

# The UK's liabilities to the financial mechanisms of the European Union

By Bob Lyddon

Lyddon Consulting Services Limited

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# Preface

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This paper has been commissioned by the Bruges Group in the run-up to the June 2016 referendum on the UK's continued membership of the European Union.

The Bruges Group believes understanding the economic consequences of that decision requires a full picture to be obtained, addressing all of (i) the trade benefits and drawbacks to EU membership, (ii) the cash costs and cash benefits, and lastly (iii) the financial obligations that are part and parcel of EU membership as well as any benefits that go with those obligations.

This paper is about the last one of these, while touching on the second one in order to put it in context.

It lays out how the mechanisms operate under which the UK's financial obligations towards the EU are set, and how the obligations can be increased or reduced.

It describes the risk-sharing amongst Member States, on a sliding scale between three variations:

1. Lowest sharing: the risk is shared by Eurozone members only, and no member's obligation can exceed a fixed proportion of the whole amount;
2. Middle sharing: the risk is shared by all Member States, but still no member's obligation can exceed a fixed proportion of the whole amount;
3. Highest sharing: the risk is shared by all Member States on a basis where each Member State could be asked to pay more, up to the entire amount, if other Member States cannot pay.

Any Member State, particularly a Euro-Out one, should be sensitive to these distinctions, as the credit rating agencies and international investors are. Variation (3) represents the best credit risk for investors as it is the one in which obligations are "collectivised" to the highest possible degree; by extension it is the worst one for Member States.

The European authorities have tried and will continue to try to bring Variation (3) into play in as many instances as possible, both directly through mechanisms like the European Financial Stabilisation Mechanism, but also indirectly, such as in the case of the European Fund for Strategic Investments, under which the EIB - operating to Variation (2) itself - benefits from a guarantee from the European Union, which operates to Variation (3).

The reader will make up their own mind after examining this paper whether it is truly the case that the UK is not part of the Eurozone bailout when most of the mechanisms used to facilitate the Eurozone recovery operate under Variations (2) and (3), in which all Member States are involved:

- The European Union – rated AAA/Aaa
- European Financial Stabilisation Mechanism – through the EU
- European Investment Bank – rated AAA/Aaa
- European Fund for Strategic Investments – through the EU and EIB

The three mechanisms in which the UK does not participate are:

- European Financial Stability Facility – rated AA/Aa1
- European Stability Mechanism – rated Aa1 (Moody's only; no S&P rating)
- The informal TARGET imbalances within the European System of Central Banks

# Author biography

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Bob Lyddon is an expert in international banking, working through his own consultancy company Lyddon Consulting Services.

Bob's particular areas of expertise include banking regulation, the sovereign debt crisis, and international money transfer and electronic banking.

Bob has consulted for major organizations on the Single Euro Payments Area and Payment Services Directive 1, and in 2012 he wrote, for The Bruges Group, an authoritative paper on the UK's financial liabilities at that time to the European Investment Bank, the European Central Bank and Eurosystem, and the European Community. That paper – "The UK's risks and exposure to the European Investment Bank and other European financial mechanisms: amounts, safeguards and breaches in the dyke" – contributed to the UK Treasury including the UK's contingent liability on the European Investment Bank in the national accounts for the first time.

Between 1997 and 2000, Bob was a Principal in the Strategic Change Management Consulting practice of PricewaterhouseCoopers, and managed several projects for the original implementation of the EUR, notably in Luxembourg and London.

In a banking career over 17 years Bob was latterly Director of European Cash Management at BankBoston, where he designed of the Connector multibank payments network and the Optimizer cross-currency notional pooling service. Bob served initially with Lloyds Bank International, where he was involved with Sovereign Risk lending under the Dutch government export credit schemes, financing such projects as dry docks in Nigeria constructed by the Royal Dutch Harbourworks company, and gas-fired boilers supplied by Stork Ketels for power stations in Taiwan.

Bob obtained a First Class B.A. degree in Modern Languages at Fitzwilliam College Cambridge in 1980, and speaks French, German, Norwegian and Dutch. He had periods of study at the universities of Bergen and Freiburg-im-Breisgau, and lived in Antwerp, Zurich and Amsterdam while working for Lloyds Bank International.

# Source Documents

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|---|
| Treaty on the Functioning of the European Union – Consolidated Version published in the Official Journal of the European Union on 26.10.12  |
| Moodys credit rating report on the European Union 30.09.15  |
| European Union Financial Report 2014  |
| Council Regulation (EU) No 407/2010 establishing the EFSM – the European Financial Stabilisation Mechanism  |
| Council Implementing Decisions on the granting of financial assistance to Ireland and Portugal (various over 2010 to 2013)  |
| European Investment Bank Annual Reports 2011-2014   |
| Moodys credit rating report on the European Investment Bank 09.07.15  |
| Decision No 1080/2011/EU of the European Parliament of the Council of 25 October 2011 granting an EU guarantee to the European Investment Bank against losses under loans and loan guarantees for projects  |
| Decision No 466/2014/EU of the European Parliament of the Council of 16 April 2014 granting an EU guarantee to the European Investment Bank against losses under financing operations supporting investment |
| An investment plan for Europe 26.11.14 COM(2014) 903 Final  |
| Regulation (EU) 2015/1017 of the European Parliament of the Council of 25.06.15, establishing the European Fund for Strategic Investments   |
| EFSD Project Factsheets for operations up to 22.01.16   |
| European Central Bank Annual Report 2014  |
| European Financial Stability Facility (“EFSF”) website - <a href="http://www.efsf.europa.eu">www.efsf.europa.eu</a>   |
| European Stability Mechanism (“ESM”) website - <a href="http://www.esm.europa.eu">www.esm.europa.eu</a>   |

# Glossary

| Term                               | Meaning  |
|------------------------------------|--|
| <b>Basel Bank Capital Adequacy</b> | Successive sets of requirements issued by the Bank for International Settlements based in Basel, defining how much capital a bank should hold to cushion itself against losses. The requirements cause a bank to identify a quantum of risk against which it should hold – under the current Basel III rules – 8-10% in capital. The quantum is arrived at by identifying the nominal amount of each piece of business that involves a risk of loss, and adjusting it for the creditworthiness of the counterparty and the risk in the piece of business itself. Then all the adjusted nominal amounts are totalled and multiplied by 8-10%, to arrive at the bank's required level of capital.  |
| <b>Central bank money</b>          | Forms of money that are regarded as free of credit risk by the central bank of a particular country, being money that represents the sovereign risk of that country. In the UK the forms would be:<br><br>A credit balance on an account at the Bank of England (which can only be in GBP)<br><br>GBP note and coin issued by the Bank of England<br><br>UK government bonds - gilts<br><br>The different forms of central bank money must be 'fully fungible': instantly exchangeable for one of the other forms at par/without a 'haircut'   |
| <b>Credit enhancement</b>          | Generic term for any form of security, guarantee, insurance policy or third-party undertaking that reduces the credit risk taken by a lender when advancing funds to a borrower, and which makes full repayment of capital and interest, and on time, more likely.   |
| <b>Creditor ladder</b>             | The seniority level of a creditor's claims in a bankruptcy. The trustee of the bankruptcy will pay out the proceeds of the liquidation of the assets in order of creditors' seniority. The first level will be paid out in full before the next level receives anything. Shareholders are at the bottom of the ladder. The amount that a certain level of creditors gets paid out as a percentage of their claims is known as "pence-in-the-pound". The maturity date of a creditor's claim has no impact on its seniority in a bankruptcy: secured long-term claims will outrank unsecured short-term claims.   |
| <b>Credit rating</b>               | An estimate of the ability of a person or organization to fulfil their financial commitments in full and on time, based on previous dealings   |
| <b>Credit rating agency</b>        | A credit rating agency (CRA, also called a ratings service) is a company that assigns credit ratings, which rate a debtor's ability to pay back debt by making timely capital and interest payments and the likelihood of default. Standard and Poor and Moodys are the two best known CRAs  |
| <b>Cross-guarantee</b>             | Normally used in commercial banking in the context of notional pooling: subsidiary companies in the same group are asked to guarantee one another's overdrafts in the pool in order that the bank can classify them as owed by a 'single counterparty'. This partially negates their status as separate limited-liability companies. Banks will generally not offer pooling unless they have either cross-guarantees or a declaration of joint-and-several liability, and would also request to have positive and recent legal opinions as to the validity and enforceability of every cross-guarantee against the issuing subsidiary. That could run to a number of legal opinions if the subsidiaries are registered in different countries, even if the pooling agreement and the guarantees are all subject to a single governing law and a single exclusive forum of jurisdiction |

| <b>Term</b>   | <b>Meaning</b>   |
|---|--|
| <b>EU Fiscal Stability Treaty or "EFST"</b>   | The Treaty on Stability, Co-ordination and Governance in the EMU, aka the Fiscal Stability Treaty, signed amongst the EU Member States that are part of the Single Currency – the EUR – to agree to reduce the ratio of government debt to GDP to 60% by 2030, and to make such adjustments as are needed to spending to take account of additional age-related social costs that may arise up to 2050 i.e. to adjust welfare spending downwards before 2030 so that the 60% ratio can be sustained up until 2050  |
| <b>European Financial Stabilisation Mechanism ("EFSM")</b>  | The first Eurozone bailout mechanism, agreed in May 2010 and involving all EU Member States. The ceiling is €60 billion; €46.8 billion is currently lent to Ireland and Portugal. €13.2 billion is available.  |
| <b>European Financial Stability Facility ("EFSF")</b><br><br><a href="http://www.efsf.europa.eu">www.efsf.europa.eu</a> | The second Eurozone bailout mechanism, also agreed in 2010 but involving only the Eurozone members. It has loans out under three programmes, all fully drawn: Ireland €17.7 billion; Portugal €26.0 billion; Greece €143.6 billion; total €187.3 billion. It is a Luxembourg-incorporated special purpose company. Its capital is in the form of part-paid shares owned by the Eurozone countries, with the subscribed-but-uncalled capital callable on a several-but-not-joint basis. No new programmes can draw on the EFSF, and no existing borrowers can draw more. The ESM administers the EFSF, meaning receiving capital and repayments on its loans, paying out on the bonds issued to finance the loans, and calling the capital when needed  |
| <b>European Stability Mechanism ("ESM")</b><br><br><a href="http://www.esm.europa.eu">www.esm.europa.eu</a>             | The third Eurozone bailout mechanism, also agreed in 2010 and again involving only the Eurozone members. It has a maximum lending capacity of €500 billion, of which €450 billion is currently available. It is a Luxembourg-incorporated special purpose company. Its capital is in the form of part-paid shares owned by the Eurozone countries, with the subscribed-but-uncalled capital callable on a several-but-not-joint basis. New programmes can access the ESM and the EFSM, but not the EFSF.   |
| <b>European System of Central Banks ("ESCB")</b>  | The European System of Central Banks (ESCB) is composed of the European Central Bank (ECB) and the national central banks (NCBs) of all 28 EU Member States. The ESCB is responsible by EU Treaty for issuance of Euro note & coin and for carrying such operations as are needed for the proper functioning of the Euro within the scope of the Treaty mandate and the ECB/NCBs' own statutes and powers  |
| <b>Exchange Rate Mechanism or ERM</b>   | The European Exchange Rate Mechanism, a system introduced by the European Community in March 1979, as part of the European Monetary System (EMS). Its goal was to reduce exchange rate variability and achieve monetary stability in Europe, in preparation for Economic and Monetary Union and the introduction of a single currency, the euro, which took place on 1 January 1999. After the adoption of the euro, it mutated into ERM II, a policy charged with linking currencies of EU Member States outside the Eurozone to the euro, having the common currency as a central point. The goal was to improve the stability of those currencies, as well as to gain an evaluation mechanism for potential Eurozone members. The only currency still in the ERM is the Danish kroner (DKK) whose central valuation against the EUR is EUR1 = DKK7.46038. The last one out was the Lithuanian litas (LTL) when it joined the Euro on 1/1/15 at an irrevocably fixed exchange rate of EUR1 = LTL3.4528 |
| <b>Fully-paid share</b>   | A share that a shareholder has paid for in one sum and where there is no difference between the subscribed amount per share and the paid amount per share  |
| <b>Gross Domestic Product</b>   | A monetary measure of the value of all final goods and services produced in a period (quarterly or yearly). Nominal GDP estimates are commonly used to determine the economic performance of a whole country or region, and to make international comparisons.   |
| <b>Gross National Income</b>  | The sum of value added by all producers who are residents in a nation, plus any product taxes (minus subsidies) not included in output, plus income received from abroad such as employee compensation and property income   |

| <b>Term</b>  | <b>Meaning</b>  |
|--|---|
| <b>Groupement d'intérêt économique ("GIE")</b>               | French corporate construction: Economic Interest Group. A French parent and its French subsidiaries sign into a GIE so as to submit a single corporation tax return. French banks are then able to offer the GIE notional pooling of its bank account balances  |
| <b>Joint-and-several liability</b>                           | An arrangement amongst parties to a business transaction, usually under a guarantee from shareholders in favour of creditors, where the creditors may recover all of their claim from any of the shareholders regardless of their individual share in the company   |
| <b>Limited liability</b>                                     | The type of corporation or company where the shareholders cannot lose more than the capital they have subscribed to, regardless of the size of the company's debts to third-parties should the company go into liquidation  |
| <b>Multiannual Financial Framework</b>                       | The MFF: the EU long-term spending plan. The multiannual financial framework lays down the maximum annual amounts ('ceilings') which the EU may spend in different political fields ('headings') over a period of at least 5 years. The current MFF covers seven years: from 2014 to 2020   |
| <b>Notional pooling</b>                                      | A banking service whereby the bank balances owned by sister companies in a corporate group can be offered an interest calculation that recognises that the credit balances owned by some participants match the amounts of the overdraft balances owed to the bank by others. No or very little interest spread is then charged on this matched balance. In order to achieve a zero interest spread it is usual for the customer to have to present its different subsidiaries as a 'single counterparty' by making them either cross-guarantee one another's overdrafts, or sign a statement of joint-and-several liability for one another's overdrafts   |
| <b>OECD</b>  | Organisation for Economic Cooperation and Development, comprising 34 advanced economies and founded in 1961 to stimulate economic progress and world trade. Used under Basel I Capital Adequacy system to distinguish between 'safe' and 'risky' countries.   |
| <b>Organschaftsvertrag mit Gewinn - und Verlustabführung</b> | 'Corporation agreement with absorption of Profit and Loss': German corporate construction whereby a parent company and a subsidiary sign an agreement for the parent to 'take over' the annual profit/loss. Enables them to submit a consolidated corporation tax return, but to avoid consolidation for taxes such as the "Trade activity tax" ("Gewerbeumsatzsteuer"). Used by BMW AG with BMW Leasing GmbH: BMW Leasing GmbH is a static asset-holding company and so is not eligible for "Trade activity tax", whereas BMW AG is. BMW Leasing needs to borrow large amounts to fund the vehicles: banks regard the existence of the "Organschaftsvertrag" as a structural guarantee of BMW Leasing's debts by BMW AG, and so that is a "credit enhancement" and enables BMW Leasing to borrow the quantity of money it needs and on fine terms  |
| <b>Part-paid share</b>                                       | A share that a shareholder pays for in more than one sum. The shareholder is committed to pay the entire amount at the point they subscribe to the share. Normally the share only remains part-paid for a short period e.g. 50% of the cash amount has to be paid within two weeks, and the balance a month after that. However, the terms of the share offer will set out the payment schedule, and there is no barrier in law to the shares being issued on a part-paid basis, with no date set for the payment of the balance, and/or with no certainty that the balance will not be called in several amounts or over an extended period. In the books of the company the subscribed-but-not-called capital has the effect of a guarantee fund acting as a credit enhancement to creditors' claims. In a liquidation the bankruptcy trustee would retain the right to call in the balance of the part-paid capital, and to use that money to meet the claims of the creditors |
| <b>Several-but-not-joint liability</b>                       | An arrangement amongst parties to a business transaction, usually under a guarantee from shareholders in favour of creditors, where the creditors may only recover from any shareholders the same share of the claim as that shareholder owns in the business – shareholders are not responsible for one another's obligations  |

| Term                       | Meaning   |
|----------------------------|---|
| <b>Share premium</b>       | The difference between the nominal value of a share and the price paid by an investor to subscribe to it. The price is normally set at a premium to the nominal value in order to achieve the effect of limiting the shareholder's liability to pay in, namely to the subscription price. This is exactly so as not to achieve the situation of a part-paid share: that a shareholder might later be called upon to pay in more so as to satisfy creditors and experience a liability that is higher than the amount they paid for the shares when subscribing  |
| <b>Single counterparty</b> | A qualifying criterion for a bank to offset credit balances and overdraft balances in its accounts as well as for calculating other costs such capital adequacy, deposit insurance and central bank reserves. If a bank is able to offset balances in its own accounts, it would be normal not to charge the customer an interest spread between credit and overdraft balances, unless not all the other ancillary costs could be eliminated  |
| <b>Sovereign risk</b>      | "Sovereign risk" is the credit risk of a government – the best and lowest credit risk available in the country concerned. It was thought to be synonymous with being a type of obligation that was free of credit risk, up until the Latin American 'foreign currency debt' defaults of the 1980s. After that the definition of "risk-free" was amended from "any debt obligation of a sovereign government" to "any debt obligation of a sovereign government in its own currency". Gilts in the UK or Treasuries in the US qualify as that: in other words foreign currency obligations were not considered as risk-free but domestic currency obligations were. This definition has been undermined by the EUR, where several countries use a currency but none has the control over the tools for its management commensurate with its obligations being regarded as risk-free. To be genuinely credit risk-free an obligation of a government must be in its own currency of which it is the sole user. The existence of multiple users of a currency damages the quality of the central bank money in that currency and reduces the quality of the respective government's Sovereign Risk, which is the fault line at the centre of the Euro. |
| <b>Subscribed share</b>    | A shareholder enters into a contract to take ownership of a share in exchange for a consideration, normally cash. The shareholder is committed at the point of subscription, and has an enforceable obligation to deliver the cash on the due date.   |

# Executive Summary

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On 23 June 2016 the UK electorate is to be asked about the UK's continuing membership of the European Union.

Money is an aspect of this, and the money question comes in several aspects:

- Does the UK benefit in terms of trade in goods and services with the EU due to access to markets, and what is the price paid if any for that access?
- What does the UK pay in cash terms for the running of the EU, and what does it get back in cash?
- What financial liabilities does the UK carry as part of EU membership and what benefits come back in return?

This paper concentrates on the last question, while touching on the second one in order to put the third one in context.

The first question has been answered by the Office of National Statistics:

<http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/rel/international-transactions/outward-foreign-affiliates-statistics/how-important-is-the-european-union-to-uk-trade-and-investment-/sty-eu.html>

The UK's trade deficit with the EU for 2014 was:

| Category | Amount - £ billions | Amount - EUR billions |
|----------|---------------------|-----------------------|
| Goods    | (77.0)              | (96.3)                |
| Services | +15.4               | +19.3                 |
| Total    | (61.6)              | (77.0)                |

To the second question, the UK's cash contribution to the EU in 2014 was:

| Category                           | Source   | Amount - EUR billions |
|------------------------------------|--|-----------------------|
| GNI-based Member Cash Contribution | EU 2014 Financial Report                                 | (14.5)                |
| UK rebate                          | EU 2014 Financial Report                                 | +6.1                  |
| VAT                                | EU 2014 Financial Report                                 | (2.9)                 |
| Other EU "Own Resources"           | EU 2014 Financial Report                                 | (2.7)                 |
| Total cash paid in                 | EU 2014 Financial Report                                 | (14.0)                |
| EU cash spent in the UK            | <a href="http://www.fullfacts.org">www.fullfacts.org</a> | +4.0                  |
| Net cash position in 2014          |  | (10.0)                |

As regards financial liabilities – the third question – the UK has value-at-risk in several ways.

The two easiest ones to demonstrate are the value-at-risk in the capital of the European Investment Bank (EIB) and the European Central Bank (ECB):

| Category | Subscribed      | Paid-in        | Callable        |
|----------|-----------------|----------------|-----------------|
| EIB      | EUR39.2 billion | EUR3.5 billion | EUR35.7 billion |
| ECB      | EUR1.5 billion  | EUR0.1 billion | EUR1.4 billion  |
| Total    | EUR40.7 billion | EUR3.6 billion | EUR37.1 billion |

The EIB is acting counter-cyclically and aggressively to increase its lending within the EU under its programme of regular loans and under the European Fund for Strategic Investments, and is aggressively increasing its loans outside the EU in pursuit of EU political objectives.

The capital base of the EIB remains small, and so a call for a further injection of capital is likely, both to support its expansion and to cushion credit losses: the European Fund for Strategic Investments involves the EIB in much higher-risk loans than its regular portfolio.

The ECB has a very small capital base, and yet its governor, Mario Draghi, claims to be using it as a base from which to direct a bazooka at the Eurozone's problems.

A call on the UK from the ECB for extra capital is another financial risk.

In neither case can a call for 'extraordinary support' - above and beyond the UK's contractual liabilities - be ruled out.

At least the liabilities of the UK towards the EIB and the ECB are on a several-but-not-joint basis i.e. the UK is not contractually obliged to pay the claims made on other Member States as well as our own, if these other Member States are in financial difficulty.

The contractual liability towards the European Union is the more worrying because it is on a joint-and-several basis, because the liability is for the entire EU Budget, and because the figures are very large and run for multiple years:

- The cash budget for the remainder of the current budget period (called a Multiannual Financial Framework or MFF), which has been set until 2020;
- Funds, facilities and guarantees already engaged during previous MFFs;
- What can be added as funds, facilities and guarantees during the current MFF.

The key link is the EU Budget, which is not allowed to go into deficit. Member States are responsible for the EU Budget and their contributions are set so that the EU Budget shows a surplus. This acts as a structural guarantee of the European Union's liabilities by the Member States, including by the UK, to any creditors of the European Union.

The cash budget is met from:

- VAT – which by treaty counts as the EU's "Own Resources"
- Customs/Sugar levies, which by treaty also count as the EU's "Own Resources"
- The Member State cash contribution based on each Member State's GNI as a share of EU GNI

The Member States have committed to fund the EU Budget, on a joint-and-several basis, for the remainder of the current MFF. The committed amount is 1.23% of EU GNI, of which 0.97% can be expended as cash payments and must be met with cash income from the sources listed above, and 0.26% can be engaged as funds, facilities and guarantees.

Moodys has specified that the 0.26% equals EUR40 billion per annum, which would total EUR280 billion over the 7 years of the MFF, and they state explicitly that this ability to claim on the Member States for extra resources (over and above the cash claims) is joint-and-several.

Since the cash budget and the funds/facilities/guarantees budget are set under the same treaty and process, it follows that the EU's claims on Member States for the cash income are also joint-and-several and for the entire MFF.

Furthermore, the budget-setting mechanism is that the Member State cash contribution based on GNI is initially fixed via a formula of Total cash budget minus expected VAT receipts minus expected Customs/Sugar levies receipts = total to be claimed from Member States.

The formula would still stand if VAT receipts and Customs/Sugar levies receipts were zero: then the entirety would be claimed as the Member State cash contribution. At that point, if some Member States could not pay, the contributions of others would be raised. Contributions would be raised further if borrowers from funds and facilities did not repay, and/or guarantees were called.

In theory and by contract the entire amount could be claimed from just one Member State, rendering any need to debate 'extraordinary support' superfluous, the amounts that could be claimed contractually being so huge.

To quantify the amounts, let's start with the cash side or the "payments appropriation" as it is termed in the EU Budget. It is 0.97% of EU GNI of EUR15,381 million for 5 years (2016 – 2020), since the 2014 and 2015 contributions have now been fixed and paid. The annual amount guaranteed by the Member States for the EU "payments appropriation" Budget is EUR149.2 billion. Since the current MFF still has five years to run, each Member State could contractually be asked for EUR746 billion.

On the funds/facilities/guarantees side, called the "commitments appropriation" in the EU Budget, it is more intricate to quantify, since the amount is composed of what was already engaged in earlier MFFs and what can be engaged in this one.

The available data indicates that the following funds/facilities/guarantees have either already been set up, or else the authority exists within the EU Budget for the current MFF to set them up:

| <b>MFF applicable/type</b>   | <b>Mobilised ceiling</b> | <b>Drawn</b>  | <b>Undrawn</b> |
|--|--------------------------|---------------|----------------|
| Funds/MFFs up to 31.12.13  | 125.0                    | 57.3          | 69.5*          |
| Guarantees/MFFs up to 31.12.13   | 36.1                     | 36.1          | 0.0            |
| EU guarantee for European Fund for Strategic Investments/MFF 2014-2020 | 30.0                     | 2.7           | 27.3           |
| EU guarantee for EIB lending outside the EU/MFF 2014-2020              | 16.0                     | 23.5*         | n/a            |
| Headroom for further funds/facilities/guarantees under 2014-2020 MFF   | 234.0                    | 0             | 234.0          |
| <b>Total</b>   | <b>441.1</b>             | <b>119.6*</b> | <b>330.8*</b>  |

There are some discrepancies in the figures as explained in the main sections, especially regarding the Macro Financial Assistance Programme (which has no stated ceiling) and the European Fund for Strategic Investments (where the break-out is not stated in information issued so far between what is at the EU's risk, what is at the EIB's risk, and what is the total project size). The places where these factors impact are marked with an \* above.

The maximum risk for the UK that could thus be created by the EU under the heading "commitments" is EUR441.1 billion up until the end of the current MFF.

We can thus come to a total for a Member State's maximum possible loss through its backing the obligations of the EU:

| <b>Category</b>                    | <b>Amount</b>      |
|------------------------------------|--------------------|
| Payments Appropriation             | EUR746.0 billion   |
| Commitments Appropriation          | EUR441.1 billion   |
| Member State Maximum Possible Loss | EUR1.187.1 billion |

Finally we can come to grand total under the UK's current contracts:

| <b>Category</b>              | <b>Amount</b>      |
|------------------------------|--------------------|
| EU/Payments Appropriation    | EUR746.0 billion   |
| EU/Commitments Appropriation | EUR441.1 billion   |
| EIB subscribed capital       | EUR39.2 billion    |
| ECB subscribed capital       | EUR1.5 billion     |
| UK Maximum Possible Loss     | EUR1,227.8 billion |

That equates to GBP982 billion. The UK's national debt is currently GBP1.560 trillion or 82% of UK GDP's of GBP1.902 trillion. A full call on the UK's contracts would raise the national debt to GBP2.542 trillion or 134% of GDP.

Over and above that could come the need to render "extraordinary support" to any of these organisations.

With the UK's public finances in deficit, any calls for money from these mechanisms simply get added to the UK's deficit and the UK has to borrow more. In other words, the guarantee mechanisms allow for a debt transfer to the UK, in the same way that the Member State cash contributions are a mechanism for a wealth transfer in the other direction.

The amounts of the non-cash obligations, how they are invoked, raised and reduced, are subject to the EU treaties and the statutes of each body concerned, but as a generality these matters are now decided by Qualified Majority Voting and no single Member State has a veto. In each situation the statutes lay down which type of meeting has to take which type of decision, and what thresholds have to be met in order for a vote to be carried.

A typical Qualified Majority Voting decision would be a decision to call up the subscribed-but-uncalled capital of the European Investment Bank: this has to be taken by the EIB Board of Directors, and at least one third of the members entitled to vote representing at least 50% of the subscribed capital must vote in favour. The EIB Board of Directors consists of senior Finance Ministry officials from each of the EU Member States, which are the shareholders.

In only one situation within the scope of this paper can the UK exercise a right of veto on its own: the raising of the subscribed capital of the EIB. In all other cases the UK would have to garner the support of other Member States to form a blocking minority, or garner the support of a significant majority of Member States to introduce and push through a measure of its own.

This situation has arisen out of the core EU structure whereby the large/strong Member States enter into a "collectivisation" with the small/weak ones in order that the latter attain the level of economic development of the former. This occurs via the large/strong Member States enabling public spending (both investment in infrastructure and day-to-day expenditure on healthcare, benefits and pensions) in the small/weak ones.

This is proven by the calculations in this paper about the benefits drawn by different Member States, by dint of their access to EU-related funding facilities and guarantees:

1. A basic measure of the quantity of financial support taken;
2. An enhanced measure based on each Member State's individual creditworthiness, showing how much that Member State benefits from the "credit enhancement" lent to its loans by the large/strong Member States

These measures show not just who benefits most and least, but also who contributes most by lending their "credit enhancement" to the debts of the small/weak Member States.

The UK comes out second from the top in terms of the size of our economy and our lending our "credit enhancement" to other EU Member States. The UK comes second from the bottom in terms of benefits drawn. Italy and Spain come out top in terms of the quantity of financial support taken as a percentage of their own size. Greece comes out top in terms of the "credit enhancement" lent to its loans by the large/strong Member States.

The total financial picture of the UK's financial relationship with the EU and its institutions comes out as negative at every level:

| <b>Category</b>  | <b>Amount - EUR billions</b> |
|--|------------------------------|
| Annual trade deficit   | (77.0)                       |
| Annual net cash deficit  | (10.0)                       |
| EU guarantees on risk under "commitments appropriation"                | (207.1)                      |
| EU guarantee ceiling still available under "commitments appropriation" | (234.0)                      |
| Annual guarantee of EU "payments appropriation"                        | (149.2)                      |
| Loans received via European Investment Bank                            | 40.6                         |
| Loans received via European Fund for Strategic Investments             | 1.4                          |
| Paid-in capital in European Investment Bank                            | (3.5)                        |
| Callable capital in European Investment Bank                           | (35.7)                       |
| Paid-in capital in European Central Bank                               | (0.1)                        |
| Callable capital in European Central Bank                              | (1.4)                        |

The loans received from the EIB (as normal loans and as EFSI funds) are about of the same amount as the UK's capital in the EIB: we are having our money recycled to ourselves. Upon EU exit our shares in the EIB would be cancelled and we could take over the EIB's UK loan book, a zero-sum exercise in itself and the only area where the UK would not see a meaningful benefit from EU withdrawal.

