



BANK OF ENGLAND

# Speech

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## **Fixing the global financial safety net: lessons from central banking**

Speech given by

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## 1. Introduction

It gives me great pleasure to deliver my first internationally themed speech as a central banker in Edinburgh on the 30th Anniversary of the David Hume Institute. Of course, Scots have played a vital role in the Bank of England's history – including one William Paterson, whose idea it was to set up the Bank of England to help put order on the government's finances in the late 17th century. But Paterson is perhaps best known for the catastrophic Darien scheme – an unsuccessful attempt to establish a Scottish trading colony in Panama. It has been argued that the failure of the scheme crippled the country's economy – an early example of how troubles abroad can rebound at home<sup>1</sup>.

Scotland also has a tradition of producing internationally renowned economists including, of course, David Hume. Hume was a great advocate of free trade between nations. His 'Of the Balance of Trade', published 34 years before Smith's 'The Wealth of Nations', was arguably the first example of modern economic reasoning. In it he railed against the "numberless bars, obstructions, and imposts, which all nations of Europe, and none more than England, have put upon trade" which "deprive neighbouring nations of that free communication and exchange which the Author of the world has intended, by giving them soils, climates, and geniuses, so different from each other<sup>2</sup>." What an elegant way to talk about the gains from international trade!

The benefits of free trade are now well established. Similarly, economic theory provides compelling arguments for the potential advantages of integrated global capital markets based on the efficient allocation of resources. But, in practice, cross-border capital flows can be fickle and flighty, with destructive effects on the real economy. It is fair to say that the case for the free movement of capital took something of a knock following the string of crises since the early 1990s in Latin America, East Asia, Russia and most recently in Europe. As a result, a variety of means to insure against sharp changes in capital flows have developed at domestic, regional and international levels which are collectively referred to as the 'global financial safety net'.<sup>3</sup> The cross border impact of the global financial crisis has forced a fundamental rethink about whether this global financial safety net is functioning as efficiently as it should, and whether more needs to be done to contain the systemic spillovers from sovereign crises.

A key means by which the Bank of England pursues its mission of monetary and financial stability is through the provision of liquidity insurance to the financial system – something it has been doing in one form or another since David Hume's time. In some ways, this makes the Bank of England the domestic safety net for the liquidity needs of solvent financial institutions. As Hume himself put it: "private bankers are enabled to

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<sup>1</sup> See Pagan (1865)

<sup>2</sup> See Hume (1758)

<sup>3</sup> These crises have also spawned a rethinking of capital flow management tools – akin to macro prudential policy for global flows - a topic which shows promise but one that I will not cover in this speech.

give...credit by the credit the receive from the depositing of money in their shops; and the Bank of England in the same manner, from the liberty it has to issue its notes in all payments<sup>4</sup>.”

Today, given my current role overseeing the Bank of England’s market functions, as well as my previous experience at the IMF dealing with the crisis in the Eurozone and in the wake of the Arab Spring, I would like to offer some thoughts on how lessons from reform to the domestic financial safety net for banks could be applied to sovereigns, to the IMF as international lender of last resort and to the global financial safety net more broadly. I will argue that we need a stronger and more resilient global financial safety net to reduce the systemic implications of sovereign crises and allow nations to cope with shocks in order to reap the economic rewards of an integrated system of trade and finance. I will also argue that the effectiveness of that safety net would be enhanced by implementing policies that strengthen surveillance and the stress testing of countries balance sheets, and better mechanisms for resolving sovereign debt crises when they occur. These are of course my personal thoughts rather than an official UK position, but I offer them in the spirit of encouraging debate.

## **2. The domestic financial safety net**

Before turning to the global safety net, let me first say a few words about how the financial regulatory reform agenda in the UK has enabled the strengthening of the domestic safety net – the provision of liquidity insurance to the financial system by the central bank.

