poor. A deterioration is expected as a result of the mandatory buy-in provisions of the CSD Regulation, being implemented in 2020. The International Capital Market Association (ICMA) issued an impact analysis in November 2019 on the so-called mandatory buy-in provisions, whose aim is to deter or punish short-selling.<sup>298</sup> The assumption is that

<sup>296</sup> ESMA Working Paper No. 1, 2018 Liquidity in fixed income markets - risk indicators and EU evidence.

<sup>297</sup> DWS: Liquidity in Euro Area Bond Markets and the Market Impact of the End of Net Purchases of the App, February 2019.

<sup>298</sup> ICMA "Mandatory buy-ins under CSDR and the European bond markets Impact Study", November 2019.

an institution has borrowed stock and then sold it, leaving their securities settlement account square but their balance sheet with an asset of cash, and a liability to deliver stock back to the institution they borrowed it from. A mandatory – or forced - buy-in occurs in a short seller's account when an original lender of the stock recalls it, and/or when the seller cannot find stock to borrow. The seller might not be notified before a mandatory buy-in occurred.<sup>299</sup> The introduction of the mandatory buy-in will increase the risks of short-selling operations, and also, according to the graph on p5 of the ICMA study, cause bid-offer spreads to widen, thus deterring trading, and directly reducing liquidity. ICMA state: "The new buy-in regime is expected to impact the capacity of market-makers to show offers across all bond subclasses, with core sovereign markets the least affected. Again, it is the lower end of the credit spectrum that is most impacted, in particular illiquid IG credit and high yield". It is noteworthy that it merits no comment that there is a class of Eurozone bond known as "Investment Grade illiquid" or "illiquid IG", as if liquidity was not a prerequisite of a security being investment grade, in normal markets anyway.

Restraining or punishing short-selling has the effect of restricting the trades a market actor can undertake if they consider a particular bond to be over-valued, whether because the market actor has a certain view on the future direction of interest rates or on the credit quality of the issuer or both. Restricting the options available to actors whose view is that prices should go down and yields up has the inevitable impact of tilting the market in favour of actors who are favoured by prices going up and yields down. Those are the actors who have a large inventory (the Eurosystem) or who have large borrowing needs (Eurozone member states). The CSD Regulation can thus be presented by the European authorities as a welcome method of deterring aggressive, "Anglo-Saxon" trading practices, while simultaneously serving as a device for tilting the market in the authorities' own favour, a typical indicator of a market in which it is not safe for investors to be involved – assuming that they have the option not to be involved.

The CSD Regulation – together with the Eurosystem's QE and the EU's controls on CCPs and rating agencies – inhibit market actors from independently assessing and pricing risk, and from carrying out trades and running positions reflecting their views. In consequence prices and yields are artificially restrained from adjusting to market-determined levels.

With so much supply now in the hands of the Eurosystem, and with all these inhibitors to trading and liquidity, the Eurozone bond market cannot now be as liquid as it was at the time of the Eurozone crisis in 2011-3. There is no obvious group of private buyers who would be willing to buy up a major divestment of bonds from a current holder who needed to encash their bonds, least of all if the Eurosystem attempted to encash its QE portfolio or had to repossess and liquidate a block of pledged collateral.

The putative new buyers of this stock would first have to have the cash available, and not be relying on raising the cash by pledging the bonds to the Eurosystem. This conduit for financing the purchase would of course be closed if it was the Eurosystem that was the original seller and was looking to raise net cash.

The putative new buyers of this stock would secondly have to be willing to buy the bonds at a price that reflected current yields or very near to them. They would be foolish to do so if the Eurosystem was the seller, since the Eurosystem's actions – as the largest buyer over the past few years – would be indicative of a change in the direction of interest rates, and a reversal of recent market dynamics. If the seller was a bank, these putative new buyers might not be willing to buy at a price that furnished the bank with the necessary proceeds to meet their cash needs: this situation is the precursor to a firesale, where the seller has to then sell more stock, driving the price down, receiving a smaller percentage of the nominal each time.

---

<sup>299</sup> <https://www.investopedia.com/terms/b/buyin.asp> accessed on 14.2.20.