Nor is the UK's risk as an EU member even static.

These EU-related mechanisms, and the EIB and the EFSI in particular, are aggressively expanding their loan volumes inside and outside the EU in a conscious and deliberate programme of counter-cyclical, public infrastructure investment.

At the same time the UK is in austerity mode, trying to reduce public spending.

There is a complete conflict between the two agendas. It is almost comical that we should closely monitor the use of the national credit card within the UK, but have lent it – Long Number, PIN, Security Code, Expiry Date and all – to so many EU organisations, who can use it on a shopping list drawn up by a Qualified Majority of Member States, and who also now have the power to raise the spending limit on our card by a Qualified Majority of Member States without the UK's agreement.

It is surreal that with the cash in our right pocket we are pursuing an economic policy on the Hayek/Friedman model, whilst with the cash in our left pocket a Qualified Majority of Member States are operating an economic policy for us on the John Maynard Keynes model.

This situation is unsustainable, and will be resolved by the referendum on 23 June 2016.

If it is Yes, the UK electorate will have decided to subscribe to the EU model, and, as the UK's economy grows and the rest of the EU does not, the UK will shoulder an increasing share of the burdens and risks.

A No vote will point the UK into uncharted territory but without the burden of EU taxes, cash contributions and guarantee liabilities.

## Sovereign risk and “the full faith and credit of the United Kingdom”

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The UK government, by signing the various treaties that have constructed the European Union in the way it exists now, has made the UK a party to the financial mechanisms of the EU:

- A member of the European Union itself, which is a legal person in its own right as confirmed in the TFEU p302 No24;
- A shareholder in the European Investment Bank, established pursuant to the TFEU;
- A shareholder in the European Central Bank, also established pursuant to the TFEU.

The related obligations – irrevocable, unconditional obligations to pay money over – were entered into as “sovereign risk” obligations of the United Kingdom.

A “sovereign risk” obligation is one of a nation state, as is explained in the Glossary, but what sits behind that? It is the “full faith and credit” of the United Kingdom.

“Faith” means that the UK will not refute the obligation and refuse to pay, and instead it will both bind all natural and non-natural legal persons in the UK into obligations to pay taxes, and it will use its public finances organisation to collect those taxes and make the requisite payments to the EU.

“Credit” means that these taxpayers have the capacity to pay, on time and in full.

This has been arranged very satisfactorily in the UK.

UK taxpayers are both natural legal persons and non-natural legal persons (companies, trusts, funds) who are resident in the UK for tax purposes. It is a criminal act for such a legal person not to comply with UK tax laws and pay what they owe.

HM Revenue and Customs is the collection agent for all taxes and levies. These monies run onto HMRC's accounts at the Bank of England, and can be credited onwards to the accounts of HM Treasury, from which accounts the payments to the EU are transferred.

Where the income from taxes is insufficient, HM Treasury can instruct the UK Debt Management Office to adjust the Public Sector Borrowing Requirement ("PSBR") and issue more UK government bonds ("gilts") to raise the balance of funds from investors. Then, in the following UK budget, the Chancellor of the Exchequer would re-set tax rates and the PSBR with any new expenses factored in.

In other words, when it comes to any claims from the EU, the UK taxpayer is obliged to pay them – either at once through immediate higher taxes, or in future because the payments on the gilts require higher future taxes to meet them.

Legal persons in the UK thus collectively shoulder the burden of taxation: in normal circumstances the whole burden does not fall on one person or company. But in theory and in law it could do. The UK is creditworthy and has a very positive credit rating because there are a sufficient number of taxable legal persons here who collectively have the financial capacity to meet all the tax requirements that need to be imposed to make the payments on the national debt. This collective concept is integral to the term "the full faith and credit of the UK".

Any mention of the term "sovereign risk", the credit risk of the UK, the UK "credit rating", comes down to the strength of the legal and organisational linkages between the government and the taxpayer ("faith"), and the taxpayer's ability to pay ("credit"). In Greece the organisational linkage is very weak: a culture of tax evasion. In the UK it is very strong. Up to now the ability of the UK taxpayer to pay was very strong as well.

This "faith" and this "credit" are mobilised in the EU financing mechanisms to raise funds and make loans to end-users in all Member States, in many non-EU countries, and to end-users in the EU that are projects.

The UK's "full faith and credit" act as a credit enhancement to the investors providing funds to these end-users, of which by far the majority are not in the UK.

## EU Member State credit ratings and the "creditor ladder"

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The UK's risk on these EU mechanisms depends on:

- What are the size and nature of the risks being undertaken by the mechanism itself, making the loss of the UK's current money-at-risk and/or a call for more money likely?
- What is the credit quality of the other backers and will they, when called upon to pay up, do so, or will they default and leave any black holes to be filled by the more creditworthy backers?

The methodology used in this paper to assess the first question is:

- Look at the EU mechanisms themselves, their balance sheets, who they are borrowing from, and what would have to happen for their equity to be eliminated – which would eliminate the UK's current money-at-risk and necessitate a call for more money
- Look at who the mechanisms are lending money to
- Look at what the credit ratings are of those entities and therefore how likely they are to repay in full and on time
- Look at where the claim of the respective EU mechanism would rank on the creditor ladder were one of the borrowers to go bankrupt

The basic framework for all of this is an organisation's balance sheet, which shows what the organisation owns (Assets) and what it owes (Liabilities), ranked by their maturity date:

| What the organisation owns<br>Assets                            | What the organisation owes<br>Liabilities |
|---|---|
| <b>Below 1 year maturity</b>                                    |   |
| Cash-in-banks   | Short-term loans                          |
| Trade debtors   | Trade creditors                           |
| Finished goods  | Taxes                                     |
| Work-in-progress and materials                                  | Short-term portion of long-term debt      |
| <b>Above 1 year maturity incl with no stated final maturity</b> |   |
| Equipment and machinery   | Long-term debt                            |
| Buildings   | Mezzanine debt                            |
| Land  | Subordinated debt                         |
| Goodwill on shares in acquired businesses                       | Shareholders' Equity                      |

If the assets shrink in value to the point that they no longer cover Shareholders' Equity, the company is bankrupt. If the cash runs out and the company can no longer pay its liabilities as they fall due, it is insolvent.

In either case a bankruptcy trustee will be appointed to liquidate the assets and pay creditors, in accordance with their ranking on the creditor ladder, not in accordance with the maturity date of a creditor's claim.

The basic creditor ladder is:

| Rung | Type of creditor   |
|------|--|
| 1.   | Legally-preferred creditors (e.g. HMRC, employees)         |
| 2.   | Secured creditors (e.g. with a mortgage on land&buildings) |
| 3.   | Senior unsecured creditors                                 |
| 4.   | Mezzanine debt providers                                   |
| 5.   | Subordinated debt providers                                |
| 6.   | Shareholders/Equity investors                              |

Please see Appendix 1 for a fuller explanation.

To the question "What is the credit quality of the other backers?" we use the long-term credit ratings issued by the credit rating agencies Standard & Poor and Moodys.

All of the backers of the EU mechanisms are also borrowers from them to some degree.

Appendix 2 contains a fuller explanation of the ratings system and also of EU Member States' linkage to the Euro, and how the two interplay.

Below is a table containing:

- Country
- S&P rating for a Long-term debt on the country's balance sheet, ranking at the level of Senior unsecured creditors on the creditor ladder
- Moodys' equivalent rating
- The grade indicated by the rating, based on the S&P rating, either "Investment Grade" or "Speculative Grade"
- The degree of credit risk being taken by the investor in buying that debt

- Three indicators of Euro status:
  - Euro – Eurozone Member State; automatically requires adherence to the EFST
  - EFST – adherence to the European Fiscal Stability Treaty
  - ERM – member of the European Monetary System; Eurozone Member States went into the ERM and then out of it into the Euro

EU Member State Credit Ratings & Euro-Status, ordered by size of the country's GDP where countries have the same rating, as of 3 February 2016:

| Nr | Country        | S&P        | Moody's    | Level       | Risk        | Euro | EFST | ERM |
|----|----------------|------------|------------|-------------|-------------|------|------|-----|
| 1  | Germany        | AAA        | Aaa        | Investment  | Minimal     | ✓    | ✓    | n/a |
| 2  | Denmark        | AAA        | Aaa        | Investment  | Minimal     | ✗    | ✓    | ✓   |
| 3  | Sweden         | AAA        | Aaa        | Investment  | Minimal     | ✗    | ✓    | n/a |
| 4  | Netherlands    | AAA        | Aaa        | Investment  | Minimal     | ✓    | ✓    | n/a |
| 5  | Luxembourg     | AAA        | Aaa        | Investment  | Minimal     | ✓    | ✓    | n/a |
| 6  | <b>UK</b>      | <b>AAA</b> | <b>Aa1</b> | Investment  | Minimal     | ✗    | ✗    | ✗   |
| 7  | Austria        | AA+        | Aaa        | Investment  | Very low    | ✓    | ✓    | n/a |
| 8  | Finland        | AA+        | Aaa        | Investment  | Very low    | ✓    | ✓    | n/a |
| 9  | France         | AA         | Aa2        | Investment  | Very low    | ✓    | ✓    | n/a |
| 10 | Belgium        | AA         | Aa3        | Investment  | Very low    | ✓    | ✓    | n/a |
| 11 | Czech Republic | AA         | A1         | Investment  | Very low    | ✗    | ✗    | ✗   |
| 12 | Estonia        | AA-        | A1         | Investment  | Very low    | ✓    | ✓    | n/a |
| 13 | Ireland        | A+         | Baa1       | Investment  | Low         | ✓    | ✓    | n/a |
| 14 | Slovakia       | A+         | A2         | Investment  | Low         | ✓    | ✓    | n/a |
| 15 | Slovenia       | A-         | Baa3       | Investment  | Low         | ✓    | ✓    | n/a |
| 16 | Lithuania      | A-         | A3         | Investment  | Low         | ✓    | ✓    | n/a |
| 17 | Latvia         | A-         | A3         | Investment  | Low         | ✓    | ✓    | n/a |
| 18 | Poland         | A-         | A2         | Investment  | Low         | ✗    | ✓    | n/a |
| 19 | Spain          | BBB+       | Baa2       | Investment  | Moderate    | ✓    | ✓    | n/a |
| 20 | Malta          | BBB+       | A3         | Investment  | Moderate    | ✓    | ✓    | n/a |
| 21 | Italy          | BBB-       | Baa2       | Investment  | Moderate    | ✓    | ✓    | n/a |
| 22 | Romania        | BBB-       | Baa3       | Investment  | Moderate    | ✗    | ✓    | n/a |
| 23 | Portugal       | BB+        | Ba1        | Speculative | Substantial | ✓    | ✓    | n/a |
| 24 | Hungary        | BB+        | Ba1        | Speculative | Substantial | ✗    | ✓    | n/a |
| 25 | Bulgaria       | BB+        | Baa2       | Speculative | Substantial | ✗    | ✓    | n/a |
| 26 | Croatia        | BB         | Ba1        | Speculative | Substantial | ✗    | ✓    | n/a |
| 27 | Cyprus         | BB-        | B1         | Speculative | Substantial | ✓    | ✓    | n/a |
| 28 | Greece         | B-         | Caa3       | Speculative | High        | ✓    | ✓    | n/a |

- Denmark is in the ERM and therefore subject to the EFST, but has no commitment to join the Euro
- Sweden voluntarily abides by the EFST, but is not in the ERM and has no commitment to join the Euro
- Only the UK and the Czech Republic have a full set of opt-outs
- The other five Euro-Out Member States are committed to joining the Euro at some stage

## Conclusion:

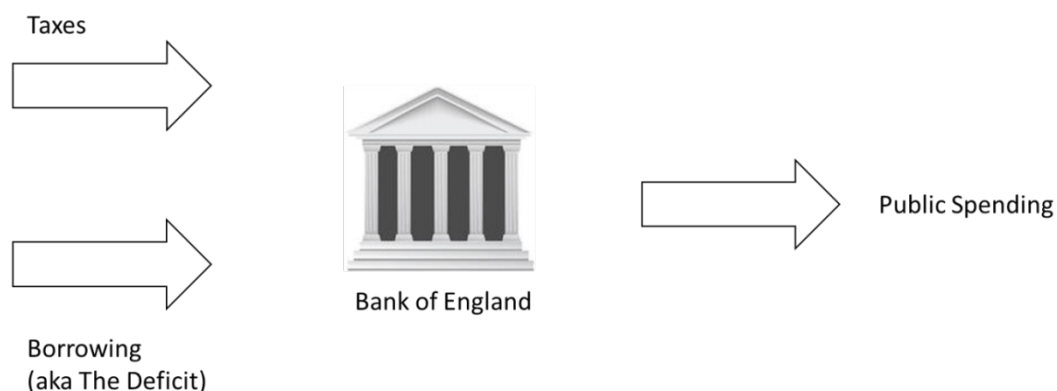
- The ratings of several countries appear very generous, especially Greece which had to restructure its debt twice in the last four years
- The ratings of the smaller/weaker countries are supported by their access to the EU mechanisms through which they can draw funds
- As stand-alones they would not rank as high as they do
- Their rating is supported by the biggest and most creditworthy countries – and only the UK and Germany rank as both – that back the EU mechanisms
- The structure is therefore dependent principally on the “full faith and credit” of the Germany and the UK

# How obligations to EU organisations sit within the structure of the UK’s public finances

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When we talk about the UK backing EU mechanisms, we are talking about the likelihood of the UK being called upon to make cash payments to the EU as part of the UK’s overall public expenditure.

UK public expenditure is all paid for out of the Bank of England by HM Treasury, and they get their money in from tax revenues (collected by HM Revenue & Customs) or borrowing (organised by the UK Debt Management Office):



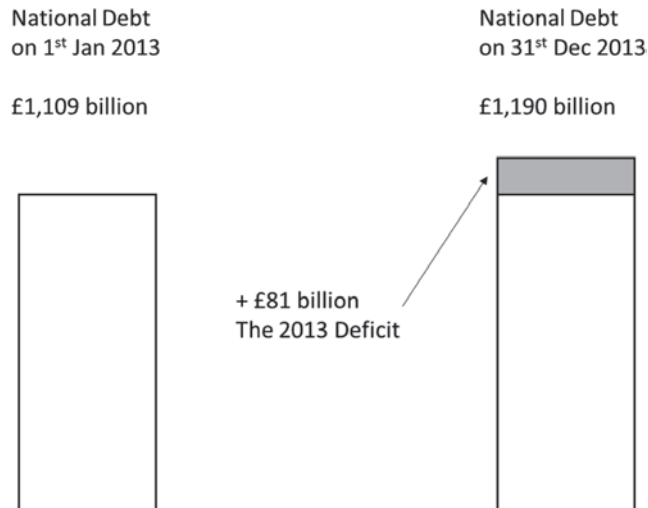
Two levels of tax revenues collected by HM Revenue & Customs in this way count as the property of the EU already. These are firstly Customs and Sugar levies, and secondly VAT – those monies are classed as the “EU’s Own Resources” and are collected by HM Revenue & Customs and paid directly on to the EU – a wash-through, with the exception of the differential between the assumed EU-wide VAT rate of 30% and the 20% rate applied to goods and service in the UK.

The third of the three elements of the cash that is collected here and paid to the EU is the UK’s Member State cash contribution. It is based on the UK’s GNI as a share of EU GNI: for 2014 it was EUR14.5 billion, reduced by the rebate of EUR6.1 billion. This cash contribution and the VAT rate differential are simply two of the expenses – like the costs of the NHS and the defence budget – that have to be covered from the UK’s other taxes and borrowing.

Similarly, were there to be a call from one of the European institutions for more capital – as happened at the European Investment Bank in 2012 – then that just gets added to the list of the UK’s expenses.

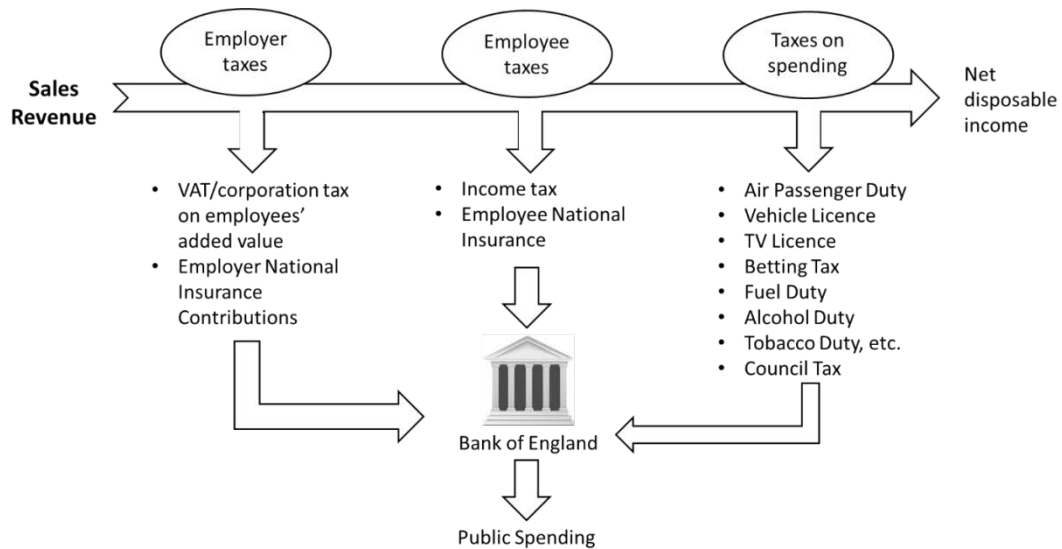
Lastly, were the EU to need to call on Member States for extra budget because the EU had loans to repay to investors and it had not received loan repayments from its borrowers, that call just gets added to the lengthening list of the UK’s expenses.

The deficit for a year has to be borrowed, and gets added to the national debt (the accumulation of the deficits from all previous years):



Where do the borrowings come from? From international investors, who buy UK government bonds called "gilts" from the UK Debt Management Office. These investors would include other governments, banks, central banks like the Bundesbank, pension funds, and insurance companies. In fact this is the same investor base that buys bonds issued by the European Union itself or the European Investment Bank.

Where do tax revenues come from? From the economy:

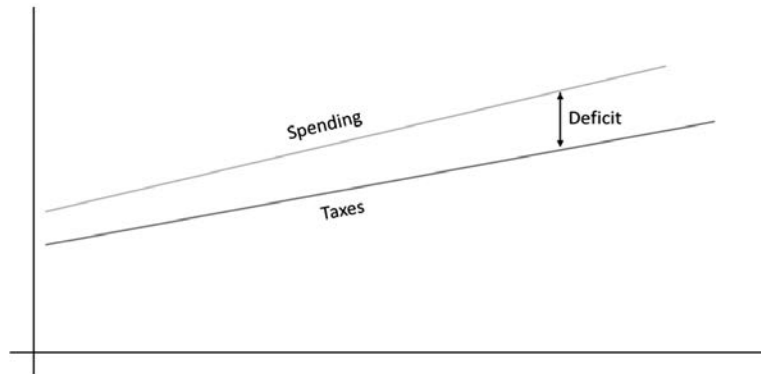


Funds come in from the many types of tax, to meet public spending, but they currently need to be topped up by borrowing.

# What status the UK's public finances are in and how calls for funds from the EU are met

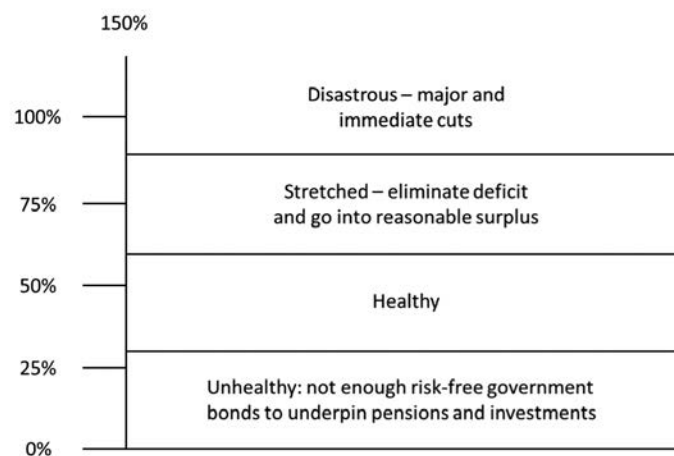
The trajectory of the UK's public finances since the early 2000s has been a consistent worsening, although starting from a very healthy position:

## Trajectory of UK public spending / debt-to-GDP

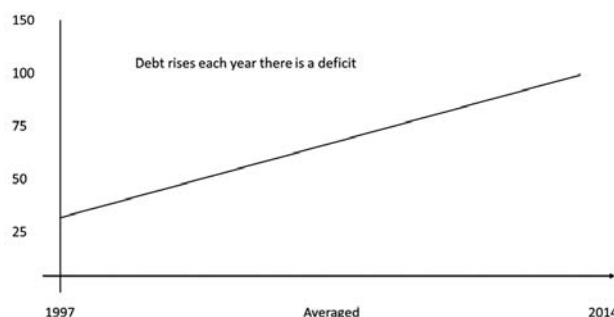


The relationship of national debt to GDP (or to total economic production) has knock-on effects on the health of the economy, which is why the Eurozone crisis has created the EU Fiscal Stability Treaty to try and keep the debt/GDP ratio of Eurozone economies within the "Healthy" zone in the chart below.

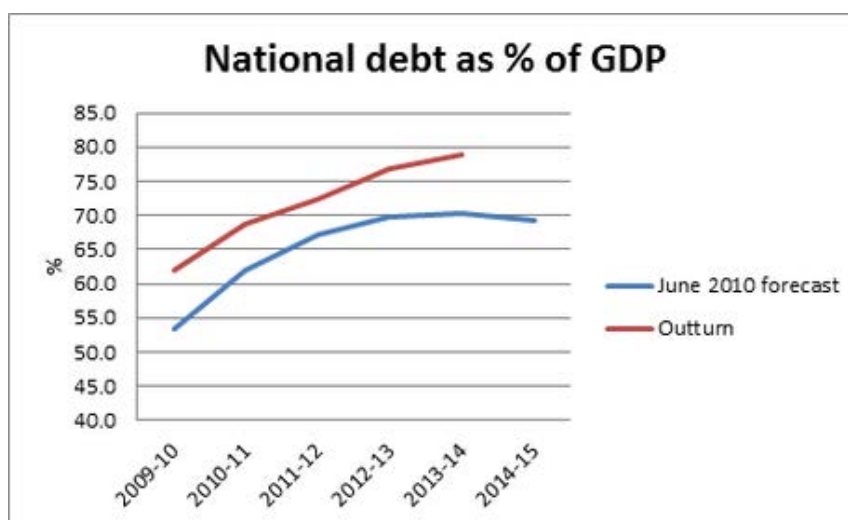
## Debt-to-GDP ratio



Every year there is a deficit at all, the national debt goes up. The Conservative government claims to have halved the deficit, but all this means is that the debt is not increasing as fast as it was before:



The government had projected that national debt would be falling by now – meaning that the deficit would have been completely eliminated and that the UK would be running a surplus. But this has not happened. Austerity – in the 2010-2015 Parliament – was not severe enough to eliminate the deficit; or one could also say that economic growth has not been strong enough. At any rate the golden day - when taxes exceed expenditure, the deficit is eliminated, the public finances go into surplus and the national debt begins to fall – is still beyond the horizon:



In a situation where the UK is already in a cash deficit on its domestic budget, and is having to borrow so as to maintain current levels of expenditure on health, education, defence etc., calls for cash from the EU simply increase the deficit and have to be borrowed: a 1-to-1 increase in the UK's national debt to avoid the EU Budget going into deficit. That is what is meant by a debt transfer: the EU's borrowings are transferred to the UK, because the UK borrows instead to pay cash into the EU Budget which, failing that, would fall into deficit.

## The organisations that benefit from Member State guarantees and how the guarantees could materialise into a demand for cash

We will be looking at each organisation individually as to what is the activity they undertake which puts Member States "on risk", for how much, and in what shape and quantity a cash call on Member States could materialise. At a high level it is as follows:

| Organisation                  | Their activity   | Circumstances giving rise to a call for cash  |
|-------------------------------|--|---|
| The European Union (the "EU") | <ul style="list-style-type: none"> <li>• Borrowing from investors to make loans to Member States and other governments</li> <li>• Issuing guarantees to the EIB for their loans outside the EU</li> <li>• Issuing guarantees to the EIB for their loans and other capital injections connected to the European Fund for Strategic Investments</li> </ul> | <ul style="list-style-type: none"> <li>• Member States and/or other governments fail to pay back their loans</li> <li>• The EIB's borrowers outside the EU fail to pay back their loans and EIB calls the guarantee</li> <li>• EIB's engagements in the European Fund for Strategic Investments fail and EIB calls the guarantee</li> <li>• These failures and guarantee calls put the EU Budget in deficit</li> <li>• The EU makes cash calls on the Member States to cover the deficit</li> </ul> |

| Organisation                             | Their activity   | Circumstances giving rise to a call for cash  |
|--|--|---|
| The European Investment Bank (the "EIB") | <ul style="list-style-type: none"> <li>· Borrowing from investors to make loans to projects inside and outside the EU</li> </ul> | <ul style="list-style-type: none"> <li>· Borrowers under projects inside the EU fail to repay</li> <li>· Borrowers under projects outside the EU fail to repay, and the call under the EU's guarantee is insufficient to cover the loss</li> <li>· Engagements in the European Fund for Strategic Investments fail, and the call under the EU's guarantee is insufficient to cover the loss</li> <li>· The losses deplete the EIB's own capital</li> <li>· The EIB calls up the capital that is subscribed but uncalled</li> <li>· The EIB raises its subscribed capital and calls it up</li> </ul> |
| The European Central Bank (the "ECB")    | <ul style="list-style-type: none"> <li>· Running the European System of Central Banks</li> </ul>                                 | <ul style="list-style-type: none"> <li>· Operations in Euro result in losses that cannot be re-allocated out to the Eurozone National Central Banks</li> <li>· The losses deplete the ECB's own capital</li> <li>· The ECB calls up the capital that is subscribed but uncalled</li> <li>· The ECB raises its subscribed capital and calls it up</li> </ul>   |

The following sections of this paper deal with each one the above organisations, addressing in each case the key questions of:

- How likely is a call on the UK to be made; and
- What is the impact if it does?

Please note that two of the main sources of risk to the UK are not "organisations" in the sense used above. These are the European Financial Stabilisation Mechanism ("EFSM") and the European Fund for Strategic Investments ("EFSI").

The EFSM is one of the bailout funds operated by the European Union.

The EFSI is not a "fund" but rather an expansion of the EIB's loan portfolio, partially under EU guarantee, and partially a mobilisation of the EIB's own resources to undertake higher-risk engagements than exist in their normal portfolio.

## The European Union

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### How the UK's contributions to the EU Budget are set – cash contributions and backing for "commitments"

Member State liabilities to the EU have been defined in the Treaty on the Functioning of the European Union. The European Commission is charged with operating the EU Budget in line with the Treaty. This means setting and collecting the cash contributions to meet the portion of the EU Budget that can be spent as "payments", and entering into arrangements that "mobilise" the portion of the EU Budget that is available for "commitments".

The income of the EU Budget is broken down into three categories, with two termed as “Own Resources”:

1. “Own Resources - Customs and Sugar levies”, meaning that any sugar, import or export duties levied by HM Revenue & Customs belong to the EU and are paid straight over;
2. “Own Resources - VAT-based contributions”, meaning a pay-over of VAT levied and collected by Member States based on an assumed rate of 30%. HM Revenue & Customs collect UK VAT for HM Treasury but at a current rate of 20%. HM Treasury pays over not only the 20% that consumers and businesses pay on VAT’able goods and services, but also an extra 10% from the UK’s own resources. This extra 10% has to be diverted from other tax income or else borrowed and added to the Public Sector Borrowing Requirement;
3. Contributions from Member States based on their share of EU Gross National Income (GNI).

A great deal of note is taken of the amount paid by the UK under (3) – the Member State cash contribution. The UK’s initial amount as calculated by the European Commission is subject to a rebate, and then is subject to retrospective adjustment based on what the EU collected under “Own Resources” and what share each Member State turned out to have of that year’s EU GNI.

Member States with a growing GNI will tend to have their cash contributions adjusted upwards and those in recession downwards.

Far less note is taken of the other very significant categories. The amounts paid over under these two categories will, like (3), reflect the size of a Member State’s economy (their GNI).

Indeed, the usage of term “own resources” for the Customs/Sugar levies and for VAT is itself questionable. They are certainly the EU’s property under EU Treaties, but they are collected through the Member State tax collection agencies and are paid by Member State consumers and businesses, and the volume of money collected from any one Member State will be in line with that Member State’s GNI, just like its cash contribution. The cash contribution is funded from taxes on Member State consumers and businesses, whilst VAT and the Customs/Sugar levies are taxes on Member State consumers and businesses.

Just like the cash contributions, Member States with a growing GNI will tend to deliver more VAT and Customs/Sugar levies, and the ones stagnant or in recession less.

There is a further interplay between the different categories, namely that if a large part of the EU is stagnant or in recession, this will decrease the overall take from VAT and the Customs/Sugar levies, and increase the portion of the EU income that must be drawn from the Member State cash contributions. In turn this will place a greater proportional burden of the Member State cash contributions on the Member States whose economies are growing.