Since the onset of the financial crisis, to keep the financial system open for business, central banks have used their balance sheets as never before. At the Bank of England, for example, new published liquidity facilities have been introduced that extend liquidity for longer durations against expanded sets of collateral to new counterparties.<sup>5</sup> As with any kind of insurance, however, liquidity insurance creates incentives to take more of the insured risk. The extent of this moral hazard and how best to tackle it was a key concern for the Bank of England when making these changes – it is not the role of the central bank to lend to insolvent institutions.<sup>6</sup> To that extent, the expansion of the provision of liquidity insurance was enabled by reform to the regulatory framework for banks, including:

- (i) Micro prudential supervision that raised the levels and quality of capital and liquidity banks are required to hold;
- (ii) Regular, transparent stress testing to ensure an ongoing assessment of solvency under different scenarios;
- (iii) A credible resolution regime for insolvent banks that reduces contagion to the wider system and the need for taxpayer support.

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<sup>4</sup> See Hume (1758)

<sup>5</sup> See Carney (2013) and Shafik (2015)

<sup>6</sup> See Hauser (2014) and Tucker (2014).

It would be foolish to declare categorically that the Bank of England has eliminated stigma or moral hazard. But we can say that these regulatory reforms have made it easier for the Bank of England to provide liquidity insurance to solvent institutions. In turn, this has allowed us to increase the availability and flexibility of our liquidity facilities and to give more clarity around the circumstances under which that insurance would be provided. These changes should help to reduce the stigma attached to the use of central bank liquidity facilities, and encourage earlier take-up to limit contagion and protect financial stability during future crises.

### **3. Are sovereigns like banks?**

Attention more recently has turned to sovereign rather than banking vulnerabilities and two issues in particular have brought this into sharper focus. First, do fundamentally sound emerging market economies have access to the right form of liquidity insurance to deal with the challenges posed by lower growth, falling commodity prices and potential spillovers from the possible exit of exceptional monetary policy in advanced economies? And second, how can we manage the tension between the need to recognise when one sovereign's debt has become unsustainable and the need to avoid contagion across countries in times of stress?

There are many ways in which sovereigns are like banks in terms of the liquidity risks they face. Cross-border capital flows can 'run' – just as deposits can 'run' for banks. And the majority of a sovereign's assets – claims on future taxpayers, are both hard to value and inherently illiquid – so, like banks, they are susceptible to runs by international investors, which even if not based on fundamentals, could threaten their solvency by raising borrowing costs. Sovereigns are particularly exposed to run risk or a sudden 'stop' if they have borrowed in foreign currency – the so called 'original sin' – as large depreciations raise the domestic burden of repaying the debt, particularly if there is a shortage of foreign exchange reserves. In the Euro-area, countries have become painfully aware of the risks of borrowing in a domestic currency that individual sovereign states have no right to issue.

But of course, sovereigns are also very different from banks. By definition, their finances are not regulated by any authority, and there is no legal framework for dealing with bankruptcy or resolution, giving them more discretion to default. Instead, we have IMF surveillance (which is weaker than bank supervision) and a complex and often messy process whereby markets and the official sector deal with sovereign debt restructurings. While there are important differences between sovereigns and banks, I think there are enough parallels to draw some insights.

#### 4. Problems with the global financial safety net

Hume himself recognised that the nature of sovereign flows created an incentive to insure against a sudden stop, lamenting: “There still prevails, even in nations well acquainted with commerce...a fear, that all their gold and silver may be leaving them<sup>7</sup>.”

There are different ways for countries to insure against the risk of sudden stops in capital flows:

(i) individually through the stockpiling of foreign exchange reserves, (ii) via collective arrangements with other countries, for example regional reserve pooling or swap arrangements or (iii) through the International Monetary Fund (IMF). This multi-layered global safety net has some advantages but it seems to me that the current configuration is suboptimal: it is fragile, costly and fragmented.

##### Fragile

The aggregate size of the global financial safety net had been in decline before of the financial crisis, despite rapid reserve accumulation. There has been some recovery since then, as the size of the IMF and Regional Financial Arrangements increased in response to the crisis and central bank swap agreements were put in place. But the composition of the global financial safety net is now more fragmented [Chart 1] and it is unclear whether it would be sufficient during a systemic crisis. The IMF element is fragile, with borrowed resources accounting for an unprecedented three-quarters, around \$500 billion of which are temporary loans due to start rolling off next year with no agreement in place to extend them [Chart 2].