These are the typical outcomes when a market is over-bought, as the Eurozone bond market is, and with one major player – the Eurosystem – having driven it there and now owning or controlling a very high share of the stock. A sign that the Eurosystem is changing its stance will cause a whiplash effect, and all the investor interest will move to the other side, the selling side.

The liquidity situation in the Eurozone is exacerbated by a further technicality, caused by the Eurosystem's policies in reducing interest rates: seasoned bonds will have been issued with higher nominal interest coupons, causing the price to increase well above the nominal ("above par") in the meantime. The price increases so that the yield for a buyer in the secondary market is the same as the yield for a buyer in the primary market, whose bond carries the current level of coupon – which will be near to or actually below 0%.

With seasoned stock priced above par, tax and accounting dynamics come into play. A given investor, selling such a bond, may be presented with an immediate and taxable capital gain, which they cannot amortise over the remaining life of the bond, because they have no bond any longer. To avoid triggering that capital gain, the investor will hold the bond to maturity. Investor selling interest in that bond reduces, meaning the bond's liquidity reduces.

Another given investor, were they to buy such a bond, would pay a premium over par, and it may be that their accounting rules will not allow them to amortise this premium over the bond's remaining life: it has to be taken as a current cost, and possibly not one that is tax-deductible. The investor will then not buy that bond, but wait for one whose coupon is pitched at current levels and which can be bought at near to par. Investor buying interest in that bond reduces, meaning the bond's liquidity reduces.

In both cases, these investors will not wish to trade in seasoned bonds, because of the premium at which they trade. The premium has been caused by the Eurosystem's monetary policy, and this policy has reduced liquidity.

The above evidence raises the suspicion that there is considerable liquidity risk within the Eurosystem, that certain classes of bond – ranked as HQLAs because they are on the Eurosystem list of eligible collateral – are actually illiquid, that other classes have become illiquid because of the Eurosystem's interventions, and that EU regulation threatens to reduce real liquidity still further – to the detriment of private investors but to the benefit of Eurozone authorities.

This is a very serious matter if, as is made clear above, the measures taken and planned by the Eurozone authorities direct markets towards adopting risk assessments and trading positions that serve the authorities' own financial interests, and control and even punish contrary and independent trading positions and assessments. This diminishes or drives out the layer of trading actors who make the market liquid. In effect these independent actors are no longer allowed to act in a way that contradicts the financial interests of authorities, meaning the markets are no longer free markets but serve the interests of the state actors that supervise them.

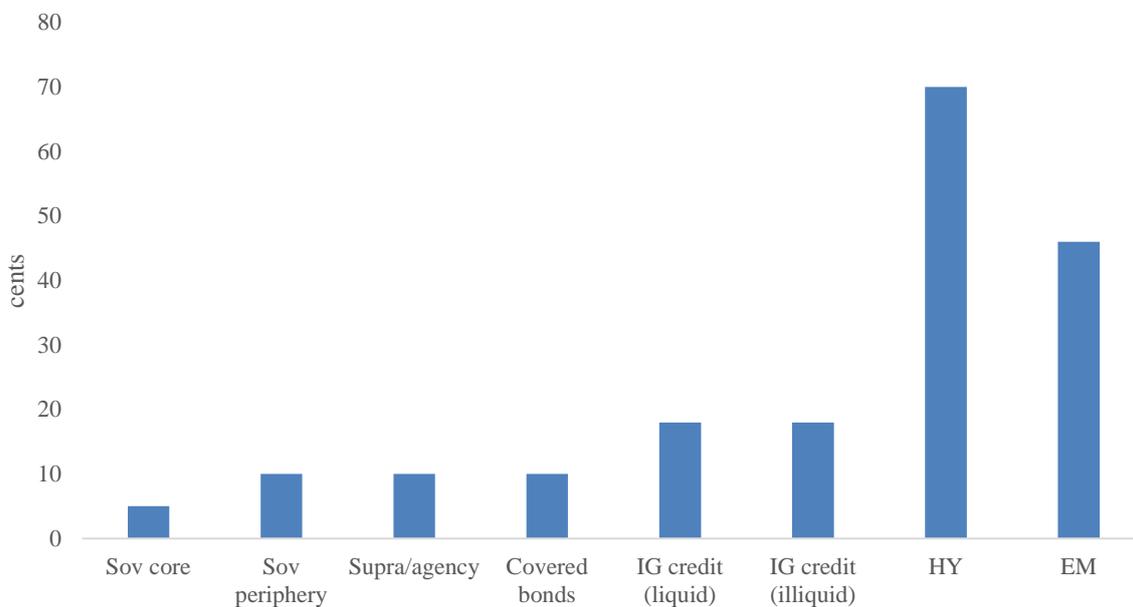
Liquidity is a complex concept with a number of dimensions.<sup>300</sup> However, the bid-ask spread is often used as a summary measure of liquidity. Figure 22 is derived from the graph on p5 of the ICMA's