The UK’s cash payments to the EU are therefore a levy on the size of the UK economy at all three levels - Member State cash contribution, VAT and Customs/Sugar levies – and they will all increase if the UK’s GNI is growing and the EU as a whole is stagnant or in recession.

That is the income side of the EU Budget. The permitted outgoings from the EU Budget fall into two categories and must meet both the cash costs and the funding of its many programmes:

- the permitted cash costs are termed in the EU Budget as the “payment appropriation”;
- the permitted actions to enable the funding of its many programmes are termed the “commitments appropriation”.

The existence of the “commitments appropriation” permits the EU – as a legal person in its own right – to firstly to set up programmes itself that are not funded from the cash budget but with debt borrowed from investors on the EU name, and then on-lent to various entities inside and outside the EU.

Secondly the EU is permitted within the “commitments appropriation” to issue guarantees to other entities – and it is principally the European Investment Bank – to enable them to borrow and on-lend to various entities inside and outside the EU.

These ultimate borrowers – from the EU directly, or from the EIB under EU guarantee - are of course obligated by contract to repay the loans and interest to the EU/EIB, and the S&P/Moodys credit ratings of these countries indicate how likely it is that the EU/EIB will recover 100 pence in the pound from these loans.

If the EU does not recover 100 pence in the pound on its direct loans, though, or if a guarantee is called, the cash to repay the investors or to pay out on the guarantee can be drawn from the EU Budget – which is then drawn in turn from the EU Member States.

The EU Budget is not allowed to go into deficit. Since all its expenses have to be paid out of the EU Budget, and the payments on its own loans and its guarantees are classed as eligible expenses, the EU's loan repayments and guarantee obligations are firstly guaranteed by the EU Budget, and are then in turn guaranteed by the Member States because of their treaty obligation to ensure the EU Budget does not go into deficit.

The EU Budget is an obligation of the Member States for the 7-year Multiannual Financial Framework for 2014-2020. A Multiannual Financial Framework (an "MFF") has to be set for a minimum 5-year period, as laid down in the TFEU. The current MFF sets the EU Budget as:

- A maximum of 1.23% of EU Gross National Income ("GNI"), of which...
- Up to 0.97% can be spent as "payments"
- The remaining 0.26% can only be deployed as "commitments"
- The credit rating agency Moodys, in their report on the EU in September 2015, quantified the 0.26% "commitments" as approx. EUR40 billion per annum

GNI differs from the more familiar Gross Domestic Product ("GDP") but basically measures the size of a country's economy. World Bank figures for 2014 put EU GDP at EUR16.6 trillion as opposed to the GNI derived from Moodys' figures of EUR15.3 trillion. There is no reason to suppose that a Member State's percentage share of EU GNI differs from its percentage share of EU GDP, so there is no need in this paper to try and reconcile the difference between the GNI and GDP. We use in this paper the lower GNI figure to specify amounts of money, to be conservative, but we use GDP figures from the World Bank to derive the percentage shares of each Member State in the EU economy as a whole.

If 0.26% of GNI equals EUR40 billion per annum as Moodys state, then 0.97% of GNI for "payments" equates to EUR149.2 billion per annum, to be covered by:

- VAT receipts;
- the Customs and Sugar Levies;
- Member State cash contributions based on their percentage share of EU GNI.

Notwithstanding the existence of the direct revenues of the EU from its "own resources", the EUR149.2 billion "payments" budget and indeed the EUR189.2 billion total budget are both an obligation of the Member States under the TFEU.

Moodys refer unequivocally on p1 of their report on the EU to the "European Commission's [author note: acting on behalf of the EU] right to call for additional resources of on average up to around 0.26% of EU Gross National Income (around EUR40 billion on average) each year during 2014-20 from its member states, on a joint and several basis".

This is a vital statement.

Firstly it confirms that the Member States are legally obliged by treaty to back the entire "commitments appropriation" and for the duration of the MFF.

Secondly, if the EU has the right to call upon the Member States for "additional resources" in respect of the entire "commitments appropriation" for 2014-2020, it follows that the EU already exercises the right to call on the Member States to deliver the basic resources, i.e. the "payments appropriation": both "appropriations" are subject to the same process and framework within the context of the TFEU.

Thus one can induce that the Member States are legally obliged by treaty to back the entire "payments appropriation" and for the duration of the MFF.

In order to assess Member State liabilities for the “payments appropriation”, it has to be recognised that the Member State cash contributions are a make-weight, set on the expectation of what the EU will raise during a year from its “Own Resources”, and then adjusted at the end of the year in line with what the EU actually raised.

The contractual situation is that, if the EU turned out to have raised no resources of its own at all, the EUR149.2 billion for “payments” can be claimed from the Member States, initially based on the same percentage share of EU GNI that was used to calculate GNI-based cash contributions.

More than that, the obligation on the Member States to support the EU Budget is a joint-and-several one, which Moodys confirm in their report. This works as follows.

Consider a situation where there are four subscribers to a business and they own it respectively:

- A. 40%
- B. 25%
- C. 25%
- D. 10%

Then the business borrows EUR10 million and the subscribers issue a joint-and-several liability guarantee for the loan. When the business fails and the loan goes bad, the lender will in the first instance send out claims under the guarantee as follows:

- A. EUR4.0 million
- B. EUR2.5 million
- C. EUR2.5 million
- D. EUR1.0 million

D then declares bankruptcy and cannot pay their 10% share of the guarantee claim. The bank recalculates the claims on A, B and C, by multiplying them by 100/90, to become:

- A. EUR4.44 million
- B. EUR2.77 million
- C. EUR2.77 million

Then, if C declares bankruptcy as well, we are down to just A and B who pay their ownership share x 100/65, because 35% of the subscribers have gone under....

- A. EUR6.15 million
- B. EUR3.85 million

Then B goes “in the tank”: A is the last-man-standing and is asked to pay the entire EUR10 million.

This is the way that Member State liabilities towards the European Union are structured, and this applies equally to the cash contributions and to the backing of the EU’s non-cash “commitments”.

These “commitments” normally arise in two forms:

1. debts that the EU has taken on in order to make loans itself in the context of one of its funds or programmes;
2. guarantees that the EU has issued in favour of the European Investment Bank in order to induce the EIB to:
  - a. make loans for projects outside the EU;
  - b. make loans or subscribe to other forms of capital in projects in the context of the European Funds for Strategic Investments.

If a debt to the EU is not repaid, the debt that was taken on by the EU to fund it still has to be repaid – and the source of repayment is the EU Budget.

If a call on a guarantee is made by the EIB, the source of the cash to make the guarantee payment is the EU Budget. The EU Budget having been set for a given Multiannual Financial Framework, the Member States are obliged to fund the Budget as long as the amounts are within the ceilings set in the MFF.

In effect each Member State could be called on for the entire 0.97% of EU GNI in cash contributions for 7 years, and then to stand behind the EU's non-cash "commitments" of 0.26% of EU GNI:

| Category      | EU GNI           | Percentage | Per annum        | Over 7-year MFF  | 2016-2020 – 5 years |
|---------------|------------------|------------|------------------|------------------|---------------------|
| "Payments"    | EUR15.3 trillion | 0.97%      | EUR149.2 billion | EUR1.04 trillion | EUR746 billion      |
| "Commitments" | EUR15.3 trillion | 0.26%      | EUR40 billion    | EUR280 billion   | EUR280 billion      |
| Total         | EUR15.3 trillion | 1.23%      | EUR189.2 billion | EUR1.32 trillion | EUR1.02 trillion    |

However, as we are 2 years into the current Multiannual Financial Framework and the UK has not been called upon for extra cash contributions for 2014 or 2015, the maximum possible call under "Payments" can be reduced to 5 times 0.97% of EU GNI = EUR746 billion.

As regards "commitments", there is no provision that the EU has to enter into such "commitments" evenly through the 7-year MFF term: they could all be engaged in the final year. As such the EUR280 billion maximum does not run off until it is "mobilised" or expires "unmobilised".

Please note the procedure once the "commitments appropriation" is set by the MFF:

- a portion of the "commitments appropriation" gets earmarked to a fund, facility or guarantee up to a given ceiling via an EU legal instrument, and that means that the "commitments appropriation" has been "mobilised" for the amount of the ceiling;
- depending on what the EU legal instrument says, the fund, facility or guarantee has either to be "drawn" during the MFF in which it was "mobilised", or else it remains available and undrawn during one or more later MFFs, until it expires in accordance with its terms;
- When a drawing is made within a "mobilised" fund, facility or guarantee, a debt is created and it is a long-term one;
- The final maturity of any drawing will for sure be in the next succeeding MFF or even the one after that;
- Nevertheless the drawing is marked against the MFF during which the fund, facility or guarantee was "mobilised" under which it was drawn.

Therefore EU Budget "commitments", once mobilised, are cumulative from one MFF to the next. Funds and facilities – to judge by the European Financial Stabilisation Mechanism and the Balance of Payments Facility – remain open for drawing sine die. Guarantees are issued in relation to loans signed, and the loan needs to be signed during the MFF when the EU legal instrument permitting the guarantee was passed. "Signed" in this case carries the meaning of "Drawn" during that MFF, even if the loan is paid out during a later MFF. Undrawn guarantee ceilings – meaning loans were not signed so as to invoke the guarantee in full - are cancelled at the end of the MFF. Then a new EU legal instrument is passed for the next MFF, permitting further operations of the same type.

So, in addition to the ceiling for new "commitments" under the 2014-2020 MFF, one should also consider what had been mobilised and drawn under "commitments" in previous MFFs. The wording of the Treaty on the Functioning of the European Union 2007 is that the EU should not "enter into commitments" above a set ceiling during an MFF. It does not speak about limiting the total outstanding "commitments" from time to time to that figure.

As a result we need to put a figure on what was outstanding as “commitments” at the end of 2013 – the end of the preceding MFF – so as to be able to express the UK’s Maximum Possible Loss under the EU’s “commitments” as:

- “commitments” as at 31.12.2013, plus...
- The EUR280 billion “commitments” ceiling under the 2014-2020 MFF

With this as the known ceiling, we will try to break it down further into:

- “commitments” as at 31.12.2013
- “commitments” entered into since 1.1.2014
- To what extent the ceiling for the current MFF of EUR280 billion has already been mobilised
- The remaining headroom for the EU to engage further “commitments” by 2020 within the current MFF

Please bear in mind that this portion is about the UK’s contractual contingent liability to pay in more than its cash contributions into the EU Budget. The same question has to be posed about the UK’s exposure through the European Investment Bank and the European Central Bank, and both organisations will be dealt with in this paper.

When the term Maximum Possible Loss is used, this refers to the maximum contractual liability, not the total that might have to be paid over if “extraordinary support” were offered as well. That could be limitless. It is an important point that Moodys refer their customers – the organisations subscribing to the debts of the EU and the EIB - to the willingness and ability of the EU Member States to render extraordinary support, and quote it as a level of protection to their customers.

Moodys consider that the backers of these organisations would want to pay in whatever sums are required in order to protect themselves from the knock-on effects of these organisations going under, such as:

- Damage to their own credibility in front of international investors;
- Increase of their own cost of borrowing;
- Worsening of other terms on their borrowing (smaller quantities; shorter final maturities).

Moodys rank the UK as one of the strongest backers of these organisations i.e. amongst the backers most capable of coming up with the extraordinary support in the required quantities, rather than just wanting to offer support.

## **The European Union – how it creates debts for which the Member States stand guarantor**

The European Union is a legal person authorised to make contracts including for borrowing money. It is authorised to do this in the name of its members – the EU Member States – and at their risk on a joint-and-several basis. It is also authorised to enter into financial commitments, such as issuing guarantees. Both count as mobilisations of the “Commitments” portion of the EU Budget.

Where the engagement under the “commitments” portion is connected to the EU enabling loans to be made, the EU establishes a “fund” or “facility”. The EU will issue bonds to international investors, and the proceeds are lent back-to-back to the approved borrower under the “fund” or “facility” in question. Notwithstanding the existence of the “fund” or “facility”, the investors have lent to the EU and the EU has on-lent to the approved borrower. The “fund” or “facility” is not a legal person and does not contract in its own right.

Where the engagement under the “commitments” portion is the issuance of a guarantee, the guarantee is established via a Decision of the European Parliament and the European Council (i.e. The Council of Ministers). The most recent EU guarantee in favour of the EIB for loans outside the EU was established under Decision 466/2014/EU.

The Decision is binding on all Member States and invokes the EU Budget to stand behind the guarantee: calls on the cash are paid from the EU Budget, which the Member States are obliged to keep in surplus.

## The European Union – what debts have been created up to now

The “funds” and “facilities” in existence now are:

1. European Financial Stabilisation Mechanism, the EFSM or first Eurozone bailout
2. The Balance of Payments Facility
3. The Macro Financial Assistance Programme
4. Euratom
5. “Special instruments”

The guarantees in place are dealt with in more detail in the section about the EIB because they are both issued in EIB’s favour, to indemnify the EIB:

- a. Regarding EIB’s loans for projects in non-EU Member States
- b. Regarding the EIB’s loans in the context of the European Fund for Strategic Investments (the EFSI)

The purposes of the “funds” and “facilities” are:

| “Funds” or “facility”                      | Purpose   |
|--|---|
| European Financial Stabilisation Mechanism | Backstop facility to bail out Eurozone Member States  |
| The Balance of Payments Facility           | Support to non-Euro Area EU Member States in their run-up to Euro membership  |
| The Macro Financial Assistance Programme   | Exceptional support for non-EU Member States facing short-term balance of payments or budget issues, and to encourage structural reforms  |
| Euratom                                    | Financing of projects in the nuclear sector in both EU and non-EU Member States   |
| “Special instruments”                      | <ol style="list-style-type: none"> <li>1. The Emergency Aid Reserve</li> <li>2. The European Globalisation Adjustment Fund</li> <li>3. The European Union Solidarity Fund</li> <li>4. A Flexibility instrument</li> </ol> |

Here are the outstandings under each mechanism, in EUR billions, to EU Member States, as at 31.12.14:

| Nr | Country     | EFSM     | BoP      | Euratom  | Special Instruments | Total    |
|----|-------------|----------|----------|----------|---------------------|----------|
| 1  | Germany     | 0        | 0        | 0        | 0                   | 0        |
| 2  | <b>UK</b>   | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b>            | <b>0</b> |
| 3  | France      | 0        | 0        | 0        | 0                   | 0        |
| 4  | Italy       | 0        | 0        | 0        | 0                   | 0        |
| 5  | Spain       | 0        | 0        | 0        | 0                   | 0        |
| 6  | Netherlands | 0        | 0        | 0        | 0                   | 0        |
| 7  | Sweden      | 0        | 0        | 0        | 0                   | 0        |
| 8  | Belgium     | 0        | 0        | 0        | 0                   | 0        |
| 9  | Poland      | 0        | 0        | 0        | 0                   | 0        |
| 10 | Austria     | 0        | 0        | 0        | 0                   | 0        |
| 11 | Denmark     | 0        | 0        | 0        | 0                   | 0        |
| 12 | Finland     | 0        | 0        | 0        | 0                   | 0        |
| 13 | Ireland     | 22.5     | 0        | 0        | 0                   | 22.5     |

| Nr | Country        | EFSM | BoP | Euratom | Special Instruments | Total |
|----|----------------|------|-----|---------|---------------------|-------|
| 14 | Greece         | 0    | 0   | 0       | 0                   | 0     |
| 15 | Portugal       | 24.3 | 0   | 0       | 0                   | 24.3  |
| 16 | Czech Republic | 0    | 0   | 0       | 0                   | 0     |
| 17 | Romania        | 0    | 5.0 | 0.2     | 0                   | 5.2   |
| 18 | Hungary        | 0    | 1.5 | 0       | 0                   | 1.5   |
| 19 | Slovakia       | 0    | 0   | 0       | 0                   | 0     |
| 20 | Luxembourg     | 0    | 0   | 0       | 0                   | 0     |
| 21 | Bulgaria       | 0    | 0   | 0.1     | 0                   | 0.1   |
| 22 | Croatia        | 0    | 0   | 0       | 0                   | 0     |
| 23 | Slovenia       | 0    | 0   | 0       | 0                   | 0     |
| 24 | Lithuania      | 0    | 0   | 0       | 0                   | 0     |
| 25 | Latvia         | 0    | 1.9 | 0       | 0                   | 1.9   |
| 26 | Estonia        | 0    | 0   | 0       | 0                   | 0     |
| 27 | Cyprus         | 0    | 0   | 0       | 0                   | 0     |
| 28 | Malta          | 0    | 0   | 0       | 0                   | 0     |
|    | <b>Total</b>   | 46.8 | 8.4 | 0.3     | 0                   | 55.5  |

The Macro Financial Assistance Programme, which is directed to non-EU Member States, had EUR1.8 billion outstanding as at 31.12.14. There appears to be no ceiling for this assistance, that is, other than the total EU Budget ceiling for "commitments". The lack of a ceiling for the MFA results in a discrepancy in the table below: "Mobilised ceiling" less "Drawn" does not equal "Undrawn".

The drawn amounts, the ceilings and the undrawn amounts in EUR billions as at 31.12.14 were:

| "Funds" or "facility"                      | Mobilised ceiling | Drawn | Undrawn |
|--|-------------------|-------|---------|
| European Financial Stabilisation Mechanism | 60.0              | 46.8  | 13.2    |
| The Balance of Payments Facility           | 50.0              | 8.4   | 41.6    |
| The Macro Financial Assistance Programme   | n/a               | 1.8   | n/a     |
| Euratom                                    | 4.0               | 0.3   | 3.7     |
| "Special instruments"                      | 11.0              | 0.0   | 11.0    |
| <b>Total</b>                               | 125.0             | 57.3  | 69.5    |

The European Financial Stabilisation Mechanism ("EFSM") was established over the weekend after the May 2010 UK General Election and much newsprint has been used about its genesis. It was established by a Council of Ministers meeting - that is a Council of Finance Ministers meeting, since a valid Council of Ministers meeting can occur either (i) on any topic if the Heads of Government are in attendance, or (ii) on a specific topic when the government ministers for that topic are in attendance. Qualified Majority Voting would have applied to the meeting in which the EFSM was established, although in the event there were no dissenters.

The EFSM was established as a "fund" whereby the EU would borrow in its name from investors and on-lend funds to Eurozone Members that had been declared eligible. Ireland and Portugal have been the main borrowers under this first of the Eurozone bailout mechanisms, with Greece having had a bridging loan during 2014 which was repaid within the same year.

If Ireland and Portugal do not repay their loans, the funds borrowed by the EU to make the loans rank as eligible expenses in the EU Budget and have to be paid from the EU Budget regardless of what happens with Ireland and Portugal. The EU Budget is, as stated above, a joint-and-several liability of all Member States and so all Member States would be asked to pay in to cover the deficit, initially in accordance with their percentage share of EU GNI.

Were Ireland and/or Portugal to default on their loans from the EFSM, however, it would be unlikely that they could perform on their liability as guarantors of the EU's debts. This is where the 'joint-and-several' mechanism would enter into the equation. The calls on Member States would be recalculated based on a reduced EU GNI with the individual GNIs of Ireland and/or Portugal backed out. The UK's share would thus rise because the UK would be liable for 16% of 97 rather than 16% of 100, Ireland and Portugal's GNIs equating to about 3% of the whole.

Funds were initially lent to Ireland and Portugal on a short-term basis, leading to the misconception that the EFSM might be some kind of bridging facility and that amounts lent out by the EFSM might be repaid from other bailout funds once they were established, i.e. from the EFSF or the ESM. Two other misconceptions hung on the meaning of the word "available":

1. that the EFSM funds were "available for three years" = they had to be repaid by the borrower within three years;
2. that the EFSM funds were "available for three years" = they had to be drawn out of the fund by May 2013 and that any unutilised ceiling at that time would be cancelled. Greece received a bridging loan out of the EFSM in 2014, so the EFSM remains available for the amount not currently outstanding to Ireland or Portugal.

Ireland and Portugal were accorded drawing rights under the EFSM firstly short-term, and then these advances were progressively consolidated into a series of long-term loans as follows:

| Amount    | Maturity | Raised on | Loan beneficiary                            | Disbursement on |
|-----------|----------|-----------|---|-----------------|
| € 5.0 bn  | 5 yr     | 5/1/11    | Ireland                                     | 12/1/11         |
| € 3.4 bn  | 7 yr     | 17/3/11   | Ireland                                     | 24/3/11         |
| € 4.75 bn | 10 yr    | 24/5/11   | € 3 bn for Ireland, € 1.75 bn for Portugal  | 31/5/11         |
| € 4.75 bn | 5 yr     | 25/5/11   | Portugal                                    | 1/6/11          |
| € 5.0 bn  | 10yr     | 14/9/11   | Portugal                                    | 21/9/11         |
| € 4.0 bn  | 15yr     | 22/9/11   | € 2 bn for Ireland; € 2 bn for Portugal     | 29/9/11         |
| € 1.1 bn  | 7yr      | 29/9/11   | € 0.5 bn for Ireland; € 0.6 bn for Portugal | 6/10/11         |
| € 3.0 bn  | 30 yr    | 9/1/12    | € 1.5 bn for Ireland; € 1.5 bn for Portugal | 16/1/12         |
| € 3.0 bn  | 20 yr    | 27/2/12   | Ireland                                     | 5/3/12          |
| € 1.8 bn  | 26 yr    | 17/4/12   | Portugal                                    | 24/4/12         |
| € 2.7 bn  | 10 yr    | 26/4/12   | Portugal                                    | 4/5/12          |
| € 2.3 bn  | 15 yr    | 26/6/12   | Ireland                                     | 3/7/12          |
| € 3.0 bn  | 15 yr    | 23/10/12  | € 1 bn Ireland, € 2 bn Portugal             | 30/10/12        |
| € 2.6 bn  | 10 yr    | 18/3/14   | € 0.8 bn Ireland, € 1.8 bn Portugal         | 25/3/14         |
| € 0.4 bn  | 15 yr    | 5/11/14   | Portugal                                    | 12/11/14        |

The current loans out of the EFSM are:

| Borrower     | Amount in EUR billion | Final maturity |
|--------------|-----------------------|----------------|
| Ireland      | 22.5                  | 9 January 2042 |
| Portugal     | 24.3                  | 9 January 2042 |
| <b>Total</b> | 46.8                  | 9 January 2042 |

Source: [http://ec.europa.eu/economy\\_finance/eu\\_borrower/efsm/index\\_en.htm](http://ec.europa.eu/economy_finance/eu_borrower/efsm/index_en.htm)

Each loan is backed by a Council Implementing Decision, that being a decision taken in another Council of Ministers meeting, again of Finance Ministers.

Qualified Majority Voting would have applied to these meetings, although in the event there were no dissenters.

Each such decision altered to the UK's risk as guarantor by lengthening its final maturity, but once the EFSM had been established by a decision subject to QMV, it could then be mobilised via further meetings subject to QMV.

Aside from the EFSM, the Balance of Payments facility has the largest capacity compared to its ceiling, but it can only be used to assist countries that have committed to join the Euro: as such it could be used for Croatia and all other EU new joiners who are similarly committed to join the Euro at some point, like Bulgaria and Romania. It cannot be used to assist Denmark, Sweden, UK or the Czech Republic, who are under no obligation to join the Euro. The outstanding to Latvia was advanced before they joined the Euro, and so Latvia cannot access more money out of this facility.

The Macro Financial Assistance Programme has relatively small outstandings but no set ceiling, so there is an open issue there.

The "Special instruments" have no outstandings. Their purpose and the mechanism for mobilisation are obscure. No doubt if there were a measure of flexibility they would have been invoked to support Greece and the Ukraine, as the EFSM and Euratom have.

### **The European Union – what debts can be created within the 2014-2020 Multiannual Financial Framework from "funds", "facilities" and guarantees already mobilised**

As of now the total of debts that the EU can create within existing funds, facilities and guarantees, is as follows. To the "funds" and "facilities" above, we can add the EU's guarantees to the EIB (further discussed below) to reach a figure of what was in place in EUR billions as at 31.12.14:

| <b>"Funds" or "facility"</b>                                     | <b>Mobilised ceiling</b> | <b>Drawn</b> | <b>Undrawn</b> |
|--|--------------------------|--------------|----------------|
| "Funds" & "facilities"   | 125.0                    | 57.3         | 69.5           |
| EU guarantee to EIB for non-EU projects signed up to 31.12.13    | 36.1                     | 36.1         | 0.0            |
| EU guarantee to EIB for non-EU projects signed between 2014-2020 | 30.0                     | 2.7          | 27.3           |
| EU guarantee to EIB for EFSI                                     | 16.0                     | 23.5         | n/a            |
| <b>Total</b>   | <b>207.1</b>             | <b>119.6</b> | <b>96.8</b>    |

Notes:

- "Funds" & "facilities" includes EUR1.8 billion drawn under Macro Financial Assistance for which there is no stated ceiling
- The EU guarantee to EIB for the EFSI seems already to have been mobilised for more than its supposed ceiling, meaning that the outstandings referred to in the EFSI Factsheets must include a portion that is at the EIB's own risk and possibly also private loans into the same projects

The maximum of debts that the EU can create by the end of 2020 under funds, facilities and guarantees that have already been mobilised, is EUR207.1 billion.

### **The European Union – the UK's Maximum Possible Loss under its contractual commitments**

This is not the end of it. The EU can mobilise the EU Budget to create further funds, facilities and guarantees between now and 2020, thereby engaging more of the "commitments appropriation.

The EU has ample room in between the current ceiling of EUR207.1 billion, and the maximum ceiling on all "commitments" permitted in the EU Budget for the current MFF. This is the more possible because:

- the EU's right to call upon Member States to meet all "commitments" is cumulative from one MFF period to the next; and/or
- the EU's right to call upon Member States does not amortise during an MFF period.

Regarding the question of cumulative or not, Moodys appear to consider the ceiling as not being cumulative, but as a maximum from time to time. By stating that the maximum call by the EU is 0.26% of GNI or EUR40 billion per annum, they infer that there is an annual ceiling and that once the 2014 and 2015 ceilings have expired with no call made, the EUR40 billion for each year ceases to be available.

The author disagrees and reads the documents that:

- the ceiling under the current MFF needs to be added to what was drawn at the end of the previous MFF i.e. it is cumulative; and
- there is no amortisation during an MFF: if the ceiling on “commitments” is EUR40 billion per annum for a 7-year MFF, the ceiling is EUR280 billion and it can be mobilised at any time during the 7 years.

The author’s reading is based on the model of the EU’s guarantee to the EIB for loans to projects outside the EU. Each Council decision setting up the guarantee refers to a ceiling on loan signings during the respective MFF. The loans are then for periods up to 15 years. The EU’s guarantee is cumulative, but unused ceilings are not carried over:

- Council Decision 466/2014/EU sets a ceiling on the guarantee of EUR30 billion for loan signings between 2014 and 2020, without breaking it down into a maximum per annum: the entire EUR30 billion could in theory be mobilised in December 2020;
- Previous Council Decisions enabled an outstanding amount on the EU guarantee of EUR36.1 billion as at 31.12.13;
- Whatever the ceilings were during those preceding MFFs, loans signed during those MFFs were guaranteed up to EUR36.1 billion, and any difference between the ceiling and loans signed expired on 31.12.13;
- New loan signings after 1.1.14 that were eligible to be guaranteed would have to be accommodated under the 2014-2020 ceiling.

Applying that to the totality of “commitments”, it follows that there was a certain amount mobilised as at 31.12.13 under all previous MFFs, and then there is a ceiling under the 2014-2020 MFF that can be mobilised at any time during the MFF. The ceiling for the 2014-2020 MFF is EUR280 billion.

What was mobilised before 31.12.13 remains mobilised and available, and does not necessarily get reduced due to repayments:

- Where the “mobilisation” is in the form of a “fund” or “facility”, amounts repaid by borrowers can be re-borrowed by other borrowers;
- Where the “mobilisation” is in the form of a guarantee of a loan, the loan can be drawn in accordance with its terms: if a loan was signed before 31.12.13, it is earmarked against the “commitments” for the previous MFF but may not be drawn until this current MFF;
- Once it starts to be repaid, there is no reinstatement of room under the previous MFF.

What is the maximum, then, that could exist under the “commitments appropriation” between now and the end of the current MFF in 2020?

- The entirety of “funds” & “facilities”, in which approx. EUR2 billion of repayments have been reinstated as “Undrawn” since 31.12.13 because the respective fund or facility is still available to other borrowers for that amount;
- Under the heading of funds” & “facilities” the MFA is still recorded as having a Drawn amount but no ceiling;
- The EU guarantee to EIB for non-EU projects signed up to 31.12.13 was EUR36.1 billion; that is now fixed and will only amortise as the underlying loans run off, the loans being of many years’ duration;
- The ceiling for the MFF 2014-2020, of which EUR46 billion has been “mobilised” via the ceiling for the EU guarantee to EIB for non-EU projects (EUR30 billion) and the EU guarantee to the EU for the EFSI (EUR16 billion), albeit that these amounts have not yet been fully drawn.

| Scheme  | Mobilised | Mobilised +Drawn | Mobilised +Undrawn | Unmobilised | Ceiling |
|---|-----------|------------------|--------------------|-------------|---------|
| "Funds" & "facilities"  | 125.0     | 55.3             | 71.5               | n/a         | 125.0   |
| EU guarantee to EIB for non-EU projects signed up to 31.12.13 | 36.1      | 36.1             | 0.0                | n/a         | 36.1    |
| Ceiling for MFF 2014-2020                                     | 46.0      | 26.2*            | 27.3               | 234.0       | 280.0   |
| <b>Total</b>  | 207.1     | 117.6*           | 98.8               | 234.0       | 441.1   |

\* The EFSI Project Factsheets do not distinguish between what has been signed by the EIB as its EFSI investments (which should not exceed EUR21 billion) and its "normal loans" into the same EFSI projects (which can be up to EUR40 billion). It conceivable that the EFSI Project Factsheets quote figures for the financed amount that include the EIB's EFSI investment, the EIB's "normal loan" into the same project, and also private loans into the same project. Absent clarifying notes it is not possible to tell, so it appears that the EIB has already exceeded its EFSI investments ceiling and completely invoked the EU guarantee already. The result of this is that the figures do not square.