##### Costly and inefficient

Self-insurance remains the most popular tool. Individual countries’ reserves remain the largest component of the global financial safety net - reserves have risen from \$1.5 trillion in 1995 to over \$11 trillion now. To be sure, self-insurance is prudent to a point – indeed it is something we have encouraged banks to do. But there are several problems with excessive reserve accumulation:

- (i) First, reserves are distributed very unevenly across and within some regions. Emerging markets with adequate reserves (largely in Asia and the Middle East) are over-insured by about \$1.5 trillion in total. By contrast the Central and Eastern European region and Latin America are underinsured by around \$200 billion [Chart 3]. This suggests the distribution of reserves does not correspond well to the distribution of risks.
- (ii) Second, even when they are in abundance, there are doubts about countries’ willingness to run down their reserves. In the last financial crisis, nine of the largest emerging market economies refrained entirely from using reserves. There is some evidence that markets judge countries

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<sup>7</sup> See Hume (1758)

according to their relative rather than absolute level of reserves. So no one wants to blink first by running them down.

- (iii) Third, issuing high yielding local currency debt to purchase reserves is costly to emerging markets, resulting in an annual cost of around 0.5% of GDP<sup>8</sup>.
- (iv) Finally, reserve accumulation causes distortions to domestic economies with potential spillovers to the global system. It can crowd out domestic investment, the flip side of current account surpluses and savings gluts. The investment of emerging market savings in advanced countries' public debt has contributed to a worldwide shift in preferences for risk-free assets, which may have been partly responsible for the build-up in financial imbalances prior to the financial crisis.

### Uneven coverage

Pooling reserves would seem to be one obvious solution to these costs and inefficiencies. And indeed there have been moves in that direction at a regional level with the expansion of the Chiang Mai Multilateralization Initiative and more recently the BRICs Contingent Reserve Arrangement. But pooling at a regional level is ineffective against shocks that affect the entire region and these regional mechanisms remain untested, with the exception of the European Stability Mechanism. Regional arrangements are also complicated because of the difficulties of imposing reform conditions on a neighbour (as the Eurozone learned with Greece).

Moreover, many emerging market economies do not have access to Regional Financial Arrangements at all [Chart 4]. So while regional insurance is a welcome layer of the safety net, it needs to operate in concert with a better global system including possible IMF facilitation of lending.

## **5. The role of the IMF**

If we are to continue to benefit from global financial integration then we need a system that can effectively and efficiently provide liquidity insurance to fundamentally sound sovereigns in order to contain spillovers to other parts of the globe. As with an independent central bank that houses supervision and liquidity provision under one roof, there are advantages to combining country surveillance and lending in one global institution, with an impartial and experienced staff. And risks are most efficiently pooled at a global level. This is the *raison d'être* for the IMF.

Unfortunately, signs of fragmentation of the global financial safety net are obviously in part a reaction to the failure to implement the 2010 quota and governance reforms to bolster the IMF's resources and the representation of emerging market economies. The priority must be to implement those. But we also need to consider whether and how the temporary resources collected by the IMF in the form of bilateral loans when it passed the hat around in 2012 could be put on a more permanent footing. One possibility is to extend these bilateral loans further. Another possibility is for the IMF to borrow directly from capital markets<sup>9</sup>

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<sup>8</sup> Bank of England staff estimates based on the spread between returns on reserve assets and those paid on domestic bonds.

<sup>9</sup> Although I note the governance implications of capital market borrowing need further thought.

during a systemic crisis which would create safe assets when demand for them is high, allowing funds to be recycled to those parts of the world with temporary liquidity needs.

A more reliable and flexible resource base would allow the IMF to more credibly perform a crisis prevention role of providing committed lines of credit to sound sovereigns through its Flexible and Precautionary Liquidity lines. Take up of the IMF's liquidity lines has been disappointing in large part because of stigma. As a country with a sound balance sheet, but concerned about potential liquidity problems arising from spillovers from shocks in the rest of the globe, what signal does requesting liquidity support from the IMF convey? Some members of the IMF have resisted more widespread use of these liquidity facilities because of concerns about moral hazard. Is there a way to address both the stigma and moral hazard issues?