<sup>300</sup> For example, ESMA considers the following dimensions:

Liquidity dimensions	Liquidity metrics
Tightness	Bid-Ask spreads Roll
Depth and Breadth	Volumes traded Turnover ratio Average trade size Amihud illiquidity coefficient
Resilience	Volatility spikes Dealer count Probabilities of liquidity regime

November 2019 mentioned earlier.<sup>301</sup> It is likely that only sovereign core and a subset of sovereign periphery and supra/agency bonds can be regarded as genuinely liquid. Indeed, a market participant informed us that only around 800 of the 25,000+ bonds on the ECB's eligible list can be regarded as liquid.

Figure 22: Bid-ask spreads on Eurozone bonds



Source: Tania De Renzis, Claudia Guagliano, Giuseppe Loiacono, *Liquidity in fixed income markets – risk indicators and EU evidence*, ESMA Working Paper No. 1, 2018; [https://www.esma.europa.eu/sites/default/files/library/esma50-165-651\\_wp\\_bond\\_liquidity.pdf](https://www.esma.europa.eu/sites/default/files/library/esma50-165-651_wp_bond_liquidity.pdf).

<sup>301</sup> ICMA "Mandatory buy-ins under CSDR and the European bond markets Impact Study", November 2019.

## Glossary of Terms Used

Term	Meaning
<b>Legislation</b>	
<b>BRRD</b>	Bank Recovery and Resolution Directive (Directive 2014/59/EU)
<b>CRA Regulation</b>	CRA Regulation (Regulation (EC) 1060/2009)
<b>CRR</b>	Capital Requirements Regulation (Regulation (EU) 575/2013)
<b>CSD Regulation</b>	Central Securities Depositories Regulation (Regulation (EU) 909/2014)
<b>EMIR</b>	European Market Infrastructure Regulation (Regulation (EU) 648/2012)
<b>EMIR 2.2</b>	Regulation (EU) No 2019/2099 amending EMIR
<b>MiFID II</b>	Markets in Financial Instruments Directive (Directive 2014/65/EU)
<b>Solvency II</b>	Solvency II Directive (Directive 2009/138/EC)
<b>Other Definitions</b>	
<b>ABSPP</b>	Asset-Backed Securities Purchase Programme
<b>APP</b>	Asset Purchase Programme
<b>Basel Rules</b>	Rules on credit risk management issued by the Basel Committee
<b>BIS</b>	Bank of International Settlements
<b>BVG</b>	Bundesverfassungsgericht, the German constitutional court
<b>Basel Committee</b>	Basel Committee on Banking Supervision
<b>CCF</b>	Credit Conversion Factor
<b>CCP</b>	Central Counterparty
<b>CCyB</b>	Countercyclical buffer
<b>CDS</b>	Credit default swap
<b>CET1 capital</b>	Common Equity Tier 1 capital
<b>CFTC</b>	Commodity Futures Trading Commission
<b>CJEU</b>	Court of Justice of the European Union
<b>CBPP3</b>	Covered Bond Purchase Programme 3
<b>CRC</b>	Country risk classification
<b>CSPP</b>	Corporate Sector Purchase Programme