Nevertheless this does not affect the total ceilings: the amount at risk for the UK can rise to EUR207.1 billion via the operation of existing funds, facilities and guarantees in accordance with the terms laid down for them in existing Regulations, Council Implementing Decisions etc..

The remaining EUR234.0 billion can be "mobilised" within the current MFF but does require EU legal instruments to "mobilise" it, just as the EFSM and the EFSI did. The total at risk for the UK up to the end of 2020 can rise to EUR441.1 billion.

To repeat, based on the precedent of the mechanics of the EU guarantee to EIB for non-EU loans, the author believes that "commitments" under the EU Budget:

- **Are** cumulative from one MFF period to another insofar as mobilised amounts are concerned, but unmobilised amounts are cancelled at the end of the MFF;
- **Remain available** for mobilised-but-undrawn amounts at the end of an MFF. They can be drawn during the next MFF: hence the undrawn amount of the EFSM is still available as the EFSM was mobilised during the 2007-2013 MFF but not fully drawn in it;
- **Are not** amortised on a "per annum" basis during an MFF: 2 years into an MFF as we are now, EUR40 billion of the ceiling did not expire each year if new "commitments" had not been engaged during that year;
- **Remain open to be mobilised** right until the end of the MFF.

The UK's Maximum Possible Loss under the heading "commitments" thus comes to EUR441.1 billion.

## The European Union – likelihood of the UK's Maximum Possible Loss materialising or even being exceeded

It seems incredible that a call of EUR441.1 billion might actually be forthcoming, let alone a claim even larger to cover all of part of the 2016-2020 "payments appropriation" of EUR746 billion. Those, though, are the UK's contractual commitments. Moodys further discuss what would be termed "extraordinary support", meaning claims over and above what is contracted.

Moodys inform the lender to the EU that "extraordinary support is very likely". They state that "in an extreme scenario we would expect Germany, the UK and the Netherlands, which together account for around 59% of the EU's budget revenue.. and 54% of GNI contributions, to be the most able to provide support beyond their contractual obligations". (Note that the EU's revenues from VAT and Customs/Sugar levies from Germany, UK and the Netherlands are an even higher proportion of EU total revenue than these countries' share of the GNI-based contributions).

Moody's continue: "we consider EU members' willingness to support the institution to be very strong, given that members have considerable political and economic incentives to fulfil a potential capital call. Member states are aware that a default on EU debt would entail significant pecuniary and political costs for Europe. Apart from threatening the survival of the EU, any default would also induce considerable reputational risks... The EU Budget contributes significantly to national budgets, particularly via agricultural subsidies and structural funds".

International investors, then, view the support of the UK for an EU-in-distress as very likely and link their appetite for funding the UK to the UK's willingness to fund the EU. Extraordinary support from the UK over and above the contractual Maximum Possible Loss is expected to be provided as required.

That said, the UK has signed up to huge amounts as contractual commitments. The author believes that Member States would step in to curb future spending, alter treaties as required and so on, were the EU to have to make claims on its Member States of anything approaching the magnitude of the contractual commitments.

The author does not consider it at all likely that the EU would need to call for "extraordinary support", because the amount it can call upon contractually is so huge already.

Nevertheless it is salutary to consider both what the size of those contractual commitments is and that Moody's consider that the UK would feel itself obliged to offer "extraordinary support" as well.

## The European Investment Bank

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### **The European Investment Bank – its role and how it creates debts**

The EIB is a bank incorporated in Luxembourg with limited liability. It is empowered like any bank to borrow money and on-lend it. The EIB is one of the class of "Multilateral Development Banks", like the African Development Bank and the European Bank for Reconstruction and Development, which are owned by sovereign states, and whose role is to provide long-term development finance, focussing on the development of infrastructure.

As Moody's point out in their credit rating report on the EIB of July 2015, the EIB is by far the largest "Multilateral Development Bank", meaning it has both the largest loan portfolio and the biggest debts taken on to fund them.

The EIB is one of the largest non-sovereign issuers of bonds in the international capital markets, and its bonds are eligible to be pledged as security to any of the EU's central banks. This is an important indicator because it infers that EIB bonds are free of credit risk:

- Holdings of EIB bonds are owned by EU central banks and pledged to one another in order to allow central banks to go overdrawn on the bank accounts that they hold with one another;
- Holdings of EIB bonds are owned by commercial banks and pledged to central banks in order to allow the commercial banks to go overdrawn on the bank accounts they hold in order to settle their obligations in payment systems – just like here in the UK the commercial banks that are members of CHAPS, BACS, Faster Payments, Cheque&Credit and Link hold settlement accounts with the Bank of England and can offer their holdings of EIB bonds in GBP to the Bank of England in order to generate cash on their Bank of England Settlement Account, over which their payments in all of these payments systems are settled.

The EIB, then, as at 31.12.2014 had issued EUR453 billion of bonds, EUR437 billion being of maturity over one year and EUR16 billion below 1 year. These are high amounts compared to the paid-in capital of EUR21 billion and the reserves of EUR38 billion. That counts as a bank that is highly leveraged on its balance-sheet capital.

Why do S&P and Moodys give the EIB their highest possible credit rating? The answer is three-fold:

- a. Who the loans have been made to by the EIB;
- b. The irrevocable and unconditional right the EIB has to claim more capital from its shareholders;
- c. The potential to call on the shareholders for “extraordinary support” over and above the irrevocable and unconditional right to claim more capital.

## The European Investment Bank – how its capital is structured to create a call on Member States

It is item (b) above that the greatest security resides.

All EU Member States are shareholders and must subscribe to the EIB capital. This requirement is contained in both the TFEU and the Treaty on the EU, as Moodys confirms.

Each Member State must subscribe to an amount of capital and pay in a portion of it. TFEU Protocol 5 Art 5.1 stipulates that only up to 5% of the subscribed capital should be paid in.

The remaining amount is subscribed but not called: it is an unconditional, irrevocable liability of the Member State to pay in the uncalled capital, in whole or in part, upon a decision by the EIB’s Board of Directors that has to be carried a “normal majority”: at least one third of the members entitled to vote representing at least 50% of the subscribed capital.

Since the EIB shareholders are the “sovereign risk” borrowers in each Member State, the commitment to pay in the extra capital is a “sovereign risk” claim, and the size of those claims as at 31.12.14 in EUR billions was:

| Nr | Country        | Subscribed capital | Called capital | Uncalled capital |
|----|----------------|--------------------|----------------|------------------|
| 1  | Germany        | 39.2               | 3.5            | 35.7             |
| 2  | <b>UK</b>      | <b>39.2</b>        | <b>3.5</b>     | <b>35.7</b>      |
| 3  | France         | 39.2               | 3.5            | 35.7             |
| 4  | Italy          | 39.2               | 3.5            | 35.7             |
| 5  | Spain          | 23.5               | 2.1            | 21.4             |
| 6  | Netherlands    | 10.9               | 1.0            | 9.9              |
| 7  | Belgium        | 10.9               | 1.0            | 9.9              |
| 8  | Sweden         | 7.2                | 0.6            | 6.6              |
| 9  | Denmark        | 5.5                | 0.5            | 5.0              |
| 10 | Austria        | 5.3                | 0.5            | 4.9              |
| 11 | Poland         | 5.0                | 0.4            | 4.6              |
| 12 | Finland        | 3.1                | 0.3            | 2.8              |
| 13 | Greece         | 3.0                | 0.3            | 2.7              |
| 14 | Portugal       | 1.9                | 0.2            | 1.7              |
| 15 | Czech Republic | 1.9                | 0.2            | 1.7              |
| 16 | Hungary        | 1.8                | 0.2            | 1.6              |
| 17 | Ireland        | 1.4                | 0.1            | 1.3              |
| 18 | Romania        | 1.3                | 0.1            | 1.2              |
| 19 | Croatia        | 0.9                | 0.1            | 0.8              |
| 20 | Slovakia       | 0.6                | 0.1            | 0.5              |
| 21 | Slovenia       | 0.6                | 0.1            | 0.5              |
| 22 | Bulgaria       | 0.4                | <0.05          | 0.4              |
| 23 | Lithuania      | 0.4                | <0.05          | 0.3              |
| 24 | Luxembourg     | 0.3                | <0.05          | 0.3              |
| 25 | Cyprus         | 0.3                | <0.05          | 0.2              |

| Nr | Country | Subscribed capital | Called capital | Uncalled capital |
|----|---------|--------------------|----------------|------------------|
| 26 | Latvia  | 0.2                | <0.05          | 0.2              |
| 27 | Estonia | 0.2                | <0.05          | 0.2              |
| 28 | Malta   | 0.1                | <0.05          | 0.1              |
|    | Total   | 243.3              | 21.7           | 221.6            |

The subscribed-but-uncalled capital of EUR221.6 billion acts as a guarantee fund and also as a credit enhancement for bond investors.

If there are losses in the loan portfolio, they deplete the paid-in capital first. If the EIB's Board of Governors feel that this depletion may harm EIB's credit ratings and/or damage the terms upon which the EIB can raise money (quantity/interest rate/final maturity), they have a right to pass a resolution to call up a portion of the uncalled capital, as they did in 2012: the subscribed capital of EIB was increased by EUR10 billion and all of the increase was called up.

The Member State liability differs from that for the European Community: for the EIB it is several-but-not-joint. Each Member State is contracted only to pay in what they have subscribed: they are not legally obliged to pay in the subscriptions of other Member States if the latter cannot.

Paying in more than this obligation would be termed "extraordinary shareholder support", upon which more below. However, in accordance with TFEU Protocol 5 Art 4.3, the Board of Governors of the EIB may – by a unanimous vote – increase the capital of the bank and cause all shareholders to increase their subscribed capital, and then, again, stipulate what portion should be paid in.

The Board of Governors of the EIB is composed of the Finance Ministers of the EU Member States, George Osborne currently representing the UK.

The Board of the Directors of the EIB is composed of senior officials from the finance ministries of the EU Member States – as at 31.12.14 Jonathan Black, Director Europe at HM Treasury represented the UK.

The UK, on its own, could block an increase in the subscribed capital of the EIB, but it could not on its own block a call for all or part of the uncalled capital to be paid in. In 2012 the capital of the EIB was increased and the UK chose not to oppose this.

## The European Investment Bank – the loan book

Moodys states that the credit quality of EIB's borrowers is high, and that the EIB's loans have a preferential status in law: they rank above the loans of private sector investors in a situation like the Greek rescheduling in 2012.

This was proven to be true: whereas private sector creditors of the Republic of Greece had to endure a substantial "haircut" (reduction in value) in 2012, the EIB's loans to the Republic of Greece were unaffected.

Moodys do not go on to investigate or pass an opinion on whether this preferential status applies in EU Member State national law in all countries and to all EIB loans to all borrowers in that country, or just to EIB loans to or guaranteed by the "sovereign borrower".

In other words, do debts to the EIB rank on the creditor ladder the same as unpaid VAT, corporation tax, employer National Insurance and PAYE deducted from employee wages? In every EU Member State, in every variation of bankruptcy and administration proceedings that exist, and for every type of borrower?

While the EIB and Moodys make great play of the number of borrowers who are "public sector", this can range from a borrower that is the "sovereign borrower" (like the Republic of Greece) down to a special-purpose limited liability company formed to construct a new airport, whose shares are owned by a variety of local, regional and national authorities and quasi-government organisations.

The EIB has four types of borrower:

- Commercial banks within the EU, for the EIB's SME (Small and Medium Enterprises) financing programmes
- Public sector entities within the EU, for projects within the EU
- Public sector entities outside the EU, for projects outside the EU, where the EIB is the beneficiary of a first-loss guarantee from the EU for a part of its loans
- Projects in the EU in the context of the European Fund for Strategic Investments, where the EIB either directly invests in debt or capital-like securities of a project, or co-finances an SME with its subsidiary the European Investment Fund, and where the EIB is again the beneficiary of a first-loss guarantee from the EU for a part of its financing

Each type of borrower and loan will be discussed in more detail below.

The loans are usually for a long term (e.g. 15 years) and on a fixed rate of interest. These are capital market terms normally reserved for high quality bond issuers like the EIB itself.

The EIB is thus an intermediary between the end-user – not always of high quality and not able to access capital markets on the same terms as the loans it gets from EIB – and the investor who only wishes to buy high-quality Investment Grade bonds.

EIB is lending its "credit enhancement" to the end-user's loan, a "credit enhancement" that derives from its capital structure and ability to call up extra capital from its shareholders.

## **EIB loans to banks as part of its SME financing programmes**

EIB's SME financing programmes are structured by the EIB by their creating a ceiling for a particular commercial bank to borrow from the EIB and then lend back-to-back to SMEs. The commercial bank identifies the borrower candidates in line with the terms of the programme.

The EIB has the credit risk on the commercial bank and does not do credit analysis itself on the SME.

The commercial banks having such a programme will be the ones that have a reasonable market share amongst SMEs for day-to-day business in the respective Member State. In the UK that would be RBS/Natwest, Lloyds, HSBC, Santander and Barclays. In other Member States it would be the equivalent domestic banks.

EIB's credit risk policy in this sector is somewhat outdated, as it is based on the too-big-to-fail concept, assuming that a big commercial bank would be bailed out by the "sovereign risk" entities in that country, namely the central bank and the Ministry of Finance.

The EU Bank Recovery and Resolution Directive infers that amounts put by depositors into banks are protected by the "sovereign risk" entities in that country only up to EUR100,000 per depositor per bank. EIB's exposure under an SME financing programme through a bank is far higher and so EIB risks being bailed-in for the amount outstanding under each of its SME programmes less EUR100,000-per-programme, should the counterparty bank go into resolution.

This is one area where the EIB business model is flawed, as it is rooted in the preferential treatment available to lenders under the first Basel Bank Capital Adequacy regime for exposures to OECD banks: these exposures were risk-weighted at only 20% of the norm, the norm being applied to loans made to consumers, SMEs and large businesses.

The preferential risk-weighting was permitted because it was assumed that public authorities would support any regulated bank that had been in good standing, and thus the exposure was deemed to be indirectly on public entities. This is the opposite of the intention of the EU Bank Recovery and Resolution Directive, under which banks must resolve themselves without recourse to funds from public entities.

In other words EIB's exposures to banks are treated by the EIB as loans to quasi-public authorities. This rationale is undermined by the EU Bank Recovery and Resolution Directive.

## Typical European Investment Bank projects within the EU

The EIB business model is flawed also in its main area of lending – to large projects within the EU that are sponsored by the public sector. The EIB operates in this area in approximate alignment with a second area of preferential treatment available to banks under the first Basel Bank Capital Adequacy regime: exposures to OECD governments.

These were risk-weighted at 0% of the norm, so literally one could build up a huge portfolio of OECD government bonds with no capital whatsoever, because these were “sovereign risk” bonds and sovereigns always pay their debts, don’t they? (like Mexico, Brasil, and many more, from 1983)

Or at least when the bonds are in their own currency? (like Greece in 2012)

EIB escaped a “haircut” on its exposures to the Republic of Greece because of its legally preferential creditor status, so in the area of EIB exposures to EU sovereign borrowers there is some support for their position.

EIB has gone one stage further with the concept, which is to apply a preferential risk-weighting to any borrower that can demonstrate a connection to the “sovereign risk” borrower in the same country, either by:

- Direct or indirect ownership of shares; and/or
- A pathway to being able to claim taxes or levies either:
  - Directly from the tax payer;
  - Through local or regional tax-levying mechanisms;
  - Through the national revenue collection service.

Few of the EIB’s loans in the EU are made to the “sovereign risk” borrower or are guaranteed by the “sovereign risk” borrower; most are to public sector borrowers whose ability to mobilise “the full faith and credit of the nation” behind their debts ranges from the very strong to the quite tenuous:

- A loan to France’s “La Poste” really is as good as lending to the Republic of France;
- A loan to the State of Bavaria (“Freistaat Bayern”) has to be tracked back through the constitution of the Federal Republic of Germany, and the finance support mechanisms between “Bund und Länder”, to the support available from the “sovereign risk” borrower, which is more subtle because Bavaria is a “Freistaat” or “Free State” and not a “Bundesland” or “Federal State” as Lower Saxony or Schleswig-Holstein are;
- A loan to an airport project in Croatia will be into a project company with limited liability, and tracking back to the sovereign borrower will be more intricate and of less value, since Croatia is only rated Ba1 – “Substantial Credit Risk”

The EIB’s ratio of Loans to Called-Up Capital is low, and this is only explicable if its loans are converted through a risk-weighting methodology that assigns a very low risk to each loan, meaning a requirement to hold little capital.

Here are six typical examples of projects funded by the EIB. We have taken examples of new loans approved at the height of the Eurozone crisis, to show the type of lending that the EIB undertakes.

Source: <http://www.eib.org/projects/pipeline/index.htm> on 5th February 2012; EIB’s up-to-date list of project loans in the pipeline

Three further points need to be made:

- These loans were approved by EIB at the same time as severe doubts were being expressed as to the financial viability of the “sovereign borrower” in the respective borrower’s country;
- These loans are not to the sovereign, nor do they carry the sovereign’s guarantee, but they certainly count as public sector debt, for which the source of repayment is the same as it is for sovereign debt: the capacity of the citizen and businesses to come up with taxes, levies and charges, and the sovereign’s right to impose those taxes/levies/charges and ability to collect them. The capacity question hangs on economic prosperity. Why should it be considered that, at a time when a lack of economic prosperity was weighing down on the Kingdom of Spain, that it should not weigh down also on its sub-divisions, like Castilla-La-Mancha or Aragon?

- Where do these loans appear in the public accounts? Are they consolidated into the debts of the Kingdom of Spain, or do they fall below the radar and only appear on the books of the respective region, or do they fall below the horizon on the books of a project company (such as Ibersol Electricidad Solar Iberica, S.L.U.), and do not get shown in the public accounts at all, as per the UK's Private Finance Initiative model?

## Project example 1: Aguas de Castilla-La-Mancha II 2

|                                   |  |
|-----------------------------------|--|
| Promoter – Financial Intermediary | Comunidad Autónoma de Castilla-La-Mancha   |
| Location                          | <ul style="list-style-type: none"> <li>• Spain</li> <li>• Region of Castilla-La-Mancha</li> </ul>  |
| Description                       | Financing of water infrastructure schemes in the region of Castilla-La-Mancha.   |
| Objectives                        | The Bank has been requested to make the largest possible contribution to the financing of this investment program. The Bank has already approved a first loan of EUR 200 million under Aguas de Castilla-La-Mancha II.   |
| Sector(s)                         | Water, sewerage, solid waste   |
| Proposed EIB finance              | Up to EUR 200 million  |
| Total cost                        | Up to EUR 1 153 million  |
| Environmental aspects             | The project consists of a number of investments in water and wastewater works. It is expected to deliver multiple environmental benefits. Compliance with relevant European legislation - EIA Directive (97/11/EC), SEA Directive (2001/42/EC) and Birds as well as Habitats Directive (92/43/EEC), amongst others - will be assessed during appraisal |
| Procurement                       | Procurement for this project falls under Directives 2004/17/EC and 2004/18/EC. Compliance of the promoter with these directives will be assessed during appraisal  |
| Status                            | Approved - 20/05/2011  |

## Project example 2: Acquedotto Pugliese

|                                   |   |
|-----------------------------------|---|
| Promoter – Financial Intermediary | Acquedotto Pugliese S.p.A.  |
| Location                          | <ul style="list-style-type: none"> <li>• Italy</li> <li>• Puglia Region</li> </ul>  |
| Description                       | The project concerns the investment programme under the Master Plan, for the 2010-2012 period. The investments will mainly concern small to medium sized water and wastewater facilities and will be aimed at (i) reducing water losses, (ii) increasing the availability of water resources and (iii) expanding the water and wastewater networks and plants |
| Objectives                        | The project will contribute to meeting the requirements of the Urban Waste Water Treatment Directive and the Water Framework Directive. The resulting improved service standards and higher resilience to the effects of climate change qualify the operation as relevant for climate action  |

## Project example 2 (cont'd)

|                       |   |
|-----------------------|---|
| Sector(s)             | Water, sewerage, solid waste  |
| Proposed EIB finance  | Up to EUR 150 million   |
| Total cost            | Up to EUR 370 million   |
| Environmental aspects | Where and if applicable, the requirements of the Environmental Impact Assessment (EIA) Directive 97/11/EC, as amended by Directive 2003/35/EC, will be respected. The promoter will in such case, prior to utilising any EIB funds, be responsible for transmitting to the Bank the non-technical summary of the EIA. In addition, for any part of the scheme that may impact on a nature conservation site, the promoter will be required to provide to the Bank information on the mitigating measures needed to comply with the Habitats Directive |
| Procurement           | The Bank will require from the promoter that contracts for the implementation of the project have been or shall be tendered in accordance with relevant EU procurement laws (2004/17/EC), with publication of tender notices in the EU Official Journal, as and where appropriate   |
| Status                | Approved - 19/07/2011   |

## Project example 3: Ibersol CSP Project

|                                   |   |
|-----------------------------------|---|
| Promoter – Financial Intermediary | Ibersol Electricidad Solar Iberica, S.L.U.  |
| Location                          | Spain   |
| Description                       | Construction, operation and maintenance of a concentrated thermosolar power (“CSP”) plant with a capacity of 49.9MW and using molten salt storage technology, located in Villanueva de la Serena (Badajoz / Extremadura / Spain).   |
| Objectives                        | The project supports national and EU renewable energy objectives. Additionally, the project will be installed in a Convergence region (Stricto sensu)   |
| Sector(s)                         | Energy  |
| Proposed EIB finance              | EUR 185 million   |
| Total cost                        | Not applicable  |
| Environmental aspects             | The plant’s site is currently used as arable land. Environmental impacts from the project are expected to be minor, mainly visual. By virtue of its technical characteristics the project falls under Annex II of Directive 85/337/EC, as amended by 97/11/EC and 2003/35/EC, which leaves the requirement for an Environmental Impact Assessment (EIA) to be determined by the competent national authorities. In this case the Spanish authorities have required an EIA to be carried out |
| Procurement                       | Neither the promoter nor the special purpose companies are subject to EU Procurement Directives. Suitable procurement procedures, including an appropriate selection of works, goods and services offered at competitive prices should be applied in the project’s best interests. Details will be verified during appraisal  |
| Status                            | Approved - 19/07/2011   |

## Project example 4: Aragón Sustainable Development B

|                                   |   |
|-----------------------------------|---|
| Promoter – Financial Intermediary | Comunidad Autónoma de Aragón  |
| Location                          | <ul style="list-style-type: none"> <li>· Spain</li> <li>· Región de Aragón</li> </ul>   |
| Description                       | Second framework loan for the financing of small and medium-sized investments in the areas of IT, RDI, education, health, social inclusion, urban transport, culture, administration, and environment in the region of Aragon   |
| Objectives                        | The Quadrennial Strategic Investment Plan 2009-2012 seeks to contribute significantly to mitigating the current phase of economic slowdown, to support job creation and create the conditions for sustainable development   |
| Sector(s)                         | <ul style="list-style-type: none"> <li>· Urban infra.</li> <li>· Transport</li> <li>· Telecom</li> <li>· Health, Education</li> <li>· Services</li> </ul>   |
| Proposed EIB finance              | Up to EUR 150 million   |
| Total cost                        | Up to EUR 744 million   |
| Environmental aspects             | The project is a multi-sector multi-scheme operation classified as Framework Loan. Some of the schemes may eventually fall under Annex I or Annex II of the EIA Directive 85/337/EEC, amended by Directives 97/11/EC and 2003/35/EC, or may have an impact on an area forming part of Natura 2000 network. It will be required that all the schemes will be implemented in compliance with the EU environmental legislation |
| Procurement                       | The promoter as a public administration entity is required to follow the EU public procurement rules (2004/17/EC and 2007/18/EC) including publication of contract notices in the EU Official Journal as implemented by national law, if and where appropriate. Projects with values below the EU thresholds will be procured according to the provisions laid down in national legislation                                 |
| Status                            | Signed - 15/09/2011.  |

## Project example 5: Sviluppo Metropolitana di Roma

|                                   |   |
|-----------------------------------|---|
| Promoter – Financial Intermediary | Comune di Roma  |
| Location                          | Italy   |
| Description                       | <p>The proposed project would consist of :</p> <ul style="list-style-type: none"> <li>· a 1.1 km extension of underground line B,</li> <li>· the acquisition of 15 new trains to operate on this line and</li> <li>· some other interventions to modernise the infrastructure of underground lines A and B, including the extension of a depot</li> </ul> |
| Objectives                        | The project will increase the extension, level of service, effectiveness and reliability of the public transport service in the Rome metropolitan area, contributing to the limitation of private car usage through an expected shift to the metro network  |

## Project example 5 (cont'd)

|                       |  |
|-----------------------|--|
| Sector(s)             | Transport  |
| Proposed EIB finance  | Up to EUR 250 million  |
| Total cost            | Up to EUR 500 million  |
| Environmental aspects | A full EIA has been carried out for line B extension. Rolling stock provision falls outside the scope of Directive 85/337/EEC (as amended); details on scrapping procedures will be assessed during appraisal. The other interventions on the lines are also outside the scope of the EIA Directive. The depot extension should fall under Annex II, according to which the need for a full EIA is decided on a case-by-case analysis by the Competent Authority. Full details will be checked at appraisal stage. The project is expected to have some positive impacts on environment thanks to the increase in public transport service quality |
| Procurement           | The Promoter is a public entity subject to EU public procurement directives (2004/17/EC and 2004/18/EC). The Bank will require the promoter to ensure that contracts for the implementation of the project have been/shall be tendered in accordance with the relevant applicable EU procurement legislation with parallel publication of tender notices in the EU Official Journal, as and where appropriate. Details will be checked at appraisal stage  |
| Status                | Signed - 10/08/2011  |

## Project example 6: ATM Rinnovo Materiale Rotabile

|                                   |   |
|-----------------------------------|---|
| Promoter – Financial Intermediary | Azienda Trasporti Milanesi S.p.A.   |
| Location                          | <ul style="list-style-type: none"> <li>· Italy</li> <li>· Milan, Lombardy Region</li> </ul>   |
| Description                       | <p>The project consists in the renewal of the metro fleet of ATM. In particular, the project includes the acquisition of up to 60 new metro trains that will replace part of the existing rolling stock currently operated on lines 1 and 2 of Milan's metro network.</p> <p>The new trains will be fully compatible with the most advanced systems for automatic operation; coupled with other investments on the signalling and power supply systems currently ongoing on line 1 and planned on line 2, the project will allow an increase in the passenger service capacity that would not otherwise be possible with the existing rolling stock</p> |
| Objectives                        | The project will improve the quality of public transport services in terms of speed, comfort, availability and reliability. The project will increase the attractiveness of public transport in the congested urban area of Milan, contribute to reduced reliance on private cars and improve the quality of the urban environment. The use of regenerating braking systems will allow for an increase in energy efficiency, thus contributing to tackling climate change   |
| Sector(s)                         | Transport   |
| Proposed EIB finance              | Up to EUR 200 million   |

## Project example 6 (cont'd)

|                       |   |
|-----------------------|---|
| Total cost            | Up to EUR 600 million   |
| Environmental aspects | The construction of the new rolling stock will take place in the manufacturer's plants and does not fall within the scope of Directive 85/337/EEC (as subsequently amended), therefore no EIA is required for the project   |
| Procurement           | The Promoter is subject to and follows EU Directives (2004/18/EC and 2004/17/EC) on procurement, including publication in the Official Journal of the European Union. All contracts will have to go through public tendering in compliance with European legislation. Under these conditions, the procedures chosen by the Promoter are suitable for the project and in line with the Bank's requirements. Application of EU legislation will be reviewed by the Bank's services during appraisal |
| Status                | Approved - 01/07/2011   |

## Distribution of EIB loan signings and outstandings by EU Member State as at 31.12.2014 in EUR billions:

As at 31.12.14 the EIB's loans were distributed around the EU Member States as follows, in EUR billions and ranked by the country's GDP size:

| Nr | Country        | Loans signed | Loans Drawn | Available   | Credit Rating |
|----|----------------|--------------|-------------|-------------|---------------|
| 1  | Germany        | 57.6         | 47.1        | 10.5        | AAA           |
| 2  | <b>UK</b>      | <b>40.6</b>  | <b>30.0</b> | <b>10.6</b> | <b>AAA</b>    |
| 3  | France         | 51.1         | 39.5        | 11.6        | AA            |
| 4  | Italy          | 67.4         | 59.2        | 8.2         | BBB-          |
| 5  | Spain          | 86.7         | 82.7        | 4.0         | BBB+          |
| 6  | Netherlands    | 10.3         | 8.0         | 2.3         | AAA           |
| 7  | Sweden         | 9.0          | 7.0         | 2.0         | AAA           |
| 8  | Belgium        | 11.0         | 9.1         | 1.9         | AA            |
| 9  | Poland         | 37.8         | 30.2        | 7.6         | A-            |
| 10 | Austria        | 14.1         | 12.2        | 1.9         | AA+           |
| 11 | Denmark        | 2.7          | 2.4         | 0.3         | AAA           |
| 12 | Finland        | 7.0          | 5.7         | 1.3         | AA+           |
| 13 | Ireland        | 5.0          | 3.9         | 1.1         | A+            |
| 14 | Greece         | 16.9         | 15.5        | 1.4         | B-            |
| 15 | Portugal       | 21.9         | 20.0        | 1.9         | BB+           |
| 16 | Czech Republic | 10.0         | 8.9         | 1.1         | AA            |
| 17 | Romania        | 7.2          | 5.2         | 2.0         | BBB-          |
| 18 | Hungary        | 11.4         | 9.5         | 1.9         | BB+           |
| 19 | Slovakia       | 3.5          | 3.0         | 0.5         | A+            |
| 20 | Luxembourg     | 0.7          | 0.4         | 0.3         | AAA           |
| 21 | Bulgaria       | 2.9          | 1.8         | 1.1         | BB+           |
| 22 | Croatia        | 3.7          | 2.6         | 1.1         | BB            |
| 23 | Slovenia       | 4.0          | 3.4         | 0.6         | A-            |
| 24 | Lithuania      | 1.5          | 1.3         | 0.2         | A-            |
| 25 | Latvia         | 1.5          | 0.7         | 0.8         | A-            |
| 26 | Estonia        | 1.6          | 1.2         | 0.4         | AA-           |
| 27 | Cyprus         | 2.5          | 1.8         | 0.7         | BB-           |
| 28 | Malta          | 0.3          | 0.3         | 0.0         | BBB+          |
|    | Total          | 490.2        | 412.7       | 77.5        |               |

The credit rating shown is that of the sovereign borrower in that country. By far not all of EIB's loans are to the sovereign borrower or guaranteed by it. Other borrowers in the same country would at best have the same rating as the sovereign.