## **6. Lessons from central bank liquidity insurance**

These are precisely the issues the Bank of England has had to deal with in the context of central bank liquidity insurance facilities. The Winters Review<sup>10</sup> conducted into the Bank's published liquidity facilities highlighted the risk of these facilities becoming stigmatised – usage being taken as a signal of fundamental solvency problems. If that led banks to self-insure against extreme 'tail' liquidity risks, that would be inefficient for the financial system as a whole.

The Bank has reduced the stigma associated with its liquidity facilities by offering greater predictability of access on more favourable terms. This improved access to liquidity has been enabled by the fact that supervision is tougher on capital and liquidity requirements, banks undergo regular stress testing, and credible resolution tools (including ring fencing to protect depositors and bail-in to protect taxpayers) are being put in place. These reforms are recent and not yet fully tested under the most difficult circumstances. But I do think there are some lessons that can be learned from the overhaul of central bank liquidity facilities that could be applied to the provision of liquidity insurance to sovereigns.

What would the equivalent enablers be for sovereigns?

- (i) Better surveillance, particularly of the vulnerabilities to sudden stops;
- (ii) Stress testing countries' balance sheets through better debt sustainability assessments; and
- (iii) Better mechanisms for reducing disorderly spillovers.

### Surveillance

The Bank of England's Sterling Monetary Framework<sup>11</sup> is available to banks and building societies on a presumptive basis – banks with a genuine short-term liquidity can rely on it when a shock hits. A key part of

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<sup>10</sup> See Winters (2012)

<sup>11</sup> Further information on the Bank of England's Sterling Monetary Framework can be found here: <http://www.bankofengland.co.uk/markets/pages/money/default.aspx>

that access is the agreement of supervisors that firms meet micro prudential standards. By contrast, there is no system of pre-qualification for the IMF's precautionary liquidity facilities, at the margin discouraging sovereigns from relying on the IMF as a form of insurance. One potential means of giving countries greater incentives to rely less on self-insurance could be to offer pre-qualification on the basis of strong economic fundamentals and policy track records as part of the Article IV process of surveillance, on a confidential basis. Strengthening countries' resilience through advice on better financial sector reforms or ways to reduce excessive debt would also help. Though, I should note that the IMF's job of assessing sovereigns' fundamentals is made more difficult by the fact that they have no formal supervisory role in relation to sovereigns.

### Stress testing

The Bank of England carries out an annual stress test<sup>12</sup> for major UK banks to assess their ability to withstand shocks in a range of scenarios and takes pre-emptive measures to enhance resilience if necessary. This not only reduces the likelihood that banks will require liquidity support from the Bank of England, but also provides an ongoing assessment of their solvency. This informs the difficult judgement of insolvency vs illiquidity in the event that a bank does require access to the Bank of England's liquidity facilities.

There is scope for the IMF to strengthen its surveillance toolkit to include stress testing. The 2014 Triennial Surveillance Review<sup>13</sup> highlighted the importance of national balance sheet analysis in detecting risks and identifying spillover channels. The IMF could extend debt sustainability assessments to cover external liquidity risks and analysis of how balance of payments flows are likely to respond in crisis scenarios. This ex ante analysis would provide greater assurance on the economic fundamentals of countries seeking liquidity support from the IMF and enable countries to take pre-emptive measures to increase their resilience.

### Reducing the risk of disorderly spillovers

A strengthened global financial safety net alone does not address the tension between the need to recognise when one sovereign's debt has become unsustainable and the need to avoid contagion across countries via a disorderly restructuring. To do that, we need to put in place mechanisms analogous to those we have put in place for banks to ensure that they can be resolved in an orderly fashion. This would have the added benefit of increasing the credibility of the IMF's commitment not to lend to insolvent sovereigns, just as improved resolution regimes for banks has strengthened the credibility of the Bank of England's commitment not to lend to insolvent institutions. Usefully, the IMF has launched important work on drawing lessons from

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<sup>12</sup> See Bank of England (2013)