<b>Term</b>	<b>Meaning</b>
<b>D-SIB</b>	Domestic Systemically Important Banks
<b>EBA</b>	European Banking Authority
<b>ECB</b>	European Central Bank
<b>EDIS</b>	European deposit insurance scheme
<b>EEA</b>	European Economic Area
<b>EFSF</b>	European Financial Stability Facility
<b>EFSD</b>	European Fund for Strategic Investments
<b>EFSM</b>	European Financial Stabilisation Mechanism
<b>EIB</b>	European Investment Bank
<b>EIF</b>	European Investment Fund
<b>EIOPA</b>	European Insurance and Occupational Pensions Authority
<b>ESA</b>	European Supervisory Authority
<b>ESMA</b>	European Securities and Markets Authority
<b>ESM</b>	European Stability Mechanism
<b>EU</b>	European Union
<b>FinCen</b>	Financial Crime Enforcement Network
<b>FSB</b>	Financial Stability Board
<b>GSIFI</b>	Global Systemically Important Financial Institution
<b>HQLAs</b>	High-Quality Liquid Assets
<b>ICMA</b>	International Capital Market Association
<b>IMF</b>	International Monetary Fund
<b>IRB approach</b>	Internal ratings-based approach
<b>LCR</b>	Liquidity Coverage Ratio
<b>MFF</b>	Multiannual Financial Frameworks
<b>MFI</b>	Monetary financial institutions
<b>NCBs</b>	National central banks
<b>NDGS</b>	national deposit guarantee scheme

<b>Term</b>	<b>Meaning</b>
<b>NPLs</b>	Non-performing loans
<b>OMT</b>	Outright Monetary Transactions
<b>OPSE</b>	Other public sector entities
<b>O-SII</b>	Other Systemically Important Institution
<b>PRA</b>	Prudential Regulation Authority
<b>PSE</b>	Public sector entity
<b>PSPP</b>	Public Sector Purchase Programme
<b>QE programme</b>	Quantitative Easing programme
<b>RTGS</b>	Real-time gross settlement
<b>RWA</b>	Risk-weighted assets
<b>S&amp;P</b>	Standard & Poor
<b>SRB</b>	Single Resolution Board
<b>SREP</b>	Supervisory Review and Evaluation Process
<b>SRM</b>	Single Resolution Mechanism
<b>SSM</b>	Single Supervisory Mechanism
<b>TLAC</b>	Total Loss Absorbing Capacity
<b>UK</b>	United Kingdom
<b>US</b>	United States of America

A Template for Enhanced Equivalence: Creating a Lasting Relationship for Financial Services  
between the EU and the UK  
*Barnabas Reynolds*

Hard Choices: Britain's Foreign Policy for a Dangerous World  
*John Baron*

Trading on the Future: Brexit Trade Options and the UK Economy  
*Patrick Minford*

Triggering Article 50, Courts, Government and Parliament  
*D. Abulafia, J. Clark, P. Crisp, D. Howarth, S. Lawlor & R. Tombs*

Prosperity not Austerity: Brexit Benefits – Britain's New Economy  
*John Redwood*

The Art of No Deal: How Best to Navigate Brexit for Financial Services  
*Barnabas Reynolds*

How to leave the EU: Legal and Trade Priorities for the New Britain  
*Martin Howe QC*

Flawed Forecasts: The Treasury, the EU and Britain's future  
*Patrick Minford*

A Blueprint for Brexit: The Future of Global Financial Services and Markets in the UK  
*Barnabas Reynolds*

The EU: An idea whose time has passed  
*Roger Bootle*

Ruling the Ruler: Parliament, the People and Britain's Political Identity  
*Sheila Lawlor*

Joining the World: Britain Outside the EU  
*Nigel Lawson*

Banking on Recovery: Towards an accountable, stable financial sector  
*J. McFall, S. Kamall, G. Lyons, R. Roberts, F. Capie, G. Wood, K. Matthews, D. B. Smith, M. Powell,  
E. Michaels & S. Lawlor*

The British Bill of Rights: Protecting Freedom Under the Law  
*Jonathan Fisher QC*

Paying for the Future: Working Systems for Pensions and Healthcare  
*L. Schuknecht, M. Dauns & W. Erbert*

What's the Point of the Human Rights Act? The Common Law, the Convention, and the English  
Constitution  
*Dinah Rose QC*

Working Systems: Towards Safer NHS Nursing  
*T. Hockley & S. Boyle*

### **Subscribe to Politeia's Publications!**

For £35 a year, you will receive an electronic copy of each of our publications, plus hard copies of two new publications on request, and, if you wish, free hard copies of your choice from our back catalogue. You will also receive advance notice and invitations to Politeia's conferences and flagship events, with guest speakers from the UK and overseas.