## Development of Loan Book between 2011 and 2014 in EUR billions:

The table below is a comparison of signed loans with percentage change year-on-year at the end of each year, and then for the whole period of 2011-2014 (through the Eurozone crisis). The listing is in order of the amount taken by each country, from most to least:

| Nr | Country        | 2011-2014 | 2014  | %    | 2013  | %    | 2012  | %    | 2011  |
|----|----------------|-----------|-------|------|-------|------|-------|------|-------|
| 1  | Spain          | +20%      | 86.7  | +8%  | 80.6  | +7%  | 75.1  | +4%  | 72.0  |
| 2  | Italy          | +13%      | 67.5  | +3%  | 65.6  | +7%  | 61.5  | +3%  | 59.9  |
| 3  | Germany        | -3%       | 57.6  | -3%  | 59.1  | +2%  | 57.9  | -2%  | 59.2  |
| 4  | France         | +17%      | 51.1  | +7%  | 47.8  | +8%  | 44.4  | +2%  | 43.5  |
| 5  | UK             | +23%      | 40.6  | +18% | 34.3  | +2%  | 33.6  | +2%  | 33.0  |
| 6  | Poland         | +42%      | 37.8  | +12% | 33.7  | +11% | 30.3  | +14% | 26.6  |
| 7  | Portugal       | -12%      | 21.9  | -3%  | 22.5  | -2%  | 22.9  | -8%  | 24.8  |
| 8  | Greece         | 0%        | 16.9  | +1%  | 16.7  | 0%   | 16.7  | -1%  | 16.9  |
| 9  | Austria        | +24%      | 14.1  | +4%  | 13.5  | +15% | 11.7  | +3%  | 11.4  |
| 10 | Hungary        | 0%        | 11.4  | -7%  | 12.2  | 0%   | 12.2  | +7%  | 11.4  |
| 11 | Belgium        | +15%      | 11.0  | +4%  | 10.6  | +8%  | 9.8   | +2%  | 9.6   |
| 12 | Netherlands    | +29%      | 10.3  | +8%  | 9.5   | +8%  | 8.8   | +10% | 8.0   |
| 13 | Czech Republic | -1%       | 10.0  | -2%  | 10.2  | -4%  | 10.6  | +5%  | 10.1  |
| 14 | Sweden         | +15%      | 9.0   | +5%  | 8.6   | +9%  | 7.9   | +1%  | 7.8   |
| 15 | Romania        | 0%        | 7.2   | +3%  | 7.0   | -3%  | 7.2   | 0%   | 7.2   |
| 16 | Finland        | -9%       | 7.0   | -4%  | 7.3   | +3%  | 7.1   | -8%  | 7.7   |
| 17 | Ireland        | +9%       | 5.0   | 0%   | 5.0   | 0%   | 5.0   | +9%  | 4.6   |
| 18 | Slovenia       | +21%      | 4.0   | -2%  | 4.1   | +8%  | 3.8   | +15% | 3.3   |
| 19 | Croatia        | n/a       | 3.7   | +12% | 3.3   | n/a  | 0.0   | n/a  | 0.0   |
| 20 | Slovakia       | +30%      | 3.5   | +9%  | 3.2   | +14% | 2.8   | +4%  | 2.7   |
| 21 | Bulgaria       | +16%      | 2.9   | +12% | 2.6   | +8%  | 2.4   | -4%  | 2.5   |
| 22 | Denmark        | +23%      | 2.7   | +23% | 2.2   | +5%  | 2.1   | -5%  | 2.2   |
| 23 | Cyprus         | +39%      | 2.5   | +9%  | 2.3   | +5%  | 2.2   | +22% | 1.8   |
| 24 | Estonia        | +33%      | 1.6   | +7%  | 1.5   | +15% | 1.3   | +8%  | 1.2   |
| 25 | Latvia         | -6%       | 1.5   | 0%   | 1.5   | -6%  | 1.6   | 0%   | 1.6   |
| 26 | Lithuania      | +15%      | 1.5   | +7%  | 1.4   | +8%  | 1.3   | 0%   | 1.3   |
| 27 | Luxembourg     | 0         | 0.7   | 0%   | 0.7   | -13% | 0.8   | +14% | 0.7   |
| 28 | Malta          | 0         | 0.3   | 0%   | 0.3   | 0%   | 0.3   | 0%   | 0.3   |
|    | Total EU Loans | +14%      | 490.0 | +5%  | 467.3 | +6%  | 441.3 | +2%  | 431.3 |
|    | Ex-EU Loans    | +18%      | 59.0  | +9%  | 54.2  | +1%  | 53.9  | +8%  | 50.1  |
|    | Total Loans    | +14%      | 549.0 | +5%  | 521.5 | +5%  | 495.2 | +3%  | 481.4 |
|    | Capital        | +85%      | 21.7  | 0%   | 21.7  | 0%   | 21.7  | +85% | 11.7  |
|    | Leverage       |           | 2530% |      | 2403% |      | 2282% |      | 4115% |

Please note that loans to Croatia are included within "Ex-EU Loans" up until 2013, when Croatia became a Member State.

## The European Investment Bank's loan book outside the EU

These are EIB loans to non-EU countries for projects outside the EU, which are partially guaranteed by the EU towards the EIB. The guarantee is on a first-loss basis so the EU is taking on the highest slice of risk on these loans.

Here is the portfolio as at 31.12.14, with the credit rating of the country's sovereign borrower:

- In EUR billion – loans to a country are not shown if they are below EUR0.05 billion in aggregate
- Unrated countries are assigned to Very High Risk
- Where the EIB has bundled many loans into a region, the figure is assigned to High Risk

### Region/Category: Candidate countries for EU Membership

| Country      | Amount | S&P rating | Credit Risk |
|--------------|--------|------------|-------------|
| Turkey       | 18.3   | BBB-       | Moderate    |
| Serbia       | 3.7    | BB-        | Substantial |
| Macedonia    | 0.5    | BB-        | Substantial |
| Iceland      | 0.4    | BBB+       | Moderate    |
| Montenegro   | 0.3    | B+         | High        |
| Albania      | 0.3    | B          | High        |
| <b>Total</b> | 23.5   |            |             |

### Region/Category: Potential candidate countries for EU Membership

| Country            | Amount | S&P rating | Credit Risk |
|--------------------|--------|------------|-------------|
| Bosnia-Herzegovina | 1.5    | B          | High        |
| Kosovo             | 0.1    | Unrated    | Very high   |
| <b>Total</b>       | 1.6    |            |             |

### Region/Category: European Free Trade Area countries (EFTA)

| Country      | Amount | S&P rating | Credit Risk |
|--------------|--------|------------|-------------|
| Norway       | 0.7    | AAA        | Minimal     |
| Switzerland  | 0.1    | AAA        | Minimal     |
| <b>Total</b> | 0.8    |            |             |

### Region/Category: ACP States (Africa and Caribbean)

| Country    | Amount | S&P rating | Credit Risk |
|------------|--------|------------|-------------|
| Kenya      | 0.3    | B+         | High        |
| Zambia     | 0.2    | B          | High        |
| Madagascar | 0.2    | Unrated    | Very high   |

Loans to Africa and Caribbean (cont'd)

| Country                | Amount | S&P rating     | Credit Risk |
|------------------------|--------|----------------|-------------|
| Tanzania               | 0.2    | Unrated        | Very high   |
| Lesotho                | 0.1    | Unrated        | Very high   |
| Regional – West Africa | 0.1    | N/A            | High        |
| Uganda                 | 0.1    | B              | High        |
| Mozambique             | 0.1    | B-             | High        |
| Mauritius              | 0.1    | Baa1 (Moody's) | Moderate    |
| Burkina Faso           | 0.1    | B-             | High        |
| Namibia                | 0.1    | Baa3 (Moody's) | Moderate    |
| Burundi                | 0.1    | Unrated        | Very high   |
| Cameroon               | 0.1    | B              | High        |
| Senegal                | 0.1    | B+             | High        |
| Cape Verde             | 0.1    | B              | High        |
| Guinea                 | 0.1    | Unrated        | Very high   |
| Ghana                  | 0.1    | B-             | High        |
| Dem Rep of Congo       | 0.1    | B-             | High        |
| Mali                   | 0.1    | Unrated        | Very high   |
| Liberia                | 0.1    | Unrated        | Very high   |
| Benin                  | 0.1    | Unrated        | Very high   |
| <b>Total</b>           | 2.6    |                |             |

**Region/Category: Asia**

| Country      | Amount | S&P rating     | Credit Risk |
|--------------|--------|----------------|-------------|
| China        | 1.8    | Aaa3 (Moody's) | Very low    |
| India        | 0.9    | BBB-           | Moderate    |
| Vietnam      | 0.6    | BB-            | Substantial |
| Kazakhstan   | 0.2    | BBB            | Moderate    |
| Sri Lanka    | 0.2    | B+             | High        |
| Bangladesh   | 0.2    | Ba3 (Moody's)  | Substantial |
| Tajikistan   | 0.1    | Unrated        | Very high   |
| Nepal        | 0.1    | Unrated        | Very high   |
| Mongolia     | 0.1    | B              | High        |
| <b>Total</b> | 4.2    |                |             |

**Region/Category: Latin America**

| Country                | Amount | S&P rating | Credit Risk |
|------------------------|--------|------------|-------------|
| Brazil                 | 1.7    | BBB-       | Moderate    |
| Panama                 | 0.5    | BBB        | Moderate    |
| Ecuador                | 0.3    | B          | High        |
| Central America region | 0.3    | N/A        | High        |

Loans to Latin America (cont'd)

| Country      | Amount | S&P rating   | Credit Risk |
|--------------|--------|--------------|-------------|
| Mexico       | 0.2    | A3 (Moody's) | Low         |
| Argentina    | 0.2    | CCC+         | Very high   |
| Chile        | 0.2    | AA           | Very low    |
| Nicaragua    | 0.2    | B2 (Moody's) | High        |
| Paraguay     | 0.1    | BB           | Substantial |
| Colombia     | 0.1    | BBB+         | Moderate    |
| Bolivia      | 0.1    | BB           | Substantial |
| Peru         | 0.1    | A3 (Moody's) | Low         |
| <b>Total</b> | 4.0    |              |             |

**Region/Category: Mediterranean countries**

| Country      | Amount | S&P rating    | Credit Risk |
|--------------|--------|---------------|-------------|
| Morocco      | 4.5    | BBB-          | Moderate    |
| Tunisia      | 3.7    | Ba3 (Moody's) | Substantial |
| Egypt        | 3.3    | B-            | High        |
| Syria        | 1.0    | Unrated       | Very high   |
| Israel       | 0.9    | A+            | Low         |
| Lebanon      | 0.8    | B-            | High        |
| Algeria      | 0.4    | Unrated       | Very high   |
| Jordan       | 0.4    | BB-           | Substantial |
| <b>Total</b> | 15.0   |               |             |

**Region/Category: Eastern Europe, Southern Caucasus, Russia**

| Country      | Amount | S&P rating    | Credit Risk |
|--------------|--------|---------------|-------------|
| Ukraine      | 3.0    | B-            | High        |
| Russia       | 1.3    | BBB-          | Moderate    |
| Moldova      | 0.6    | B3 (Moody's)  | High        |
| Georgia      | 0.5    | BB-           | Substantial |
| Armenia      | 0.2    | Ba3 (Moody's) | Substantial |
| <b>Total</b> | 5.6    |               |             |

**Region/Category: South Africa**

| Country      | Amount | S&P rating | Credit Risk |
|--------------|--------|------------|-------------|
| South Africa | 1.3    | BBB+       | Moderate    |
| <b>Total</b> | 1.3    |            |             |

## Summary of total loans for projects outside the EU at the end of 2014: EUR59 billion

| Region                                       | Amount |
|--|--------|
| Candidate countries for EU Membership        | 23.5   |
| Potential candidate countries for EU Member- | 1.6    |
| European Free Trade Area countries (EFTA)    | 0.8    |
| ACP States (Africa and Caribbean)            | 2.6    |
| Asia   | 4.2    |
| Latin America                                | 4.0    |
| Mediterranean countries                      | 15.0   |
| Eastern Europe, Southern Caucasus, Russia    | 5.6    |
| South Africa                                 | 1.3    |
| <b>Sub-total</b>                             | 58.6   |
| Total of the many smaller loans              | 0.3    |
| <b>Total</b>                                 | 58.9   |

## Summary by Region and Credit Risk Category in EUR billions

| Region   | Minimal | Very Low | Low  | Moderate | Substan-<br>tial | High  | Very High |
|--|---------|----------|------|----------|------------------|-------|-----------|
| Candidate countries for EU Member-<br>ship         | 0       | 0        | 0    | 18.7     | 4.2              | 0.6   | 0         |
| Potential candidate countries for EU<br>Membership | 0       | 0        | 0    | 0        | 0                | 1.5   | 0.1       |
| European Free Trade Area countries<br>(EFTA)       | 0.8     | 0        | 0    | 0        | 0                | 0     | 0         |
| ACP States (Africa and Caribbean)                  | 0       | 0        | 0    | 0.2      | 0                | 1.4   | 1.0       |
| Asia   | 0       | 1.8      | 0    | 1.1      | 0.8              | 0.3   | 0.2       |
| Latin America                                      | 0       | 0.2      | 0.3  | 2.3      | 0.2              | 0.8   | 0.2       |
| Mediterranean countries                            | 0       | 0        | 0.9  | 4.5      | 4.1              | 4.1   | 1.4       |
| Eastern Europe, Southern Caucasus,<br>Russia       | 0       | 0        | 0    | 1.3      | 0.7              | 3.6   | 0         |
| South Africa                                       | 0       | 0        | 0    | 1.3      | 0                | 0     | 0         |
| <b>Sub-total</b>                                   |         |          |      |          |                  |       |           |
| Total of the many smaller loans                    | 0       | 0        | 0    | 0        | 0                | 0.3   | 0         |
| <b>Total</b>                                       | 0.8     | 2.0      | 1.2  | 29.4     | 10.0             | 12.6  | 2.9       |
| <b>As a percentage of the whole</b>                | 1.4%    | 3.4%     | 2.0% | 49.9%    | 17.0%            | 21.4% | 4.9%      |

As a percentage of the whole, only 6.8% is Low Risk or better, meaning 93.2% is Moderate Risk or Worse. In fact 38.4% would count as 'Speculative' (Substantial or High Risk) and the remaining 4.9% as 'Junk'.

## First-loss guarantee from the European Union for the European Investment Bank's loan book outside the EU

A portion of the EIB's loans to non-EU borrowers – both the disbursed and undisbursed amounts – is counter-guaranteed by the European Union. The extent of the European Union's guarantee of EIB's lending to projects outside the EU is defined in a European Council Decision covering each successive Multiannual Financial Framework period.

The latest period is 2014-2020. The EU guarantees a portion of loans signed during the period, whether they are drawn during the period or after it has expired.

The EU guarantee is further conditional upon:

- The loans being destined to a list of eligible countries
- A maximum percentage of the EIB's total of signed loans during the given period – it is 65% for 2014-2020 but was higher in the preceding period
- A maximum ceiling of amounts by region, and by sub-region where there is one

However, the European Commission are permitted to agree, without further reference to the Council or the European Parliament:

- To promote countries from the list of "potentially eligible countries" to the list of "actually eligible countries"
- Some variations of the regional and sub-regional ceilings

This is a good example of how the European Commission can alter the UK's risk-profile without specific reference to the UK, once the basic outlines of a scheme have been agreed by the Parliament and Council of Ministers.

The amounts that could possibly fall upon the UK have to be derived from available figures.

The figures for the amounts guaranteed in the EIB's portfolio are given in the EIB Annual Reports as follows in EUR billions:

| Year                 | Total  | Disbursed/drawn         | Undisbursed/committed but not yet drawn |
|----------------------|--------|-------------------------|---|
| 31.12.2012           | 53.926 | 34.445                  | 19.480                                  |
| Change between years | +266   | -118 (i.e. some repaid) | +384                                    |
| 31.12.2013           | 54.192 | 34.327                  | 19.864                                  |
| Change between years | +4.720 | +2.647                  | +2.074                                  |
| 31.12.2014           | 58.912 | 36.974                  | 21.928                                  |

It should be noted that loan signatures in 2014 were much higher than in 2013, pointing to the EIB's increasingly important role as an instrument of EU policy.

Moody's state on p11 of their rating report on the EU that the guarantee to the EIB was EUR22.9 billion at 31.12.2013 and EUR24.4 billion at 31.12.2014 in respect of the disbursed amounts, but Moody's took no account of what would be under EU guarantee once a loan signed before 31.12.2013 was drawn.

If we apply the same percentage to the undisbursed amount as is the percentage of the disbursed amount guaranteed, we can derive the total EU guarantee, at the end of 2013:

| Guarantee of Disbursed Amount at year-end - A | Disbursed/drawn amount at same date - B | Percentage covered $A / B = C$ | Undisbursed/committed but not yet drawn amount - D | Derived guaranteed portion $- D \times C = E$ | Total under EU guarantee $- A + E$ |
|---|---|--------------------------------|--|---|------------------------------------|
| 22.900  | 34.327                                  | 66.7%                          | 19.864   | 13.251  | 36.151                             |

In other words the EU guarantee had been used for EUR36.1 billion of loans signed before 31.12.13.

Then we can derive what was added in 2014: Moody's state that the guarantee to the EIB was EUR24.4 billion at 31.12.2014 in respect of the disbursed amounts, an addition of EUR1.5 billion during the year.

Thus we can derive the following:

| Guarantee of newly-disbursed loans at year-end<br>- A | Additions to Disbursed/drawn amount at same date<br>- B | Percentage covered<br>A / B = C | Undisbursed/ committed but not yet drawn amount<br>- D | Derived guaranteed portion<br>- D x C = E | Total under EU guarantee<br>- A + E |
|---|---|---------------------------------|--|---|-------------------------------------|
| 1.500   | 2.647   | 56.67%                          | 2.074  | 1.159                                     | 2.659                               |

Finally we can bring that together as follows:

| Year                  | Guarantee on disbursed amount | Guarantee on undisbursed amount | Total under EU guarantee at date<br>- x | Total non-EU loans<br>- y | Loans on EIB's own risk<br>y - x = z |
|-----------------------|-------------------------------|---------------------------------|---|---------------------------|--------------------------------------|
| As at 31.12.2013      | 22.900                        | 13.251                          | 36.151                                  | 54.192                    | 18.041                               |
| Additions in 2014     | 1.500                         | 1.159                           | 2.659                                   | 4.720                     | 2.061                                |
| Total                 | 24.400                        | 14.410                          | 38.810                                  | 58.912                    | 20.102                               |
| Guaranteed percentage | 65.99%                        | 65.68%                          | 65.88%                                  | 100%                      | 34.12%                               |

34.12% of the total – EUR20.1 billion - are at the EIB's own risk and represent an expanding nominal amount of high-risk loans, making a call by the EIB for extra capital from the UK more likely, subject to the limit of EUR35.7 billion of the UK's subscribed-but-uncalled capital in EIB

65.88% of the total – EUR38.8 billion - are an expanding nominal amount of high-risk loans that are fully-guaranteed from the EU budget – which is the joint-and-several liability of the UK

## EIB loan policy since the Eurozone Crisis

The EIB's loan policy since the Eurozone crisis has been in line with the agreement made between Angela Merkel and Francois Hollande in 2012 - to fully mobilise the potential of the EIB for engaging in counter-cyclical public spending, also known as Keynesian economics.

"German Chancellor Angela Merkel added her voice on Saturday to calls to bolster the European Investment Bank (EIB) and to use EU infrastructure funds more flexibly to help spur economic growth in Europe. Her comments are part of a new German emphasis on growth-boosting measures to complement painful tax hikes and spending cuts that have triggered a political and popular backlash against austerity across the Eurozone."

<http://uk.reuters.com/article/uk-germany-merkel-idUKBRE83R02120120428>

The highlights section of the EIB 2014 Annual Financial Report confirms this:

- "2014 was the second year of implementation of incremental lending associated with the EUR10 billion capital increase."
- "During the challenges of 2008-2011, the EIB provided exceptional support to the European economy to help soften the impact of the crisis. The bank is again on course to do so by additional lending volumes for the period 2013-2015, facilitated by the EUR10 billion capital increase. Over 2015-2018 the EIB is expected to shoulder additional responsibilities to support sustainable long-term growth and employment in Europe, bolstered by EU guarantees."

The section also confirmed that the capital increase in 2012 of EUR10 billion was supported unanimously by all shareholders, including the UK.

The section further anticipates the setting-up of the European Fund for Strategic Investments, earlier name the European Structural Fund, the Juncker Fund and InvestEU, before coming out as the EFSI.

The most recent statements from the EIB, in March 2016, further eulogize their "success", meaning their increased loan signings in pursuit of the same policy objectives.

“The European Investment Bank (EIB) has approved €4.7 billion in loans for 25 projects including replacement of a coal-fired district heating plant in Germany, new roads in the Netherlands and France, commuter trains in Germany and relocation of a container port in Ireland” (Source: Pinsent Mason legal review of 15th March 2016).

The EIB statement said that the bank had “also approved new financing for the first European industrial plant to recycle and re-melt aviation-grade scrap titanium metal and titanium alloys that will prevent the need to export titanium for recycling outside of Europe; support to expand modernised milk production activities in Normandy; and reinforcement of the transmission network serving the north of Scotland to connect future wind, wave and tidal generation sites to the onshore transmission network”.

“More than half of the loans will improve access to finance for small businesses in Italy, Spain, Finland, Egypt and Lebanon. Nine of the new projects will be supported by the European Fund for Strategic Investments (EFSI)”.

Werner Hoyer, EIB president said: “Europe faces enormous challenges. EIB lending backed by the EU budget under the investment plan for Europe is now accelerating, enabling the EIB to support the projects that need it most, catalysing and accelerating private investment.”

The EIB is “putting investment to work in the countries neighbouring Syria, a region whose growth and prosperity are an urgent priority for Europe. Without the prospect of a decent future, people in those countries will continue to see migration to Europe as their only hope. As the largest international public bank, the EIB has a central role to play in addressing the root causes of the refugee crisis, starting by targeting projects in the countries that currently shoulder the heaviest burden,” Hoyer said.

## **The European Fund for Strategic Investments – more volumes of EIB lending and at higher risk**

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 EUR16 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 a certain type of capital which was stopping projects 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”:

- EUR21 billion in the top-slice of risk: “mezzanine debt”, “subordinated debt” or “preference share capital” from the EFSI enables...
- EIB to lend a middle-slice of risk of EUR40 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 EUR254 billion of “senior unsecured debt” from private sources.

The total amount raised would be EUR315 billion, all enabled by EU/EIB taking a high-risk position of EUR21 billion and a medium-risk position of EUR40 billion.

In order for this multiplier effect to be realised, the EIB would have to inject its medium-risk position of EUR40 billion at a lower rung on the creditor ladder than the EUR254 billion of “senior unsecured debt” from private sources. The EIB’s total position of EUR61 billion then acts as a credit enhancement towards the suppliers of the EUR254 billion: EIB is in a first-loss position and would lose all its money before the suppliers of the EUR254 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.

EUR315 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.

The EFSI is not a “fund” but rather an expansion of the EIB’s loan portfolio in four aspects:

- EIB benefits from a EUR16 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;
- 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 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 EIB lost anything;
- A special EUR5 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 European Investment Fund acting as the conduit for this money;
- Once again, 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 European money into higher-risk projects and/or into higher-risk financing levels, such as mezzanine debt, subordinated debt, 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 EUR61 billion of financing in two slices, one counter-guaranteed by the EU (EUR21 billion) and one at its own risk (EUR40 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. And 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.

## EFSI funding agreed since launch – drawn from EFSI Country Factsheets

| Country      | Funding in EUR 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                    |
| <b>Total</b> | <b>23.5</b>            |

The EFSI is still in its infancy and can be expected to grow strongly over the coming years, as the EIB's latest press coverage confirms.

### The European Investment Bank – the UK's Maximum Possible Loss under its contractual commitments

The UK's Maximum Possible Loss under current commitments is EUR39.2 billion, being the loss of our paid-in capital of EUR3.5 billion plus the obligation to pay in – and then the subsequent loss of – our subscribed-but-uncalled capital of EUR35.7 billion.