<sup>13</sup> See IMF (July 2014)



recent experiences with sovereign debt restructurings<sup>14</sup>. Here I offer three preliminary ideas which could reduce the systemic spillovers of sovereign debt crises:

(i) Managing the risk of sovereign crises

Sovereign balance sheets could be made safer by using state-contingent bonds to increase risk-sharing with private sector creditors. For example, GDP-linked bonds advocated in a Bank of England paper in 2013,<sup>15</sup> are debt instruments that directly link principal and interest payments to the level of a country's nominal GDP and so provide a form of 'recession insurance'. Economies with higher GDP growth volatility or countries where monetary policy is constrained in its ability to respond to growth shocks (such as those in a monetary union) are likely to benefit most. Giving such bonds favourable treatment in debt sustainability assessments could enhance their attractiveness. More work is needed to pin down how such instruments could be implemented in practice. Work by the IMF on introducing flexibility for sovereign debt in distress situations is also worth considering.

(ii) Facilitating agreements on a debt restructuring

The Bank has also been a strong supporter of the recent contractual innovations to ease resolvability once default occurs: i) changes to 'Collective Action Clauses' (CACs) in bond contracts so that decisions can be taken by a majority of creditors across all bond issuances, without the need for an issuance-by-issuance vote; and ii) reforms to the 'pari passu' clause to prevent a repeat of the Argentinian situation.

Indeed, the Bank has set an example here by including a new style CAC clause in a recent US Dollar bond issue. The new style contracts have also seen good take-up among emerging market issuers in their foreign-law bonds (the new clause was designed for foreign law bonds, for which the collective action problem tends to be more acute). Since October 2014, 59% of the nominal principal amount of total issuances has included these enhanced CACs for countries such as Mexico, Armenia, Bulgaria, Croatia and Egypt.<sup>16</sup> But as the September 2015 G20 communique<sup>17</sup> highlighted, there is a need to further explore market-based ways to speed up the incorporation of such clauses to the outstanding stock of debt.

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<sup>14</sup> See IMF (April 2013)

<sup>15</sup> Brooke et al (2013)

<sup>16</sup> See Briefing for G20 Meeting, September 4, 2015, Inclusion of Enhanced Contractual Provisions in International Sovereign Bond Contracts. <https://g20.org/wp-content/uploads/2015/09/IMF-Note-on-Inclusion-of-Enhanced-Contractual-Provisions-in-International-Sovereign-Bond-Contracts-Briefing-for-G20-Meeting.docx>

<sup>17</sup> See Communique, G20 Finance Ministers and Central Bank Governors Meeting, 4-5 September 2015. <https://g20.org/wp-content/uploads/2015/09/September-FMCBG-Communique.pdf>

### (iii) Reducing large cross-border exposures

A commitment to bail-in rather than bail-out creditors of sovereigns can only be credible if losses can be absorbed safely without significant spillovers across borders. Sovereign exposures receive special and in some cases preferential treatment in prudential regulation, with low or even zero capital requirements and exemptions from large exposure limits. It is hardly surprising then that they make up an important part of banks' balance sheets. Claims on foreign public sectors reported by BIS-reporting banks as a share of their total foreign claims have risen from 17% in 2004 to 25% at end-2014.<sup>18</sup> The Basel Committee has recently started a review of the treatment of sovereign exposures in the Basel Standards. This is an important part of the resolution agenda – reducing international spillovers from sovereign debt restructurings will make it more feasible to implement them when needed.

## Conclusion

Promoting cross border capital flows as a means of allowing resources to flow to where they will be best used is a logical extension of the arguments David Hume first put forward in favour of free trade more than 250 years ago. However, such flows leave nations exposed to a 'capital stop', in much the same way that banks can experience a run on their deposits.

The mix of self- and multi-lateral insurance arrangements that have arisen in response to recent events and liquidity pressures appears suboptimal – resembling more of a patchwork than a safety net. We need a better global financial safety net with the IMF at its heart and three key additional elements that will make the safety net more effective.