More information can be found on our website: [www.politeia.co.uk](http://www.politeia.co.uk). Or, write to the Secretary, Politeia, 14a Eccleston Street, London SW1W 9LT, or at [secretary@politeia.co.uk](mailto:secretary@politeia.co.uk)

### **A Selection of Recent and Related Publications**

All Change? UK State Aid after Brexit: What Law? Whose Courts?

*James Webber*

The Irish Border, Brexit & the EU – The Route to Frictionless Trade

*Ray Bassett*

Now or Never: Countering the Coup Against Britain's Democracy

*Sheila Lawlor*

Leave as You Entered: Brexit in International Law

*Thomas Grant*

Any Role to Play in UK Law? The EU Charter of Fundamental Human Rights

*Anthony Speaight*

UK and EU Financial Services – The Legal Framework for Free Trade after Brexit

*Barnabas Reynolds* (2nd Edition, July 2019, with New Direction)

Avoiding the Trap – How to Move from the Withdrawal Agreement

*Martin Howe QC, Sir Richard Aikens and Thomas Grant*

The EU, the UK and Global Trade – A New Roadmap

*David Collins* (2nd edition, June 2019, with New Direction)

The Withdrawal Agreement, State Aid & UK Industry: How to Protect UK Competitiveness

*Barnabas Reynolds & James Webber*

Intangible Assets: Funding Research in the Arts and Humanities

*John Marenbon*

The Brexit Settlement and UK Taxes

*David B. Smith*

Commercial Law After Brexit: Next Steps for the UK

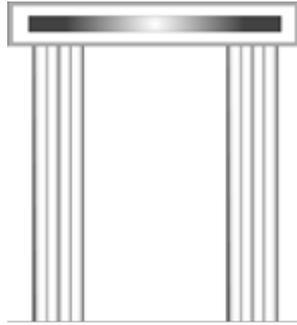
*Thomas Sharpe QC*

Best for the Future, Best for the Interim Free Trade for the Future

*Barnabas Reynolds*

Working Welfare: Contributory Benefits, the Moral Economy and the New Politics

*Frank Field*



Many people in Britain can see that the EU project has lost touch with the normal arrangements that govern successful western economies. But less obvious is that the zone's financial system and its legal underpinnings are weak. As this analysis shows, EU law sidesteps the Basel standards – the international rules which protect the financial system from systemic risk. But, whereas the UK has until now helped to manage the risk by applying its own controls to the business it regulates, after Brexit much will depend on whose laws govern trade.

*Managing Euro Risk: Saving Investors from Systemic Risk* explains how the problem has arisen. Legally the Eurozone has circumvented the Basel rules. Eurozone states can raise funds on the debt markets, behaving as sovereign, but in fact are 'sub sovereign' - and without the currency being backed by a single sovereign. The EU's supra-national bodies, its central bank (the ECB) and investment bank (the EIB) operate under the same misassumptions. The problems have been exacerbated by an absence of transparent accounting practices. The upshot is that the Eurozone's financial sector today is under-capitalised, under-collateralised and less liquid than it should be.

The authors, Barnabas Reynolds, a UK and international financial services lawyer, David Blake, an academic economist and Robert Lyddon, a bank accounting and financial analyst, warn that the potential for systemic risk spreading to the UK or globally is grave, endangering businesses, savers and investors - a danger likely to become acute after Brexit.

The authors explain how the risk can be managed and contagion contained. They propose that the EU should be obliged to apply the Basel and accounting standards properly, with Eurozone member states adopting joint-and-several liability for each other's debts. Above all, the UK should insist that future financial services trade with the bloc will be on an Enhanced Equivalence basis, with UK trade governed by UK law. If the EU refuses, the UK and US, the regulators of the global financial market, must take whatever steps are needed to prevent systemic risk.

**POLITEIA**