### The European Investment Bank – 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 EUR16 billion from the EU in respect of its engagements, and can risk up to EUR5 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 EIB's shareholders who 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 European Investment Fund 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;

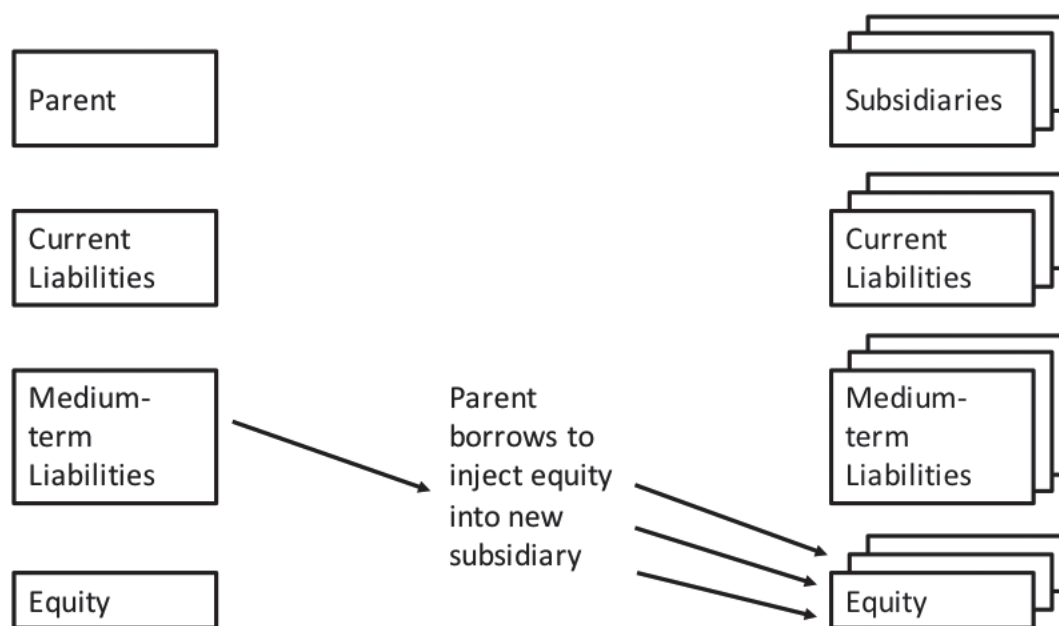
- It does not seem to interrupt the logic chain that these “investors” are the EIB itself either acting directly and under EU guarantee or at the EIB’s own risk through the EIF;
- The EIB “Traditional Loans” are only the first multiplying effect – the second one is that the injection of both the EFSI 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 follows:

| Level/multiplier                                    | Amount         |
|---|----------------|
| EFSI funding/bottom-slice                           | EUR21 billion  |
| First-level Multiplier                              | 190%           |
| EIB “Traditional Loans”/middle-slice                | EUR40 billion  |
| EFSI and EIB funding combined on EIB balance sheet  | EUR61 billion  |
| Second-level Multiplier                             | 416%           |
| Private loans/top-slice                             | EUR254 billion |
| Total funding raised                                | EUR315 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:

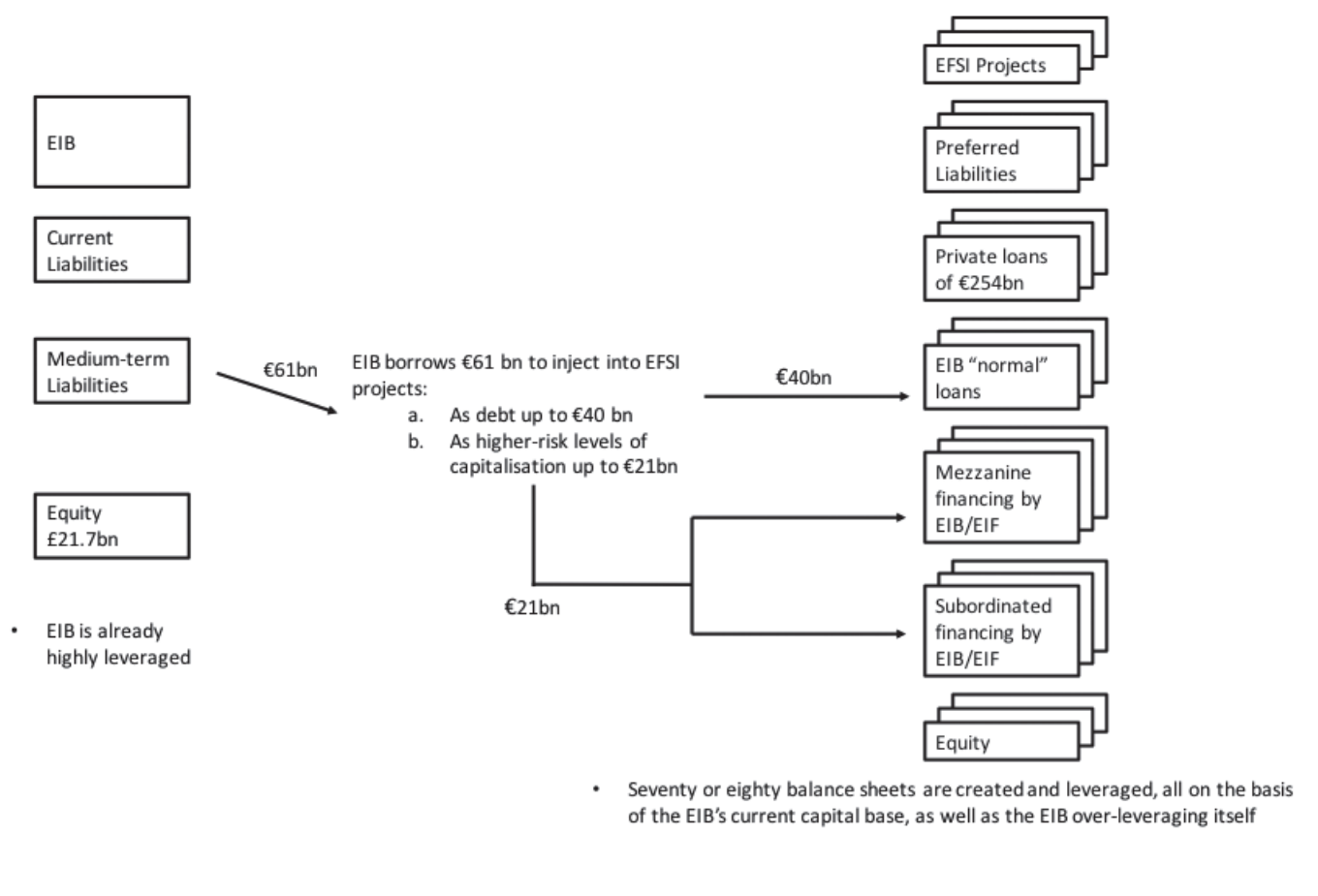
### Enron



- Parent is already highly leveraged

- Four or five leveraged balance sheets are supported on just one small base of equity

In the context of the EFSI the EIB will borrow an extra EUR61 billion itself and then inject it into EFSI projects, either itself as “normal” loans, or as mezzanine or subordinated financing itself or through the EIF. The projects will then borrow EUR254 billion themselves, just as the Enron subsidiaries did:



These are the figures for the total leverage being created in the EIB and EFSI:

| Capital/debt/leverage  | Figure          |
|--|-----------------|
| EIB current called capital                                     | EUR21.7 billion |
| EIB current debts  | EUR453 billion  |
| Current leverage   | 2088%           |
| Extra EIB debts raised to fund the EFSI bottom-slice           | EUR21 billion   |
| Extra EIB debts raised to fund the EFSI middle-slice           | EUR40 billion   |
| Extra debts raised through EFSI                                | EUR254 billion  |
| Total future debts threatening integrity of EU capital         | EUR768 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 (EUR16 billion) whereas its indirect position in that same slice through the EIF is not (EUR5 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 round and claim EUR16 billion from the EU Budget.

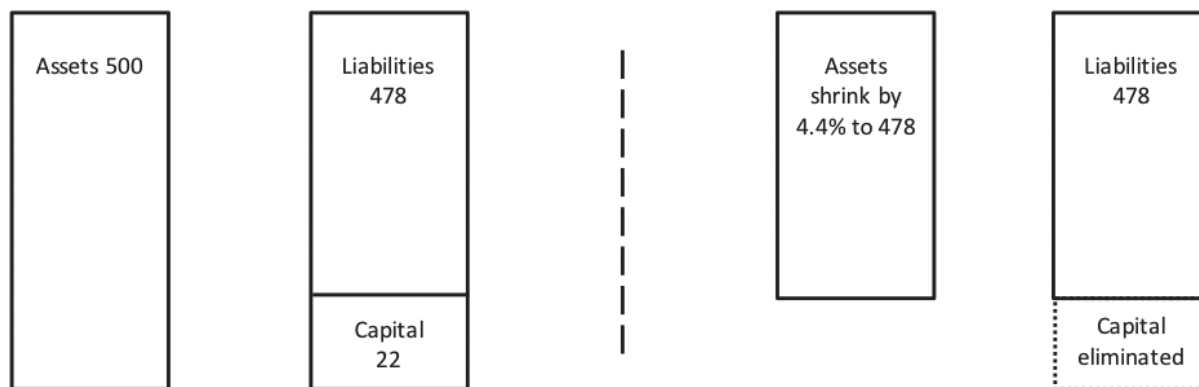
This distinction – that the EIB could lose EUR16 billion on the EFSI before it had to book the loss against its own capital – is of little comfort when the loss would be met by the Member States through the EU Budget or by the same Member States through a call by the EIB for more capital.

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.

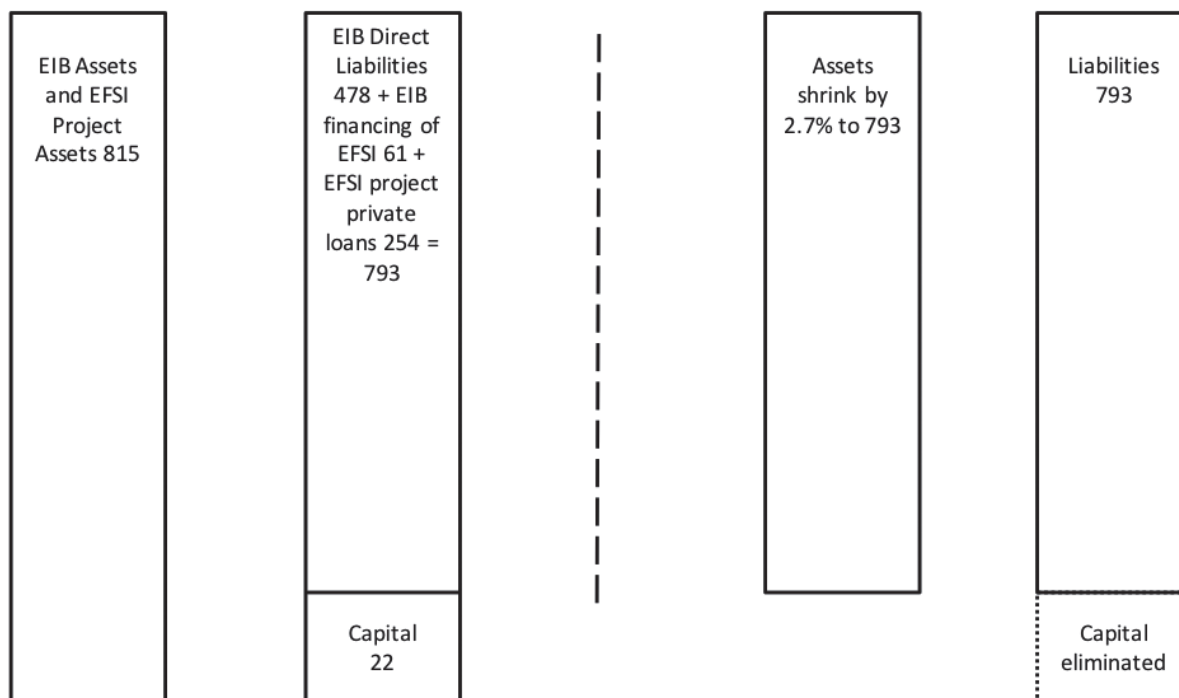
What is important is how much the projects have to pay out to someone else before the claims of the EIB/EU are met, and how much the assets of the projects would have to shrink for the EIB/EU to receive 0-pence-in-the-pound in a liquidation. That comes down to whether the EFSI projects are themselves highly leveraged. They are: EUR254 billion divided by EUR61 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 EIB's assets to eliminate the EIB's capital:



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 EIB direct assets and EFSI project assets to eliminate the value of EIB/EIF engagements in EFSI and the EIB capital as a whole:



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.

## **Likelihood of a call on the EIB's subscribed-but-not-called capital**

The answer to this question lies partially in the percentage of value depletion in EIB's portfolio for EIB's current called-up capital to be eliminated, and this is shown above.

But it also lies in the heads of the EIB Board of Governors and whether they believe that the EIB's expansion is imprudent, imperils its credit rating and threatens its access to funds.

It would not take very high credit losses as a percentage of the EIB's total loan book for these circumstances to transpire, and so, given the EIB's policies and loan book, and the expansion via the EFSI, the author considers such a call to be likely.

## **Extraordinary shareholder support for the EIB**

In a situation where loan defaults had depleted EIB's capital and a capital call had been made, it would have to be assumed that a proportion of the losses were occurring because of a repeat of the Eurozone crisis, where certain "sovereign borrowers" of EU Member States could not finance themselves.

Were that to be the background, it could not be assumed that these same "sovereign borrowers" would be able to meet their capital calls from the EIB.

That scenario would in turn make it more likely that the entire EIB capital was called, on the assumption that the strongest EU Member States, like the UK, would pay in, and that the weaker ones - whose countries were experiencing the problems that necessitated the call in the first place - would not.

Depending on how large the losses were and what size of capital injection would be needed to repair the EIB's balance sheet, and assure its credit rating and access to capital markets, there would be consideration of "extraordinary support" from the strongest shareholders: Moodys state that they consider it "very likely" that this would be forthcoming, for exactly the same reasons that it would be supplied behind the European Union.

Because the potential ceiling for the liabilities of the European Union is so large and because they are on a joint-and-several basis, the likelihood of a need for "extraordinary support" for the EU beyond the contractual commitments is low.

This is not the case with the EIB:

- contractual commitments have fixed ceilings per Member State;
- contractual commitments are several-but-not-joint: the UK could not contractually be called upon to pay in the capital calls of other Member States.

Against that contractual background and with the EIB taking on more risk by both expanding its traditional loan book on its current capital, and also participating in the EFSI in more than one level of capitalisation, it becomes more likely that these scenarios will come to pass and be tested.

It is worth underlining again that the EIB and Moodys set great store by the preferred creditor status of EIB loans in sovereign restructurings like that of Greece, and then in the next breath, the EIB surrenders this status via its engagement through the EFSI, and in large monetary quantity.

# The European Central Bank

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## The European Central Bank – capital structure and the UK's role in it

The third entity where the UK has an exposure is the European Central Bank. All Member States are obliged to become shareholders in the ECB, whether they are Eurozone members or not.

The Bank of England has subscribed EUR1.48 billion to the capital of the European Central Bank, of which EUR56 million has been called and EUR1.42 billion is callable, a similar structure to the European Investment Bank (Source ECB Annual Report 2014).

Protocol 4 in the TFEU states how the subscribed capital of the ECB is divided into the shares of each country, how the ECB's capital can be increased, the procedure for deciding how much will be paid-in and how much left as callable, and the procedure for calling in the uncalled capital.

Shares are owned by the National Central Bank of each EU Member State and must be subscribed in accordance with the Member State's "capital key". The "capital key" is adjusted every five years and is:

- 50% of the Member State's percentage population share of the EU in the preceding year;
- 50% of the Member State's percentage share of EU GDP over the preceding five years.

So it is a blend of the country's population size and GDP size, and countries in which both are growing will have their capital keys ratcheted up.

The ECB Governing Council is the forum for voting on an increase in the subscribed capital of the ECB, and for calling up uncalled capital (TFEU Protocol 4 Art28). The ECB Governing Council has its own version of QMV – the vote must be carried by Governing Council members representing NCBs (shareholders) that make up at least 66% of the ECB's subscribed capital and 50% of the shareholders numerically (TFEU Protocol 4 Art10). Lithuania joined the Euro on 1.1.15 and so the combined capital keys of the Eurozone member states are now 70.3915% and the number of countries in the Eurozone is 19, as opposed to the lower figures on the following table from 2014.

The ECB Governing Council consists of the governors of the Eurozone National Central Banks and the Members of the ECB's own Executive Board. The Executive Board, headed by Mario Draghi, had seven members as of 31.12.14.

There is also a General Council composed of the governors of all 28 EU Member State National Central Banks, plus the President and Vice President of the ECB (Mario Draghi and Vito Constancio).

Non-Euro-Area NCBs have no representation in the ECB Governing Council and do not vote on resolutions to support an increase in the ECB's subscribed capital or a calling-up of uncalled capital (TFEU Protocol 4 Art10). Nevertheless, they and their shareholdings are included in the calculations of the majority needed to carry such a vote, meaning that the 66%/100% and 50%/100% thresholds can be met in a Governing Council meeting with the support of 66% out of the 70.3915% of ECB's subscribed capital that is owned by Eurozone NCBs, and by 14/19 of NCB Governors in the room.

The requirement for the support of Governing Council members representing at least 66% of the ECB's subscribed capital allows for dissent by as many as Malta, Cyprus, Estonia, Luxembourg, Slovenia, Lithuania, Slovakia, Ireland and Finland, but only 6 out of 19 Governors need dissent before the vote ceased to carry the support of 50% of the ECB shareholders numerically.

## Shares in the ECB.

### Shares - euro area NCBs in EUR millions:

| NCB                           | Country     | Capital key % | Subscribed capital |
|-------------------------------|-------------|---------------|--------------------|
| Nationale Bank van België     | Belgium     | 2.4778        | 268                |
| Deutsche Bundesbank           | Germany     | 17.9973       | 1.948              |
| EestiPank                     | Estonia     | 0.1928        | 21                 |
| Central Bank of Ireland       | Ireland     | 1.1607        | 126                |
| Bank of Greece                | Greece      | 2.0332        | 220                |
| Banco de España               | Spain       | 8.8409        | 957                |
| Banque de France              | France      | 14.1792       | 1.535              |
| Bancad'Italia                 | Italy       | 12.3108       | 1.333              |
| Central Bank of Cyprus        | Cyprus      | 0.1513        | 16                 |
| Latvijas Banka                | Latvia      | 0.2821        | 31                 |
| Banquecentrale du Luxembourg  | Luxembourg  | 0.2030        | 22                 |
| Central Bank of Malta         | Malta       | 0.0648        | 7                  |
| De Nederlandsche Bank         | Netherlands | 4.0035        | 433                |
| Oesterreichische Nationalbank | Austria     | 1.9631        | 213                |
| Banco de Portugal             | Portugal    | 1.7434        | 189                |
| Banka Slovenije               | Slovenia    | 0.3455        | 37                 |
| Národnábanka Slovenska        | Slovakia    | 0.7725        | 84                 |
| Suomen Pankki                 | Finland     | 1.2564        | 136                |
| <b>Total</b>                  |             | 69.9783       | 7.575              |

### Shares - non-euro area NCBs in Euro millions:

| NCB                        | Country        | Capital key % | Subscribed capital |
|----------------------------|----------------|---------------|--------------------|
| Българсканароднабанка      | Bulgaria       | 0.8590        | 93                 |
| Českánárodníbanka          | Czech Republic | 1.6075        | 174                |
| Danmarks Nationalbank      | Denmark        | 1.4873        | 161                |
| Hrvatska narodna banka     | Croatia        | 0.6023        | 65                 |
| Lietuvosbankas             | Lithuania      | 0.4132        | 45                 |
| Magyar Nemzeti Bank        | Hungary        | 1.3798        | 149                |
| Narodowy Bank Polski       | Poland         | 5.1230        | 555                |
| Banca Națională a României | Romania        | 2.6024        | 282                |
| Sveriges Riksbank          | Sweden         | 2.2729        | 246                |
| Bank of England            | UK             | 13.6743       | 1.480              |
| <b>Total</b>               |                | 30.0217       | 3.250              |

The entirety of Euro-area NCBs' subscribed capital in the ECB had been called up as at 31.12.2104, whereas only a proportion of non-euro-area NCBs' subscriptions had:

Called and uncalled capital in the ECB - euro area NCBs in Euro millions:

| NCB                           | Country     | Subscribed   | Called       | Uncalled |
|-------------------------------|-------------|--------------|--------------|----------|
| Nationale Bank van België     | Belgium     | 268          | 268          | 0        |
| Deutsche Bundesbank           | Germany     | 1.948        | 1.948        | 0        |
| EestiPank                     | Estonia     | 21           | 21           | 0        |
| Central Bank of Ireland       | Ireland     | 126          | 126          | 0        |
| Bank of Greece                | Greece      | 220          | 220          | 0        |
| Banco de España               | Spain       | 957          | 957          | 0        |
| Banque de France              | France      | 1.535        | 1.535        | 0        |
| Bancad'Italia                 | Italy       | 1.333        | 1.333        | 0        |
| Central Bank of Cyprus        | Cyprus      | 16           | 16           | 0        |
| Latvijas Banka                | Latvia      | 31           | 31           | 0        |
| Banquecentrale du Luxembourg  | Luxembourg  | 22           | 22           | 0        |
| Central Bank of Malta         | Malta       | 7            | 7            | 0        |
| De Nederlandsche Bank         | Netherlands | 433          | 433          | 0        |
| Oesterreichische Nationalbank | Austria     | 213          | 213          | 0        |
| Banco de Portugal             | Portugal    | 189          | 189          | 0        |
| Banka Slovenije               | Slovenia    | 37           | 37           | 0        |
| Národnábanka Slovenska        | Slovakia    | 84           | 84           | 0        |
| Suomen Pankki                 | Finland     | 136          | 136          | 0        |
| <b>Total</b>                  |             | <b>7.575</b> | <b>7.575</b> | <b>0</b> |

**Called and uncalled capital in the ECB - non-euro area NCBs in Euro millions:**

| NCB                        | Country        | Subscribed   | Called     | Uncalled     |
|----------------------------|----------------|--------------|------------|--------------|
| Българсканароднабанка      | Bulgaria       | 93           | 3          | 90           |
| Českánárodníbanka          | Czech Republic | 174          | 7          | 167          |
| Danmarks Nationalbank      | Denmark        | 161          | 6          | 155          |
| Hrvatska narodna banka     | Croatia        | 65           | 2          | 63           |
| Lietuvosbankas             | Lithuania      | 45           | 2          | 43           |
| Magyar Nemzeti Bank        | Hungary        | 149          | 6          | 143          |
| Narodowy Bank Polski       | Poland         | 555          | 21         | 534          |
| Banca Națională a României | Romania        | 282          | 10         | 272          |
| Sveriges Riksbank          | Sweden         | 246          | 9          | 237          |
| Bank of England            | UK             | 1.480        | 56         | 1.424        |
| <b>Total</b>               |                | <b>3.250</b> | <b>122</b> | <b>3.128</b> |

## **The European Central Bank – the UK’s Maximum Possible Loss under its contractual commitments**

The UK’s Maximum Possible Loss under contractual commitments is its EUR1.48 billion subscribed to the capital of the European Central Bank, of which EUR56 million has been called and EUR1.42 billion is callable.

The UK has no vote in the meetings which decide on uncalled capital being called, or on the ECB’s subscribed capital being increased. Both decisions are made by the ECB Governing Council and only the Eurozone National Central Banks are represented on it. However, the UK and its shareholding do count in the calculations that govern those decisions.

## **The European Central Bank – likelihood of the UK’s Maximum Possible Loss materialising or even being exceeded**

S&P and Moodys do not issue ratings for the ECB, as the ECB does not borrow on capital markets. Neither rating agency therefore issues an opinion on “extraordinary shareholder support”.

The ECB is a very curious animal in that it “manages” the foreign exchange reserves of the Euro-In Member States without owning them: there is no asset position on its balance sheet entitled “Foreign exchange reserves and bullion”.

The second biggest liability position on its balance sheet is “Liabilities ref. transfer of foreign exchange reserves”, but this is money owed, not owned, and at EUR40.6 billion is an amount far smaller than the total value of all foreign exchange and bullion reserves of the NCBs combined. The largest asset position is banknotes, for which the ECB is the issuer – but the National Central Banks are the issuers of the Euro coin.

Apart from that, the ECB itself does not have much money: the main resources are at the National Central Banks. Mario Draghi has frequently stated that the ECB “will do whatever it takes” to fulfil its objectives and that it will aim a bazooka at the Euro’s problems. The size of the ECB’s balance sheet footings does not support these statements, so either it is not being done, or it is being done but not in such a way that it appears on the ECB’s balance sheet.

There is provision for the latter eventuality: ECB can mobilise its operations through the NCBs under a profit/loss-sharing arrangement. The ECB initiates, oversees and administers the operation but appoints a National Central Bank to undertake it in the open market. The acting NCB executes the operation and makes a profit or a loss. The profit or loss is taken over by the ECB and apportioned around all the National Central Banks, including back to the one that undertook the operation, in accordance with their capital keys.

The only trace in the ECB’s balance sheet of such operations is in the single balance sheet position “Net liabilities in the Eurosystem”, which would be liabilities of the ECB towards the NCBs.

An accounting treatment that allows the statement of one position for the dealings between the ECB on the one side, and all the NCBs on the other, infers that all Eurosystem members constitute a “single counterparty” towards the ECB. That treatment is permissible to commercial banks when they offer a service like BankBoston Optimizer notional pooling but only where it is offered to a “single counterparty” on the customer side. A customer group consisting of many separate legal entities owned by a single parent company does not per se constitute a “single counterparty”, even if the accounts of the subsidiaries are consolidated into those of the parent.

A further document is needed to enable this, in some cases just signed between the separate legal entities on the customer side (France: Groupement d’intérêt économique; Germany: Organschaftsvertrag mit Gewinn- und Verlustabführung), or involving the bank (Statement of joint and several liability; Cross-Guarantee).

The Eurosystem certainly consists of many separate legal entities, but the NCBs are not owned by the ECB and the accounts of the NCBs are not consolidated into those of the ECB. Nevertheless the ECB shows just one net position towards the NCBs collectively.

It would be quite credible that the ECB's accounting treatment allowed the ECB to record, as separate but netted positions, each of its relationships with an NCB. That is combining all its loans to the Banque de France with the sum of any credit balances and securities the Banque de France held at the ECB, if there was a legally-binding set-off agreement in place between the ECB and the Banque de France. This would equate to "single counterparty netting" in commercial banking. That could be repeated across all the other 27 NCBs individually, and then the individual net asset positions and the individual net liability positions totalled, to reach two balance sheet positions: "Net assets with Eurosystem members" and "Net liabilities with Eurosystem members".

The ECB has only one position and this is credible only if it had applied the approach described above and every single result was a liability in the respective NCB's favour, and not one had a net balance in the ECB's favour.

This is then not credible, and the position should be unwound into two positions, one on each side of the balance sheet, and both positions should be supported by notes:

- Showing the gross and net positions against each NCB individually;
- Showing how the balance sheet position derived from the addition of the individual positions;
- Stating that in all cases a legally-binding set-off agreement was in place and that it was supported by recently-refreshed and positive legal opinions as to its validity and enforceability in all relevant jurisdictions;
- The number of relevant jurisdictions would be at least two, namely Germany (for the ECB) and the law of the country of the respective NCB, plus the law of the contracts if different and the laws of any other places of business within the dealings themselves (e.g. the State of New York if the dealings involved a pledge of US government securities).

Instead one has to conclude that the ECB has agglomerated several net liability positions with NCBs with several – but in total a lesser amount of - net asset positions with NCBs, to reach a net-net liability position in the customer class "Eurosystem NCBs" as a whole – a treatment that would not be allowable to a commercial bank.

It is also noteworthy that there is no balance sheet position for the ECB's positions towards NCBs on their payment settlement accounts for TARGET, the main Euro high-value payment system: more on that below.

ECB Summary Balance Sheet:

| <b>Assets</b>                  | <b>EUR bil</b> | <b>Liabilities</b>                                 | <b>EUR bil</b> |
|--------------------------------|----------------|--|----------------|
| Gold                           | 16.0           | Banknotes  | 81.3           |
| Non-euro bank balances – ex-EU | 44.4           | Liability re transfer of foreign exchange reserves | 40.6           |
| Non-euro bank balances – in-EU | 1.8            | <b>Net liabilities in the Eurosystem</b>           | 23.6           |
| Securities                     | 17.8           | Sundry liabilities                                 | 2.5            |
| Claims regarding banknotes     | 81.3           | Provisions and revaluations                        | 27.6           |
| Other assets                   | 24.0           | Capital & P&L                                      | 8.7            |
| <b>Total Assets</b>            | 185.3          | <b>Total Liabilities</b>                           | 185.3          |

From the point of view of what monies the ECB owes to creditors in the sense that the EU and EIB owe money to creditors, the amounts are very small – basically the "Net liabilities in the Eurosystem": this makes the ECB's leverage appear very low compared to that of the EIB.

ECB ratio of capital to debts, compared to the EIB:

|                        | <b>EIB without EFSI</b> | <b>EIB with EFSI</b> | <b>ECB</b>      |
|------------------------|-------------------------|----------------------|-----------------|
| Current called capital | EUR21.7 billion         | EUR21.7 billion      | EUR8.7 billion  |
| Current debts          | EUR453 billion          | EUR453 billion       | EUR23.6 billion |
| EFSI-based debts       | --                      | EUR315 billion       | --              |
| Total debts            | EUR453 billion          | EUR768 billion       | EUR23.6 billion |
| Leverage               | 2088%                   | 3539%                | 271%            |

However, the ECB's balance sheet and leverage tend to disguise the size of the wheel at whose centre it sits and which spins at its behest. The ECB initiates, oversees and administers many operations amongst Euro-In National Central Banks in which the identity of the actor is disguised.

An example is the main high-value payments system in Euro – called TARGET or Trans-European Automated Real-Time Gross Settlement Express Transfer System in full – in which the National Central Banks hold bank accounts with one another. These accounts will naturally and by turns show credit balances or overdrafts as payments go in and out. These positions are not assets or liabilities of the ECB and so do not appear on the ECB's balance sheet.

However TARGET has been the subject of considerable controversy because the positions run by the National Central Banks mirror the capital flight out of the Eurozone periphery: the Bundesbank is the main creditor. At the end of a business day in which capital flight had occurred out of the Eurozone periphery and into Germany, either or both of the following would be apparent:

- The Bundesbank would have a credit balance on its accounts at Banca d'Italia, Banca d'España etc;
- The Central Bank of Ireland or of Portugal would have an overdraft on their accounts at the Bundesbank.

In both cases the Bundesbank is a creditor of the NCB of a Eurozone periphery country, and is offering financial support in TARGET either by making a deposit with or by lending on overdraft to the country's central bank over and above any support it might be offering through EIB, EFSI, EFSM, EFSF or ESM.

This creditor position – which fluctuates daily – has been the subject of much dispute in Germany as to whether it is legal under the Maastricht Treaty for the European System of Central Banks to allow any creditor/debtor balances on cash accounts to remain outstanding overnight, whilst it is seen as natural that overdrafts would appear during the day as payments were exchanged within the system.

Taking the example of where an NCB had gone overdrawn at the Bundesbank, the rules are that it can do this and the Bundesbank can allow it, as long as the borrowing NCB has lodged adequate collateral with the lending NCB.

Spanish government bonds are permissible collateral for the Banca d'España to place:

- These bonds are valued at face value in TARGET even if the open market price is lower, leaving a difference which is an unsecured credit risk for the lending NCB;
- The first argument is over whether the bonds should rather be valued at the open market price and whether the Banca d'España should not overcollateralise by depositing bonds with a higher face value, such that the lending NCB did not have any unsecured credit risk on Banca d'España;
- The second argument goes to the point that Spanish government bonds pledged by the Banca d'España are a prime example of "correlation": the security carries the same risk as the borrower. Banca d'España and the office of the Spanish exchequer are no more distinct from one another than the Bank of England and H.M.Treasury. If the Banca d'España found itself with no money, it would be because the Spanish government had no money. In that circumstance Spanish government bond prices would fall sharply and the collateral would not cover the loan.

The total outstanding position of debtors and creditors has recently been estimated at EUR600 billion by Lombard Research and, as stated, the Bundesbank is the main creditor.

Mario Draghi has several times claimed that the "Eurosystème" could mobilise a bazooka to deal with any problems in the Eurozone but the ammunition would have to come from the National Central Banks, and their resources and risk-appetite have their limits.

The other option would be for the ECB Governing Council to increase the capital of the ECB itself, including for the UK, and there is no stated limit as to how big that increase could be.

The ECB Governing Council could call up the subscribed-but-not-called capital of the ECB, meaning the portions from the Euro-Out Member States, including the UK.

The ECB Governing Council could both increase the subscribed capital of the ECB and also call up all subscribed-but-not-called capital, requiring cash to be injected by all Member States.

The ECB Governing Council would surely use these powerful means at its disposal to increase contractual commitments first, before resorting to a call for “extraordinary support”.

Then one comes to the same debate as with the EIB: if the ECB Governing Council did any of this, it would very likely have been triggered by external circumstances in which certain Member States would not be able to meet calls for cash, even if they were willing to take on extra liabilities for subscribed-but-not-called capital.

In those circumstances the ECB would have to look to those shareholders with the largest capital keys and the highest credit ratings to support them. The same rationale for offering extraordinary support would come into play for these shareholders as Moodys has listed in the case of the EU and EIB.

In this case the contractual commitment ceilings are far lower than for the EU, and lower than for the EIB, whereas the size of the wheel that the “Eurosystème” is spinning is very large, and the apportionment of risks and rewards between the ECB and the National Central Banks is opaque.

It has to be counted as a wild card whether there could be a call for “extraordinary support” for the ECB. At any rate there is a risk of a call for extra, contractual support both by a calling-up of the UK’s subscribed-but-not-called capital, and by the expansion of the UK’s subscribed capital.

The determining authority for these two matters is the ECB Governing Council, upon which the UK is not represented.

## Who is benefitting from all of this?

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Now we need to step back and ask who is benefitting from the existence of these mechanisms and from the manner in which they are being applied, and this should focus on the EU and the EIB, since they are the main mechanisms of debt and wealth transfer.

Identifying the beneficiary countries and quantifying the benefit they derive has been attempted in two ways:

- Identifying which countries borrow the most and the least through the EU mechanisms compared to their size as measured by their individual GDP;
- Magnifying this by applying a risk-weighting, so as to ascertain which country is benefitting the most from the “credit enhancement” their debt receives when it is taken from one of the EU mechanisms rather than their having to raise the debt directly from investors.

The application of a risk-weighting is done in the same way that a commercial bank would do it. The result is a proxy for the degree of difficulty that a small/weak country would have in accessing the same volumes of credit directly from investors on the same terms, compared to taking the debt from the AAA-rated EU mechanisms.

For (2) we have relied on the credit ratings of Moodys and Standard&Poor for every EU Member State, while noting that the ratings seem overly generous to the smaller/weaker countries (see Appendix II for a fuller explanation).

These are the Member State ratings ordered by GDP size:

| Nr | Country     | S&P Rating | Moodys rating |
|----|-------------|------------|---------------|
| 1  | Germany     | AAA        | Aaa           |
| 2  | <b>UK</b>   | <b>AAA</b> | <b>Aa1</b>    |
| 3  | France      | AA         | Aa2           |
| 4  | Italy       | BBB-       | Baa2          |
| 5  | Spain       | BBB+       | Baa2          |
| 6  | Netherlands | AAA        | Aaa           |
| 7  | Sweden      | AAA        | Aaa           |

## Member State ratings by GDP size (cont'd)

| Nr | Country        | S&P Rating | Moody's rating |
|----|----------------|------------|----------------|
| 8  | Belgium        | AA         | Aa3            |
| 9  | Poland         | A-         | A2             |
| 10 | Austria        | AA+        | Aaa            |
| 11 | Denmark        | AAA        | Aaa            |
| 12 | Finland        | AA+        | Aaa            |
| 13 | Ireland        | A+         | Baa1           |
| 14 | Greece         | B-         | Caa3           |
| 15 | Portugal       | BB+        | Ba1            |
| 16 | Czech Republic | AA         | A1             |
| 17 | Romania        | BBB-       | Baa3           |
| 18 | Hungary        | BB+        | Ba1            |
| 19 | Slovakia       | A+         | A2             |
| 20 | Luxembourg     | AAA        | Aaa            |
| 21 | Bulgaria       | BB+        | Baa2           |
| 22 | Croatia        | BB         | Ba1            |
| 23 | Slovenia       | A-         | Baa3           |
| 24 | Lithuania      | A-         | A3             |
| 25 | Latvia         | A-         | A3             |
| 26 | Estonia        | AA-        | A1             |
| 27 | Cyprus         | BB-        | B1             |
| 28 | Malta          | BBB+       | A3             |

## The European Union and the European Investment Bank as “credit enhancements” for investor money going into borrower countries

The European Union and the EIB are both rated AAA by Standard & Poor and Aaa by Moody's. Investors lend money to these organisations for long periods and at low interest rates.

Investors might lend to Czech Republic or just about to Romania – which still ranks as “Investment Grade” – but not for such a long period or at such a low rate of interest. They would not lend to Cyprus, Greece or Hungary at all because their ratings are not “Investment Grade”.

All those countries can borrow through the EU and/or the EIB. EU and/or EIB borrow from investors and lend back-to-back to countries that either could not raise funds themselves or not on such good terms.

The EU and EIB are acting as “credit enhancements” towards investors on behalf of borrowers. Other forms of “credit enhancement” would be a residential mortgage or a portfolio of shares, but in this case it is the access to the larger/stronger Member States through the structural guarantees described above – in other words the “full faith and credit of the UK” is a “credit enhancement” mobilised through the EU and EIB to enable the borrowings of the smaller/weaker EU countries.

# Which Member States are contributing the most in terms of their percentage share in the guarantee structure?

This is clear from the capital structure in the case of the EIB. In the case of the EU it is based on the relative sizes of the economies of the Member States based on GNI. Here the equivalent World Bank statistics from 2014 on EU Member State on GDP size ("Gross Domestic Product"):

| Nr | Country        | GDP in EUR billions | Share of EU GDP |
|----|----------------|---------------------|-----------------|
| 1  | Germany        | 3,481               | 20.90%          |
| 2  | <b>UK</b>      | <b>2,690</b>        | <b>16.15%</b>   |
| 3  | France         | 2,546               | 15.28%          |
| 4  | Italy          | 1,927               | 11.57%          |
| 5  | Spain          | 1,243               | 7.46%           |
| 6  | Netherlands    | 791                 | 4.75%           |
| 7  | Sweden         | 514                 | 3.08%           |
| 8  | Belgium        | 491                 | 2.94%           |
| 9  | Poland         | 479                 | 2.87%           |
| 10 | Austria        | 393                 | 2.36%           |
| 11 | Denmark        | 308                 | 1.85%           |
| 12 | Finland        | 245                 | 1.47%           |
| 13 | Ireland        | 226                 | 1.36%           |
| 14 | Greece         | 212                 | 1.27%           |
| 15 | Portugal       | 207                 | 1.24%           |
| 16 | Czech Republic | 185                 | 1.11%           |
| 17 | Romania        | 179                 | 1.08%           |
| 18 | Hungary        | 124                 | 0.75%           |
| 19 | Slovakia       | 90                  | 0.54%           |
| 20 | Luxembourg     | 59                  | 0.35%           |
| 21 | Bulgaria       | 51                  | 0.31%           |
| 22 | Croatia        | 51                  | 0.31%           |
| 23 | Slovenia       | 44                  | 0.26%           |
| 24 | Lithuania      | 43                  | 0.26%           |
| 25 | Latvia         | 28                  | 0.17%           |
| 26 | Estonia        | 23                  | 0.14%           |
| 27 | Cyprus         | 21                  | 0.12%           |
| 28 | Malta          | 9                   | 0.05%           |

# Which Member States are benefitting the most in terms of the quantity of loans they are accessing?

This is the first measure of how much benefit each Member State is gaining from the different financing mechanisms. It is the share of the volume of credit borrowed by each Member State through the different mechanisms, compared to their share of GDP size: this will tell us which Member State is using these mechanisms proportionally the most and the least.

We insert the amounts of credit taken from each mechanism, in EUR billions:

| Nr | Country        | EU*      | EIB         | EFSI       | Total       | Share of total |
|----|----------------|----------|-------------|------------|-------------|----------------|
| 1  | Germany        | 0        | 57.6        | 0.2        | 57.8        | 10.16%         |
| 2  | <b>UK</b>      | <b>0</b> | <b>40.6</b> | <b>1.4</b> | <b>42.0</b> | <b>7.38%</b>   |
| 3  | France         | 0        | 51.1        | 1.2        | 52.3        | 9.19%          |
| 4  | Italy          | 0        | 67.5        | 1.3        | 68.8        | 12.09%         |
| 5  | Spain          | 0        | 86.7        | 0.5        | 87.2        | 15.33%         |
| 6  | Netherlands    | 0        | 10.3        | 0.1        | 10.4        | 1.83%          |
| 7  | Sweden         | 0        | 9.0         | 0          | 9.0         | 1.58%          |
| 8  | Belgium        | 0        | 11.0        | 0.2        | 11.2        | 1.97%          |
| 9  | Poland         | 0        | 37.8        | 18.5       | 56.3        | 9.89%          |
| 10 | Austria        | 0        | 14.1        | 0          | 14.1        | 2.48%          |
| 11 | Denmark        | 0        | 2.7         | 0.1        | 2.8         | 0.49%          |
| 12 | Finland        | 0        | 7.0         | 0          | 7.0         | 1.23%          |
| 13 | Ireland        | 22.5     | 5.0         | 0          | 27.5        | 4.83%          |
| 14 | Greece         | 0        | 16.9        | 0          | 16.9        | 2.97%          |
| 15 | Portugal       | 24.3     | 21.9        | 0          | 46.2        | 8.12%          |
| 16 | Czech Republic | 0        | 10.0        | 0          | 10.0        | 1.76%          |
| 17 | Romania        | 5.2      | 7.2         | 0          | 12.4        | 2.18%          |
| 18 | Hungary        | 1.5      | 11.4        | 0          | 12.9        | 2.27%          |
| 19 | Slovakia       | 0        | 3.5         | 0          | 3.5         | 0.62%          |
| 20 | Luxembourg     | 0        | 0.7         | 0          | 0.7         | 0.12%          |
| 21 | Bulgaria       | 0.1      | 2.9         | 0          | 3.0         | 0.53%          |
| 22 | Croatia        | 0        | 3.7         | 0          | 3.7         | 0.65%          |
| 23 | Slovenia       | 0        | 4.0         | 0          | 4.0         | 0.70%          |
| 24 | Lithuania      | 0        | 1.5         | 0          | 1.5         | 0.26%          |
| 25 | Latvia         | 1.9      | 1.5         | 0          | 3.4         | 0.60%          |
| 26 | Estonia        | 0        | 1.6         | 0          | 1.6         | 0.28%          |
| 27 | Cyprus         | 0        | 2.5         | 0          | 2.5         | 0.44%          |
| 28 | Malta          | 0        | 0.3         | 0          | 0.3         | 0.05%          |

\*see the next table for a breakdown of which EU mechanism is being used by which country

The table below breaks out the column "EU" in the previous table, into the main mechanisms:

- European Financial Stabilisation Mechanism ("EFSM")
- Balance of Payments Facility ("BoP")
- Euratom

The Macro Financial Assistance Programme is for non-EU countries, so it appears in the analysis above on the UK's total liability, but not in this analysis, which is confined to loans to Member States. The MFA outstanding was EUR1.8 billion as at 31.12.2014.

Here are the outstandings under each main mechanism, in EUR billions:

| <b>Nr</b> | <b>Country</b> | <b>EFSM</b> | <b>BoP</b> | <b>Euratom</b> | <b>Total</b> |
|-----------|----------------|-------------|------------|----------------|--------------|
| 1         | Germany        | 0           | 0          | 0              | 0            |
| 2         | <b>UK</b>      | <b>0</b>    | <b>0</b>   | <b>0</b>       | <b>0</b>     |
| 3         | France         | 0           | 0          | 0              | 0            |
| 4         | Italy          | 0           | 0          | 0              | 0            |
| 5         | Spain          | 0           | 0          | 0              | 0            |
| 6         | Netherlands    | 0           | 0          | 0              | 0            |
| 7         | Sweden         | 0           | 0          | 0              | 0            |
| 8         | Belgium        | 0           | 0          | 0              | 0            |
| 9         | Poland         | 0           | 0          | 0              | 0            |
| 10        | Austria        | 0           | 0          | 0              | 0            |
| 11        | Denmark        | 0           | 0          | 0              | 0            |
| 12        | Finland        | 0           | 0          | 0              | 0            |
| 13        | Ireland        | 22.5        | 0          | 0              | 22.5         |
| 14        | Greece         | 0           | 0          | 0              | 0            |
| 15        | Portugal       | 24.3        | 0          | 0              | 24.3         |
| 16        | Czech Republic | 0           | 0          | 0              | 0            |
| 17        | Romania        | 0           | 5.0        | 0.2            | 5.2          |
| 18        | Hungary        | 0           | 1.5        | 0              | 1.5          |
| 19        | Slovakia       | 0           | 0          | 0              | 0            |
| 20        | Luxembourg     | 0           | 0          | 0              | 0            |
| 21        | Bulgaria       | 0           | 0          | 0.1            | 0.1          |
| 22        | Croatia        | 0           | 0          | 0              | 0            |
| 23        | Slovenia       | 0           | 0          | 0              | 0            |
| 24        | Lithuania      | 0           | 0          | 0              | 0            |
| 25        | Latvia         | 0           | 1.9        | 0              | 1.9          |
| 26        | Estonia        | 0           | 0          | 0              | 0            |
| 27        | Cyprus         | 0           | 0          | 0              | 0            |
| 28        | Malta          | 0           | 0          | 0              | 0            |
|           | <b>Total</b>   | 46.8        | 8.4        | 0.3            | 55.5         |

Then we can set the GDP share against the share of the loans and see which country is making the greatest use of these collaborative fund-raising mechanisms compared to its own size, firstly ranked by GDP size:

| Nr | Country        | GDP share     | Loans share  | Benefit + or - |
|----|----------------|---------------|--------------|----------------|
| 1  | Germany        | 20.90%        | 10.16%       | -10.75%        |
| 2  | <b>UK</b>      | <b>16.15%</b> | <b>7.38%</b> | <b>-8.77%</b>  |
| 3  | France         | 15.28%        | 9.19%        | -6.09%         |
| 4  | Italy          | 11.57%        | 12.09%       | +0.53%         |
| 5  | Spain          | 7.46%         | 15.33%       | +7.86%         |
| 6  | Netherlands    | 4.75%         | 1.83%        | -2.92%         |
| 7  | Sweden         | 3.08%         | 1.58%        | -1.50%         |
| 8  | Belgium        | 2.94%         | 1.97%        | -0.98%         |
| 9  | Poland         | 2.87%         | 9.89%        | +7.02%         |
| 10 | Austria        | 2.36%         | 2.48%        | +0.12%         |
| 11 | Denmark        | 1.85%         | 0.49%        | -1.36%         |
| 12 | Finland        | 1.47%         | 1.23%        | -0.24%         |
| 13 | Ireland        | 1.36%         | 4.83%        | +3.48%         |
| 14 | Greece         | 1.27%         | 2.97%        | +1.70%         |
| 15 | Portugal       | 1.24%         | 8.12%        | +6.88%         |
| 16 | Czech Republic | 1.11%         | 1.76%        | +0.65%         |
| 17 | Romania        | 1.08%         | 2.18%        | +1.10%         |
| 18 | Hungary        | 0.75%         | 2.27%        | +1.52%         |
| 19 | Slovakia       | 0.54%         | 0.62%        | +0.07%         |
| 20 | Luxembourg     | 0.35%         | 0.12%        | -0.23%         |
| 21 | Bulgaria       | 0.31%         | 0.53%        | +0.22%         |
| 22 | Croatia        | 0.31%         | 0.65%        | +0.34%         |
| 23 | Slovenia       | 0.26%         | 0.70%        | +0.44%         |
| 24 | Lithuania      | 0.26%         | 0.26%        | 0.00%          |
| 25 | Latvia         | 0.17%         | 0.60%        | +0.43%         |
| 26 | Estonia        | 0.14%         | 0.28%        | +0.14%         |
| 27 | Cyprus         | 0.12%         | 0.44%        | +0.32%         |
| 28 | Malta          | 0.05%         | 0.05%        | 0.00%          |

Secondly the same figures ranked in order of size of benefit:

| <b>Nr</b> | <b>Country</b> | <b>GDP share</b> | <b>Loans share</b> | <b>Benefit + or -</b> |
|-----------|----------------|------------------|--------------------|-----------------------|
| 1         | Spain          | 7.46%            | 15.33%             | +7.86%                |
| 2         | Portugal       | 1.24%            | 8.12%              | +6.88%                |
| 3         | Poland         | 2.87%            | 9.89%              | +7.02%                |
| 4         | Ireland        | 1.36%            | 4.83%              | +3.48%                |
| 5         | Greece         | 1.27%            | 2.97%              | +1.70%                |
| 6         | Hungary        | 0.75%            | 2.27%              | +1.52%                |
| 7         | Romania        | 1.08%            | 2.18%              | +1.10%                |
| 8         | Czech Republic | 1.11%            | 1.76%              | +0.65%                |
| 9         | Italy          | 11.57%           | 12.09%             | +0.53%                |
| 10        | Slovenia       | 0.26%            | 0.70%              | +0.44%                |
| 11        | Latvia         | 0.17%            | 0.60%              | +0.43%                |
| 12        | Croatia        | 0.31%            | 0.65%              | +0.34%                |
| 13        | Cyprus         | 0.12%            | 0.44%              | +0.32%                |
| 14        | Bulgaria       | 0.31%            | 0.53%              | +0.22%                |
| 15        | Estonia        | 0.14%            | 0.28%              | +0.14%                |
| 16        | Austria        | 2.36%            | 2.48%              | +0.12%                |
| 17        | Slovakia       | 0.54%            | 0.62%              | +0.07%                |
| 18        | Lithuania      | 0.26%            | 0.26%              | 0.00%                 |
| 19        | Malta          | 0.05%            | 0.05%              | 0.00%                 |
| 20        | Luxembourg     | 0.35%            | 0.12%              | -0.23%                |
| 21        | Finland        | 1.47%            | 1.23%              | -0.24%                |
| 22        | Belgium        | 2.94%            | 1.97%              | -0.98%                |
| 23        | Denmark        | 1.85%            | 0.49%              | -1.36%                |
| 24        | Sweden         | 3.08%            | 1.58%              | -1.50%                |
| 25        | Netherlands    | 4.75%            | 1.83%              | -2.92%                |
| 26        | France         | 15.28%           | 9.19%              | -6.09%                |
| 27        | <b>UK</b>      | <b>16.15%</b>    | <b>7.38%</b>       | <b>-8.77%</b>         |
| 28        | Germany        | 20.90%           | 10.16%             | -10.75%               |

Germany draws the least amount of funding compared to its own size.

The UK is second bottom.

# Which Member States are benefitting the most from the “credit enhancement” being applied by the European Union and the European Investment Bank

But this is not the whole story because the fund-raising mechanisms themselves are a form of credit enhancement. The investor buying the Aaa-rated bonds of the EU or the EIB is not taking the credit risk of the end-user of the funds, but of a blend of the credit risk of all the Member States, placing most reliance on the strongest.

To get the full picture we need to find out which Member States are benefitting both from the amount of credit and from the credit enhancement lent to them by the other Member States, which enables them to get the money for a longer period and on better terms than they would if they borrowed direct from the same investors – assuming of course that their bonds were “investment grade” in the first place and would be taken up by international investors at all.

To get that full picture and factor in each Member State’s creditworthiness, we need to “risk-adjust” the amounts of money each one is drawing from the pot.

“Risk-adjustment” is central to the Basel Bank Capital Adequacy regimes and to how commercial banks assess credit risk. The regime causes them to do this by multiplying the face value of a loan by two factors:

- The creditworthiness of the borrower expressed as a percentage, often called the “Borrower Rating” (A);
- The risk characteristics of the loan itself expressed as a percentage, often called the “Facility Rating” (B).

$A \times B$  = the Credit Conversion Factor or “CCF” also expressed as a percentage, meaning the factor by which the face value of the loan is multiplied to reach a figure against which the bank must hold 8-10% of capital. Raising this “capital adequacy” percentage from a range of 5-6% has been a key part of fixing the banking system since the 2008 crisis and of the Vickers Report “Changing Banking for Good”.

The amount of capital a bank needs to support a given loan is:

The face value of the loan  $\times$  the CCF  $\times$  8-10%

So what affects A, the Borrower Rating? If it is a country, it is its S&P or Moodys rating.

And what affects B, the Facility Rating? Factors like the term of the loan: a 1-year year will be rated better than a 5-year loan. Or security: a loan that is a residential mortgage with a 60% loan-to-value will be rated better than a car loan, and so will need to be supported with less capital.

It is perfectly possible that the Credit Conversion Factor will exceed 100% and then the bank needs to hold more than 8-10% of the face value as capital, because the loan carries a high risk of loss and the bank should have a cushion to absorb that loss if it materialises.

Examples:

| Loan  | Borrower Rating (A)                              | Facility Rating (B)  | Credit Conversion Factor (A x B) | Capital (CCF x 10%)          | Rationale  |
|---|--|--|----------------------------------|------------------------------|--|
| 15-year loan to an airline secured on an aircraft mortgage                  | 200% - weak, low-cost airline                    | 65% - it is a new B737 with a 75% loan-to-value            | 130%                             | 13.0% of the loan face value | Good plane, can be re-sold as long as we can repossess it  |
| 25-year residential mortgage  | 100% - the borrower meets all the standard tests | 25% - loan-to-value is 85%, UK property in a good postcode | 25%                              | 2.5% of the loan face value  | Core business, we have all the papers to repossess and we can refinance the loan through "Funding for Lending"   |
| 1-month loan to a company that is rumoured to be considering administration | 1000% - nearly bankrupt                          | 100% - standard type of business                           | 1000%                            | 100% - the entire loan       | We are lending into a near-bankruptcy, and will lose all our money: we should hold capital of the entire loan value because we will get 0 pence-in-the-pound |

Let's now apply this to the EU Member States, using a completely standard loan – a 1-month loan with a Facility Rating of 100%. This means that the Credit Conversion Factors for EU Member States will differ only because of the Borrower Rating, and that in turn differs according to their S&P or Moodys rating.

| S&P Rating | Moodys Equivalent | Level       | Borrower Rating - A | Facility Rating - B | CCF A x B |
|------------|-------------------|-------------|---------------------|---------------------|-----------|
| AAA        | Aaa               | Investment  | 2%                  | 100%                | 2%        |
| AA+        | Aa1               | Investment  | 4%                  | 100%                | 4%        |
| AA         | Aa2               | Investment  | 7%                  | 100%                | 7%        |
| AA-        | Aa3               | Investment  | 14%                 | 100%                | 14%       |
| A+         | A1                | Investment  | 25%                 | 100%                | 25%       |
| A          | A2                | Investment  | 37%                 | 100%                | 37%       |
| A-         | A3                | Investment  | 55%                 | 100%                | 55%       |
| BBB+       | Baa1              | Investment  | 70%                 | 100%                | 70%       |
| BBB        | Baa2              | Investment  | 83%                 | 100%                | 83%       |
| BBB-       | Baa3              | Investment  | 100%                | 100%                | 100%      |
| BB+        | Ba1               | Speculative | 150%                | 100%                | 150%      |
| BB         | Ba2               | Speculative | 200%                | 100%                | 200%      |
| BB-        | Ba3               | Speculative | 250%                | 100%                | 250%      |
| B+         | B1                | Speculative | 325%                | 100%                | 325%      |
| B          | B2                | Speculative | 400%                | 100%                | 400%      |
| B-         | B3                | Speculative | 500%                | 100%                | 500%      |

| S&P Rating | Moodys Equivalent | Level | Borrower Rating - A | Facility Rating - B | CCF A x B |
|------------|-------------------|-------|---------------------|---------------------|-----------|
| CCC+       | Caa1              | Junk  | 600%                | 100%                | 600%      |
| CCC        | Caa2              | Junk  | 650%                | 100%                | 650%      |
| CCC-       | Caa3              | Junk  | 700%                | 100%                | 700%      |
| CC         | Ca                | Junk  | 800%                | 100%                | 800%      |
| C          | Ca                | Junk  | 900%                | 100%                | 900%      |
| SD         | C                 | Junk  | 1000%               | 100%                | 1000%     |
| D          | C                 | Junk  | 1000%               | 100%                | 1000%     |

We can then derive the Credit Conversion Factor for each Member State from their S&P Rating:

| Nr | Country        | S&P Rating | CCF       |
|----|----------------|------------|-----------|
| 1  | Germany        | AAA        | 2%        |
| 2  | <b>UK</b>      | <b>AAA</b> | <b>2%</b> |
| 3  | France         | AA         | 7%        |
| 4  | Italy          | BBB-       | 100%      |
| 5  | Spain          | BBB+       | 70%       |
| 6  | Netherlands    | AAA        | 2%        |
| 7  | Sweden         | AAA        | 2%        |
| 8  | Belgium        | AA         | 7%        |
| 9  | Poland         | A-         | 55%       |
| 10 | Austria        | AA+        | 4%        |
| 11 | Denmark        | AAA        | 2%        |
| 12 | Finland        | AA+        | 4%        |
| 13 | Ireland        | A+         | 25%       |
| 14 | Greece         | B-         | 500%      |
| 15 | Portugal       | BB+        | 150%      |
| 16 | Czech Republic | AA         | 7%        |
| 17 | Romania        | BBB-       | 100%      |
| 18 | Hungary        | BB+        | 150%      |
| 19 | Slovakia       | A+         | 25%       |
| 20 | Luxembourg     | AAA        | 2%        |
| 21 | Bulgaria       | BB+        | 150%      |
| 22 | Croatia        | BB         | 200%      |
| 23 | Slovenia       | A-         | 55%       |
| 24 | Lithuania      | A-         | 55%       |
| 25 | Latvia         | A-         | 55%       |
| 26 | Estonia        | AA-        | 14%       |
| 27 | Cyprus         | BB-        | 250%      |
| 28 | Malta          | BBB+       | 70%       |

Now we go back and apply these CCFs to the same amounts of credit taken from each mechanism, in EUR billions:

| Nr | Country        | EU       | EIB         | EFSI       | Total       | CCF       | Risk-adjusted total credit | Risk-adjusted share of total |
|----|----------------|----------|-------------|------------|-------------|-----------|----------------------------|------------------------------|
| 1  | Germany        | 0        | 57.6        | 0.2        | 57.8        | 2%        | 1.16                       | 0.30%                        |
| 2  | <b>UK</b>      | <b>0</b> | <b>40.6</b> | <b>1.4</b> | <b>42.0</b> | <b>2%</b> | <b>0.84</b>                | <b>0.22%</b>                 |
| 3  | France         | 0        | 51.1        | 1.2        | 52.3        | 7%        | 3.66                       | 0.95%                        |
| 4  | Italy          | 0        | 67.5        | 1.3        | 68.8        | 100%      | 68.80                      | 17.82%                       |
| 5  | Spain          | 0        | 86.7        | 0.5        | 87.2        | 70%       | 61.04                      | 15.81%                       |
| 6  | Netherlands    | 0        | 10.3        | 0.1        | 10.4        | 2%        | 0.21                       | 0.05%                        |
| 7  | Sweden         | 0        | 9.0         | 0          | 9.0         | 2%        | 0.18                       | 0.05%                        |
| 8  | Belgium        | 0        | 11.0        | 0.2        | 11.2        | 7%        | 0.78                       | 0.20%                        |
| 9  | Poland         | 0        | 37.8        | 18.5       | 56.3        | 55%       | 30.97                      | 8.02%                        |
| 10 | Austria        | 0        | 14.1        | 0          | 14.1        | 4%        | 0.56                       | 0.15%                        |
| 11 | Denmark        | 0        | 2.7         | 0.1        | 2.8         | 2%        | 0.06                       | 0.01%                        |
| 12 | Finland        | 0        | 7.0         | 0          | 7.0         | 4%        | 0.28                       | 0.07%                        |
| 13 | Ireland        | 22.5     | 5.0         | 0          | 27.5        | 25%       | 6.88                       | 1.78%                        |
| 14 | Greece         | 0        | 16.9        | 0          | 16.9        | 500%      | 84.50                      | 21.89%                       |
| 15 | Portugal       | 24.3     | 21.9        | 0          | 46.2        | 150%      | 69.30                      | 17.95%                       |
| 16 | Czech Republic | 0        | 10.0        | 0          | 10.0        | 7%        | 0.70                       | 0.18%                        |
| 17 | Romania        | 5.2      | 7.2         | 0          | 12.4        | 100%      | 12.40                      | 3.21%                        |
| 18 | Hungary        | 1.5      | 11.4        | 0          | 12.9        | 150%      | 19.35                      | 5.01%                        |
| 19 | Slovakia       | 0        | 3.5         | 0          | 3.5         | 25%       | 0.88                       | 0.23%                        |
| 20 | Luxembourg     | 0        | 0.7         | 0          | 0.7         | 2%        | 0.01                       | 0.00%                        |
| 21 | Bulgaria       | 0.1      | 2.9         | 0          | 3.0         | 150%      | 4.50                       | 1.17%                        |
| 22 | Croatia        | 0        | 3.7         | 0          | 3.7         | 200%      | 7.40                       | 1.92%                        |
| 23 | Slovenia       | 0        | 4.0         | 0          | 4.0         | 55%       | 2.20                       | 0.57%                        |
| 24 | Lithuania      | 0        | 1.5         | 0          | 1.5         | 55%       | 0.83                       | 0.21%                        |
| 25 | Latvia         | 1.9      | 1.5         | 0          | 3.4         | 55%       | 1.87                       | 0.48%                        |
| 26 | Estonia        | 0        | 1.6         | 0          | 1.6         | 14%       | 0.22                       | 0.06%                        |
| 27 | Cyprus         | 0        | 2.5         | 0          | 2.5         | 250%      | 6.25                       | 1.62%                        |
| 28 | Malta          | 0        | 0.3         | 0          | 0.3         | 70%       | 0.21                       | 0.00%                        |

Finally we can set the GDP share against the share of the risk-adjusted credit amount and see which country is making the greatest use of these collaborative fund-raising mechanisms both in terms of volume of credit taken and exploitation of the credit enhancement afforded to less well-rated Member States by better-rated ones, firstly by order of GDP size:

| Nr | Country        | GDP share     | Risk-adjusted loans share | Benefit + or - |
|----|----------------|---------------|---------------------------|----------------|
| 1  | Germany        | 20.90%        | 0.30%                     | -20.60%        |
| 2  | <b>UK</b>      | <b>16.15%</b> | <b>0.22%</b>              | <b>-15.93%</b> |
| 3  | France         | 15.28%        | 0.95%                     | -14.33%        |
| 4  | Italy          | 11.57%        | 17.82%                    | +6.26%         |
| 5  | Spain          | 7.46%         | 15.81%                    | +8.35%         |
| 6  | Netherlands    | 4.75%         | 0.05%                     | -4.69%         |
| 7  | Sweden         | 3.08%         | 0.05%                     | -3.04%         |
| 8  | Belgium        | 2.94%         | 0.20%                     | -2.74%         |
| 9  | Poland         | 2.87%         | 8.02%                     | +5.15%         |
| 10 | Austria        | 2.36%         | 0.15%                     | -2.21%         |
| 11 | Denmark        | 1.85%         | 0.01%                     | -1.83%         |
| 12 | Finland        | 1.47%         | 0.07%                     | -1.40%         |
| 13 | Ireland        | 1.36%         | 1.78%                     | +0.43%         |
| 14 | Greece         | 1.27%         | 21.89%                    | +20.61%        |
| 15 | Portugal       | 1.24%         | 17.95%                    | +16.71%        |
| 16 | Czech Republic | 1.11%         | 0.18%                     | -0.93%         |
| 17 | Romania        | 1.08%         | 3.21%                     | +2.14%         |
| 18 | Hungary        | 0.75%         | 5.01%                     | +4.27%         |
| 19 | Slovakia       | 0.54%         | 0.23%                     | -0.31%         |
| 20 | Luxembourg     | 0.35%         | 0.00%                     | -0.35%         |
| 21 | Bulgaria       | 0.31%         | 1.17%                     | +0.86%         |
| 22 | Croatia        | 0.31%         | 1.92%                     | +1.61%         |
| 23 | Slovenia       | 0.26%         | 0.57%                     | +0.31%         |
| 24 | Lithuania      | 0.26%         | 0.21%                     | -0.05%         |
| 25 | Latvia         | 0.17%         | 0.48%                     | +0.32%         |
| 26 | Estonia        | 0.14%         | 0.06%                     | -0.08%         |
| 27 | Cyprus         | 0.12%         | 1.62%                     | +1.49%         |
| 28 | Malta          | 0.05%         | 0.00%                     | 0.00%          |

And secondly by the degree of benefit:

| Nr | Country        | GDP share     | Risk-adjusted loans share | Benefit + or - |
|----|----------------|---------------|---------------------------|----------------|
| 1  | Greece         | 1.27%         | 21.89%                    | +20.61%        |
| 2  | Portugal       | 1.24%         | 17.95%                    | +16.71%        |
| 3  | Spain          | 7.46%         | 15.81%                    | +8.35%         |
| 4  | Italy          | 11.57%        | 17.82%                    | +6.26%         |
| 5  | Poland         | 2.87%         | 8.02%                     | +5.15%         |
| 6  | Hungary        | 0.75%         | 5.01%                     | +4.27%         |
| 7  | Romania        | 1.08%         | 3.21%                     | +2.14%         |
| 8  | Croatia        | 0.31%         | 1.92%                     | +1.61%         |
| 9  | Cyprus         | 0.12%         | 1.62%                     | +1.49%         |
| 10 | Bulgaria       | 0.31%         | 1.17%                     | +0.86%         |
| 11 | Ireland        | 1.36%         | 1.78%                     | +0.43%         |
| 12 | Latvia         | 0.17%         | 0.48%                     | +0.32%         |
| 13 | Slovenia       | 0.26%         | 0.57%                     | +0.31%         |
| 14 | Malta          | 0.05%         | 0.00%                     | 0.00%          |
| 15 | Lithuania      | 0.26%         | 0.21%                     | -0.05%         |
| 16 | Estonia        | 0.14%         | 0.06%                     | -0.08%         |
| 17 | Slovakia       | 0.54%         | 0.23%                     | -0.31%         |
| 18 | Luxembourg     | 0.35%         | 0.00%                     | -0.35%         |
| 19 | Czech Republic | 1.11%         | 0.18%                     | -0.93%         |
| 20 | Finland        | 1.47%         | 0.07%                     | -1.40%         |
| 21 | Denmark        | 1.85%         | 0.01%                     | -1.83%         |
| 22 | Austria        | 2.36%         | 0.15%                     | -2.21%         |
| 23 | Belgium        | 2.94%         | 0.20%                     | -2.74%         |
| 24 | Sweden         | 3.08%         | 0.05%                     | -3.04%         |
| 25 | Netherlands    | 4.75%         | 0.05%                     | -4.69%         |
| 26 | France         | 15.28%        | 0.95%                     | -14.33%        |
| 27 | <b>UK</b>      | <b>16.15%</b> | <b>0.22%</b>              | <b>-15.93%</b> |
| 28 | Germany        | 20.90%        | 0.30%                     | -20.60%        |

## Which Member States are being exploited the most by lending their “full faith and credit” as a “credit enhancement” for loans from investors to both Member States and non-Member States

Germany, followed by the UK. Germany's position is the more dire because they are the bulwark of the two Eurozone bailout mechanisms in which only the Euro-In Member States are subscribers – the European Financial Stability Facility and the European Stability Mechanism.

On top of that the Bundesbank is the main creditor within TARGET.

# Absence of UK sovereign controls

The UK has the sole right in only one case to veto an increase in the amounts of any of the mechanisms that cause the UK's risk to alter; this is an increase in the subscribed capital of the EIB and is highlighted:

| <b>Risk increase</b>   | <b>Decision-maker</b>   |
|--|---|
| Set the 2021-2027 Multiannual Financial Framework at a higher level than 2014-2020       | As per Lisbon Treaty under Qualified Majority Voting  |
| Allow the unutilised portion of the EFSM to be drawn                                     | Council of Finance Ministers under Qualified Majority Voting  |
| Allow the unutilised portion of the Balance of Payments Facility to be drawn             | Council of Finance Ministers under Qualified Majority Voting  |
| Increase the size of the Macro Financial Assistance                                      | Council of Finance Ministers under Qualified Majority Voting  |
| Allow the unutilised portion of the Euratom ceiling to be drawn                          | Council of Finance Ministers under Qualified Majority Voting  |
| Mobilise the four "special instruments"  | Council of Finance Ministers under Qualified Majority Voting  |
| Create a completely new fund   | New EU Regulation, as for the EFSI, to be passed through the Council and the Parliament, under Qualified Majority Voting  |
| Increase EIB loan volume within EU   | EIB Board of Management   |
| Increase EIB loan volume outside EU but under EU guarantee                               | EIB Board of Management with oversight and reporting to the European Commission   |
| Increase EIB loan volume outside EU at EIB risk  | EIB Board of Management   |
| Make high-risk engagement from EIB in context of EFSI under EU guarantee                 | EIB Board of Management within terms of the Regulation establishing the EFSI  |
| Make high-risk engagement out of European Investment Fund in context of EFSI at EIB risk | EIB Board of Management within terms of the Regulation establishing the EFSI  |
| Make a "normal loan" out of the EIB in the context of the EFSI                           | EIB Board of Management   |
| Call up all or part of the subscribed-but-not-called portion of the capital of the EIB   | EIB Board of Directors - at least one third of the members entitled to vote representing at least 50% of the subscribed capital   |
| <b>Increase the subscribed capital of the EIB</b>  | <b>EIB Board of Governors - unanimous</b>   |
| Call up all or part of the subscribed-but-not-called portion of the capital of the ECB   | ECB Governing Council – by members representing ECB shareholders that make up at least 66% of the ECB's subscribed capital and 50% of the shareholders numerically, but the Governing Council is composed of Euro-In countries only |
| Increase the subscribed capital of the ECB   | ECB Governing Council – by members representing ECB shareholders that make up at least 66% of the ECB's subscribed capital and 50% of the shareholders numerically, but the Governing Council is composed of Euro-In countries only |

# Critique of this “washing machine” in a time when the UK has imposed austerity on itself

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At a time when the UK's public finances are in disorder, it seems absurd to allow these EU organisations to have the right to call for cash and to create engagements for which the UK is identified by the credit rating agencies as a primary source of “credit enhancement”, and in such quantity and with such long maturity periods.

The credit ratings of the smaller/weaker EU Member States are higher than their stand-alone economic statistics merit – because they have access to funds from these EU mechanism and do not have to go to investors direct.

It follows that the credit ratings of the larger/stronger EU Member States are either lower than they would otherwise be, and are imperilled by the size of the payments and potential liabilities to EU organisations.

The UK's Moodys rating is Aa1 and not the highest Aaa.

The UK's cash payments to the EU simply have to be added to the UK's deficit and borrowed on our own name. The UK is one of the biggest net payers-in of cash: the UK's cash contribution is distributed to other EU Member States. Without that cash they would have to borrow themselves to maintain levels of public spending. In the case of the Member States that are committed to the Fiscal Stability Treaty, the UK is subsidising their compliance.

The EU and EIB borrow in their name but at the UK's risk, and they on-lend mainly to the other EU Member States. Without these loans these other EU Member States would have to borrow in their own name – if they could - to maintain levels of public spending.

The net effect is simply that the UK is enabling the levels of public spending in other EU Member States when we are having great difficulty in maintaining our own levels of public spending.

As the cash contributions to the EU Budget are either set explicitly with reference to a Member State's GNI (GNI-based cash contribution), or are naturally linked to it (VAT and Customs/Sugar levies), any country whose GNI is growing will make a contribution that rises over time, whilst those whose economies are stagnating or in recession will contribute less.

As an overarching rule, bigger countries contribute more and smaller ones less.

In the current period this means that the UK – a large country with higher GNI growth rates than the EU average – will see a constant rise in its cash payments, but not necessarily of its benefits.

## Summary and Conclusions

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As stated at the outset, in June 2016 the UK electorate will be asked about the UK's continuing membership of the European Union.

This paper focuses on one aspect of one facet of that decision. The facet is Money, and the aspect is the financial liabilities the UK carries as part of EU membership. The aspect “What does the UK pay in cash terms for the running of the EU?” is related to it: it is not possible to understand the one in isolation from the other.

We have not touched at all upon the Money aspect of what benefit the UK derives in terms of trade in goods and services with the EU, due to access to markets, other than to quote that the UK runs an annual trade deficit of EUR77 billion with the EU. Nor have we made any attempt to address the facets of the EU beyond Money, such as Security, Climate Change etc..

Nevertheless, the EU is meant to be a partnership and the other EU Member States want the UK to remain and be a “full partner” in the EU.

Policies and decisions in the EU are made by consensus, compromise and specifically by Qualified Majority Voting, meaning neither unanimously nor by a simple show of hands and 51% takes it, but by a super-majority of both numbers of Member States and their size.

The UK is not a blocking minority on its own except in the case of an increase in the subscribed capital of the EIB, and the UK appears rarely if ever to be able to form a blocking minority with other like-minded Member States.

Furthermore the compromise aspect comes into play when the European Commission advances a new plan, it is discussed, compromises are agreed and the plan is adopted but not in full.

“Compromise” limits the size of the move forward but neither eliminates the move forward completely nor enables a move back from the jumping-off point, which is itself the result of previous compromises on undesired movements forward. This ratcheting-up mechanism ensures that the European Commission can advance its agenda.

There simply is no mechanism available to the UK on its own for freezing the status quo or moving it back. What then is the value of a partnership in which one’s partners are constantly advancing on a different agenda and outvoting one?

What is the value of a partnership that works in this way and increases the financial risks of the partner who is strong and creditworthy, when the beneficiaries are the majority who can impose extra risks on the minority?

A partnership should work on one model, and in the economic sphere we can characterise the EU as a whole as being run on a Keynesian model. The UK, on the other hand, is being run on a Hayek/Friedman model. The UK is currently being more successful in terms of employment creation, population and GDP growth, although not in terms of tax revenues and deficit elimination.

Nevertheless EU contributions, capital keys etc all measure the elements where the UK is outstripping the EU average, meaning the UK will progressively shoulder – thanks to the success of its policies – the burdens of the failure of the policies pursued by the rest of the EU.

The net financial effect of this partnership is enablement of levels of public spending in other Member States whilst we are tightening our belt here. The amounts of money the UK receives from these EU mechanisms are moderate and could as easily be borrowed from international investors on our own name by the UK Debt Management Office – why do we need to guarantee a multiple of that amount to the same pool of international investors in order to have a small fraction of it advanced to the UK?

This is an area where the UK’s leaving the EU would relieve us of considerable risks and liabilities without a corresponding give-up of meaningful benefits, and insulate us from those risks and liabilities increasing.

It is notable, though, that Moodys have sounded a warning that leaving the EU could imperil the UK’s current Aa1 rating that the UK enjoys from Moodys. They have not factored in the beneficial effects of a relief from the EU-related cash and guarantee burdens.

No doubt upon withdrawal the UK would have to take over onto its own name the loans into the UK from the EIB both in the normal portfolio (EUR40.6 billion as at 31.12.14) and through the EFSI (EUR1.4 billion as per the recent EFSI UK Country Factsheet).

All those loans will be denominated in GBP, equating then to GBP33 billion to be paid to the EIB. Set against this we should be paid out our current called-up capital in the EIB (EUR 3.5 billion as at 31.12.14) and in the ECB (EUR 56 million as at 31.12.14), meaning an inflow of around GBP2.85 billion.

At the same time we would be released firstly from our obligations to pay in the subscribed-but-uncalled capital in the EIB and ECB, which total £29.7 billion.

Secondly we would be released from our commitments towards the EU Budget, both the “payment appropriation” through to the end of 2020, and the “commitments appropriation” for engagements mobilised under previous MFFs and under this one.

The net effect would be a need to refinance GBP30 billion via the UK Debt Management Office, thus increasing the UK’s direct national debt whilst releasing the UK from contractual commitments up EUR1.23 trillion and the inferred obligation to offer “extraordinary support” of an unlimited amount above that.

In this subset of the Money issue the case for leaving the EU is convincing.

## The credit-rating systems of Standard and Poors (S&P) and Moodys and their importance

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Credit ratings are integral to the world of investments, as they act as a guide to investors as to how likely they are to get their capital back and receive the promised interest – in full and on time - if they invest in securities issued by a rated organisation.

The bellwether securities for this purpose would be:

- Commercial Paper (issued by a non-bank) or Certificates of Deposit (issued by a bank) for securities below 1 year final maturity
- Bonds or Medium-Term Notes for securities above 1 year final maturity

The bellwether rating is the Long-term rating. When the BBC discuss the UK's credit rating being "Triple-A" or falling from "Triple-A", it is this Long-term rating they are referring to. This rating is applied to securities of over 1 year maturity, and for a security which is a bond and which ranks as a senior unsecured debt of the issuer:

- No tangible security is offered to the investor, such as a residential mortgage or gold bullion;
- The debt would rank equal with all other unsecured, unsubordinated creditors in the event that the organisation were to go into bankruptcy;
- The administrator of a bankruptcy estate pays out creditors in groups in accordance with the rung they occupy on the so-called "creditor ladder"; creditors in each rung are paid out in full before any creditors on a lower rung receive anything at all;
- The government usually has a preferential status on the "creditor ladder" for certain debts like for unpaid corporation tax, VAT, employer's national insurance;
- Employees may rank next, for unpaid wages;
- Next up would creditors holding security, whether a mortgage on property or land, a lien on stocks, a ship or aircraft mortgage;
- Then you have the group of senior unsecured creditors;
- Below them rank any holders of mezzanine debt and subordinated debt, and at the bottom of the ladder come the shareholders;
- The percentage that a creditor group is repaid compared to the sum of their claims is usually referred to as their "pence in the pound";
- In a bankruptcy it would be normal for shareholders, at the bottom of the ladder, to receive 0 pence in the pound;
- Moodys and S&P are thus delivering, through the credit rating, an assessment of how likely it is that a creditor owning the type of bond described will receive 100 pence in the pound.

A typical creditor ladder:

| Rung      | Type of creditor   |
|-----------|--|
| 1.        | Legally-preferred creditors (e.g. HMRC, employees)         |
| 2.        | Secured creditors (e.g. with a mortgage on land&buildings) |
| <b>3.</b> | <b>Senior unsecured creditors</b>                          |
| 4.        | Mezzanine debt providers                                   |
| 5.        | Subordinated debt providers                                |
| 6.        | Shareholders/Equity investors                              |

Here are a couple of examples of the application of the “creditor ladder” in practice.

**Example 1: the assets realised by the administrator of the liquidation are 150 on a balance sheet of 200 = overall depletion of value of 25%, and 50 has been lost**

| Rung      | Type of creditor              | Claims    | Pence-in the-pound | Amount recovered by this level | Available after claims at this level were met |
|-----------|-------------------------------|-----------|--------------------|--------------------------------|---|
| 1.        | Legally-preferred creditors   | 30        | 100                | 30                             | 120   |
| 2.        | Secured creditors             | 20        | 100                | 20                             | 100   |
| <b>3.</b> | <b>Senior unsecured</b>       | <b>90</b> | <b>100</b>         | <b>90</b>                      | <b>10</b>                                     |
| 4.        | Mezzanine debt providers      | 20        | 50                 | 10                             | 0   |
| 5.        | Subordinated debt providers   | 20        | 0                  | 0                              | 0   |
| 6.        | Shareholders/Equity investors | 20        | 0                  | 0                              | 0   |
|           | Total balance sheet           | 200       | 0                  | 0                              | 0   |

**Example 2: the assets realised in the liquidation are 70 on a balance sheet of 200 = overall depletion of value of 65%, 140 has been lost**

| Rung      | Type of creditor                  | Claims    | Pence-in the-pound | Amount recovered by this level | Available after claims at this level were met |
|-----------|-----------------------------------|-----------|--------------------|--------------------------------|---|
| 1.        | Legally-preferred creditors       | 30        | 100                | 30                             | 40  |
| 2.        | Secured creditors                 | 20        | 100                | 20                             | 20  |
| <b>3.</b> | <b>Senior unsecured creditors</b> | <b>90</b> | <b>22</b>          | <b>20</b>                      | <b>0</b>                                      |
| 4.        | Mezzanine debt providers          | 20        | 0                  | 0                              | 0   |
| 5.        | Subordinated debt providers       | 20        | 0                  | 0                              | 0   |
| 6.        | Shareholders/Equity investors     | 20        | 0                  | 0                              | 0   |
|           | Total balance sheet               | 200       | 0                  | 0                              | 0   |

There are many rungs or “notches” in the S&P and Moodys rating systems but they are commonly grouped as follows:

| Levels   | S&P Range  |
|--|--|
| “Investment Grade” – a formal term   | An investment rated by S&P at BBB- long-term or better, or Baa3 or better in the Moodys system. If a security is downgraded to below that point many investors are not allowed to hold it and if they are doing so, they must sell it (‘dumping’). The same investor would not be permitted to invest in a new security rated below investment grade |
| “Junk” – an informal term  | An investment rated by S&P at lower than B- long-term: this means anything rated by S&P long-term at CCC+ or lower   |
| Below “investment grade” but not “junk” – informal because the term “junk” is informal | Bonds rated between BB+ and B- long-term rank as “Speculative Grade”   |

Terms are often misused:

- “Investment Grade” does of itself not mean AAA and does not mean ‘top-quality’
- ‘Top-quality’ would usually be taken to mean S&P AA or better

These are all the notches in the S&P and Moodys long-term rating systems, the grouping they each fall within, and the degree of credit risk:

| S&P Rating | Moodys Equivalent | Grouping    | Degree of Credit Risk   |
|------------|-------------------|-------------|-------------------------|
| AAA        | Aaa               | Investment  | Minimal credit risk     |
| AA+        | Aa1               | Investment  | Very low credit risk    |
| AA         | Aa2               | Investment  | Very low credit risk    |
| AA-        | Aa3               | Investment  | Very low credit risk    |
| A+         | A1                | Investment  | Low credit risk         |
| A          | A2                | Investment  | Low credit risk         |
| A-         | A3                | Investment  | Low credit risk         |
| BBB+       | Baa1              | Investment  | Moderate credit risk    |
| BBB        | Baa2              | Investment  | Moderate credit risk    |
| BBB-       | Baa3              | Investment  | Moderate credit risk    |
| BB+        | Ba1               | Speculative | Substantial credit risk |
| BB         | Ba2               | Speculative | Substantial credit risk |
| BB-        | Ba3               | Speculative | Substantial credit risk |
| B+         | B1                | Speculative | High credit risk        |
| B          | B2                | Speculative | High credit risk        |
| B-         | B3                | Speculative | High credit risk        |
| CCC+       | Caa1              | Junk        | Very high credit risk   |
| CCC        | Caa2              | Junk        | Very high credit risk   |

| <b>S&amp;P Rating</b> | <b>Moody's Equivalent</b> | <b>Grouping</b> | <b>Degree of Credit Risk</b>                     |
|-----------------------|---------------------------|-----------------|--|
| CCC-                  | Caa3                      | Junk            | Very high credit risk                            |
| CC                    | Ca                        | Junk            | In or near default, with possibility of recovery |
| C                     | Ca                        | Junk            | In or near default, with possibility of recovery |
| SD                    | C                         | Junk            | In default, with little chance of recovery       |
| D                     | C                         | Junk            | In default, with little chance of recovery       |

This paper refers widely to S&P and Moodys ratings:

- Because they are accepted in the financial markets;
- Because S&P and Moodys are advising investors about the credit risk they are taking, and they must offer 'best advice';
- Because S&P and Moodys base themselves on documentation provided to them by the borrower themselves. It is simply unthinkable, for example, that when Moodys declare in their rating report on the European Union that the EU has recourse for the EU Budget to all EU Member States on a joint-and-several basis, that this would not be true. Were it not to be true, the EU would for sure be guilty of securities fraud because the representations that it is true are contained in the bond prospectuses that are issued to investors for each bond issue, which are written by the EU itself at their risk, and which act as primary source documents for S&P and Moodys.

## EU Member State Long-Term Credit Ratings and the status of Member States' linkage to the Euro

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You will find below the Long-Term credit ratings of each EU Member State as of 3 February 2016, as well as an indicator of the degree to which each EU Member State is integrated into the Euro.

The two are connected.

All Member States can access funds from the European Investment Bank, the European Fund for Strategic Investments and the European Financial Stabilisation Mechanism.

Member States that are on the convergence path to the Euro can access the EU Balance of Payments Facility.

Eurozone Member States can obtain financial support from the European Stability Mechanism ("ESM"), and Ireland, Portugal and Greece have substantial loans from the European Financial Stability Facility ("EFSF"), although the EFSF is closed to further loans.

These levels of access enhance the respective country's credit rating, and this access is a quid pro quo for the policies that Member States are obliged to follow. Running a tight fiscal and monetary policy means it is more likely that a country will pay its debts. Moodys and S&P thus reward Member States via their ratings for pursuing these policies, which result in access to funds, which Moodys and S&P reward via their ratings... There is a certain circularity, and a certain generosity, of which more below.

"Running a tight fiscal and monetary policy" means, in this context, that:

- Member States that are in the Euro or are on a convergence path to it must adhere to the EU Fiscal Stability Treaty (the "EFST"), limiting their national debt and annual public spending deficit to maximum percentages of Gross Domestic Product
- On the way towards joining the Euro, Member States have their currency join the ERM – the Exchange Rate Mechanism
- Upon joining the Euro they also become fully part of the European System of Central Banks, through which Eurozone interest rates and foreign exchange rates are set

The pathway into the Euro – the convergence path – is a progressive give-up of control over the normal sovereign tools of economic and monetary policy – setting interest rates and managing the foreign exchange rate. The country's economic and monetary performance thus comes into line with that of the Eurozone Member States, first by implementing a treaty commitment, then by joining the ERM, and then by adopting the Euro itself.

The treaty commitment of all new joiners is for all three, but starting with adherence to the EFST.

Certain non-Eurozone Member States that do not count as new joiners have been permitted to restrict their commitments, such as UK, Sweden, Czech Republic and Denmark. Nevertheless, Sweden and Denmark have voluntarily decided to subscribe to parts of the Euro machinery.

EU Member State Credit Ratings & Euro-Status ordered by size of the country's GDP/integration with the Euro, as of 3 February 2016:

| Nr | Country        | Euro status                       | S&P Rating | Moodys rating |
|----|----------------|-----------------------------------|------------|---------------|
| 1  | Germany        | In                                | AAA        | Aaa           |
| 2  | France         | In                                | AA         | Aa2           |
| 3  | Italy          | In                                | BBB-       | Baa2          |
| 4  | Spain          | In                                | BBB+       | Baa2          |
| 5  | Netherlands    | In                                | AAA        | Aaa           |
| 6  | Belgium        | In                                | AA         | Aa3           |
| 7  | Austria        | In                                | AA+        | Aaa           |
| 8  | Finland        | In                                | AA+        | Aaa           |
| 9  | Ireland        | In                                | A+         | Baa1          |
| 10 | Greece         | In                                | B-         | Caa3          |
| 11 | Portugal       | In                                | BB+        | Ba1           |
| 12 | Slovakia       | In                                | A+         | A2            |
| 13 | Luxembourg     | In                                | AAA        | Aaa           |
| 14 | Slovenia       | In                                | A-         | Baa3          |
| 15 | Lithuania      | In                                | A-         | A3            |
| 16 | Latvia         | In                                | A-         | A3            |
| 17 | Estonia        | In                                | AA-        | A1            |
| 18 | Cyprus         | In                                | BB-        | B1            |
| 19 | Malta          | In                                | BBB+       | A3            |
| 20 | Poland         | Out of EUR & ERM; in EFST         | A-         | A2            |
| 21 | Romania        | Out of EUR & ERM; in EFST         | BBB-       | Baa3          |
| 22 | Hungary        | Out of EUR & ERM; in EFST         | BB+        | Ba1           |
| 23 | Bulgaria       | Out of EUR & ERM; in EFST         | BB+        | Baa2          |
| 24 | Croatia        | Out of EUR & ERM; in EFST         | BB         | Ba1           |
| 25 | Denmark        | Out of EUR; in ERM & EFST         | AAA        | Aaa           |
| 26 | Sweden         | Out of EUR & ERM; in EFST         | AAA        | Aaa           |
| 27 | <b>UK</b>      | <b>Out of EUR, ERM &amp; EFST</b> | <b>AAA</b> | <b>Aa1</b>    |
| 28 | Czech Republic | Out of EUR, ERM & EFST            | AA         | A1            |

The correlations are clear enough:

- Eurozone members have generally higher ratings than Euro-out/convergence countries;
- Eurozone members will have high ratings because they are within a governance structure that insists on sound money, low inflation and restrictive monetary policy;
- Countries that are part of none of the Euro, ERM or EFST have very high ratings, despite their looser fiscal policies, because they have more policy tools at their disposal that can be employed with only their own predicament in mind.

Having praised and explained the Moodys and S&P systems, it is hopefully not inconsistent to state that, in the author's view, the individual EU Member State ratings are overgenerous for all the Member States that are rated lower than AA/Aa3, or in other words for all Member States below 'Top-quality'.

The reason for this view is that the ratings agencies cite as rationale for their assessment of individual EU Member States the access that these countries have to the different EU funds that are the subject of this paper, as well as to the ones that do not involve the UK.

Were that support not to be available, or were a bulwark of those EU funds – a AAA-rated country like the UK – no longer to be present in them, it is conceivable that the ratings agencies would review their assessments downwards. Thus even today's ratings of the EU Member States cannot be regarded as stand-alone ratings in the same way as the ratings of the USA, Canada or Japan are.

For example, Greece is rated B- (Speculative/High Credit Risk) by S&P and Caa3 by (Junk/Very High Credit Risk) by Moodys. Only 3½ years ago private investors received a major "haircut" on their holdings as a result of Greece's "selective default". Greece had to ask for further concessions in 2015. These circumstances would point to a rating of CC or C/Ca "In or near default, with possibility of recovery", meaning with a possibility of a recovery but not necessarily of 100 pence in the pound.

The difference in the S&P system between CC and C would be the number of pence in the pound likely to be received: for CC it would be >50% but <100%, whilst C would be >0% but <50%. Moodys do not attempt to make such a distinction.

A rating CC/Ca would accurately reflect Greece's financials on a stand-alone basis, as the haircut was less than 50%. Greece's being rated 4 notches higher by S&P and one notch higher by Moodys is only accountable because Greece has received very substantial support from EU financial mechanisms, and can expect to receive such support again in the future.

These EU financial mechanisms – for example the European Investment Bank - in turn declare themselves to be creditworthy because their customers have good credit ratings. The argument is circular and each side receives beneficial credit ratings because of their connection with one another.

## THE BRUGES GROUP

The Bruges Group is an independent all-party think tank. Set up in February 1989, its aim was to promote the idea of a less centralised European structure than that emerging in Brussels. Its inspiration was Margaret Thatcher's Bruges speech in September 1988, in which she remarked that "We have not successfully rolled back the frontiers of the state in Britain, only to see them re-imposed at a European level...". The Bruges Group has had a major effect on public opinion and forged links with Members of Parliament as well as with similarly minded groups in other countries. The Bruges Group spearheads the intellectual battle against the notion of "ever-closer Union" in Europe. Through its ground-breaking publications and wide-ranging discussions it will continue its fight against further integration and, above all, against British involvement in a single European state.

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For further information about the Bruges Group, to attend our meetings, or join and receive our publications, please see the membership form at the end of this paper. Alternatively, you can visit our website [www.brugesgroup.com](http://www.brugesgroup.com) or contact us at [info@brugesgroup.com](mailto:info@brugesgroup.com).

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