- First, a more reliable and flexible source of funding for the IMF and greater clarity on coordination with Regional Financial Arrangements.
- Second, a stronger mandate for IMF surveillance and stress testing to reduce the likelihood that countries might need recourse to the safety net, and possible prequalification to reduce stigma when liquidity is needed.
- Third, better mechanisms for dealing with debt restructuring and reducing the risk of disorderly spillovers.

None of this will be easy. As Hume said "it must, however, be confessed that...all these questions of trade and money are extremely complicated."<sup>19</sup> But there are some important lessons from the experience of central bank reforms since the crisis that, while complicated, show us what might be possible.

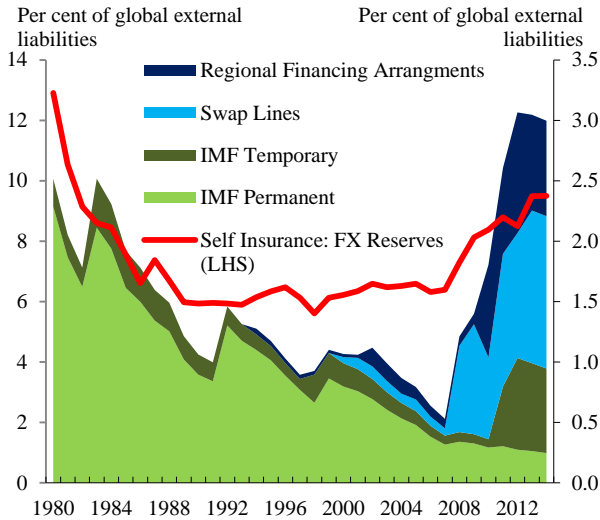
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<sup>18</sup> Bank of England staff calculations based on BIS data.

<sup>19</sup> See Hume (1758)

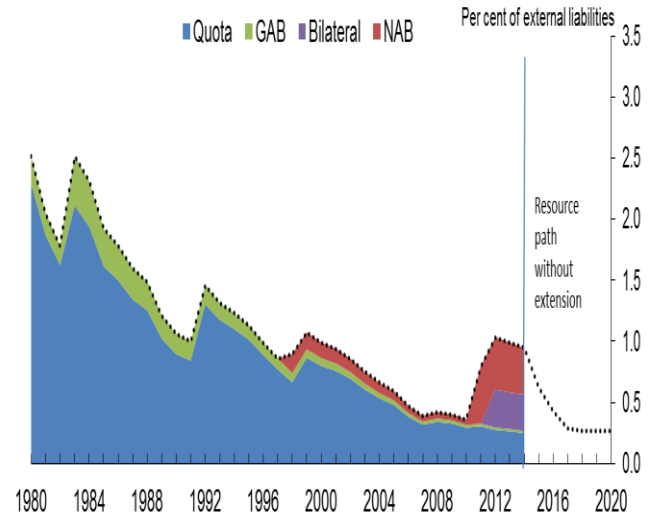
**Charts and Tables**

**Chart 1: Evolution of the global financial safety net as a percentage of external liabilities (1980-2014)**



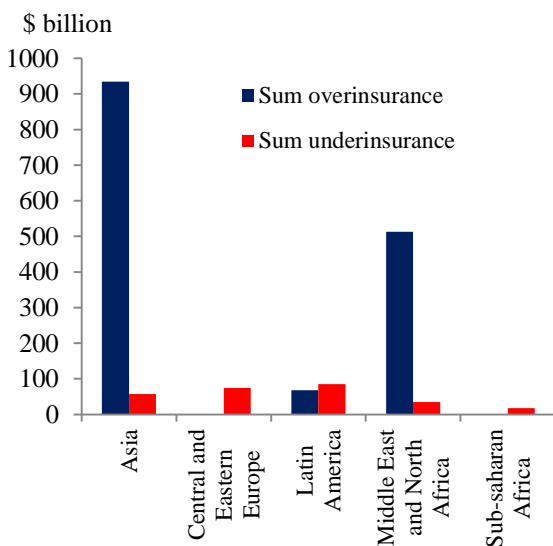
Sources: IMF, central bank websites, RFAs, Lane and Milesi-Feretti (2012) and Bank calculations.

**Chart 2: Composition of IMF resources**



GAB – General Arrangements to Borrow  
 NAB – New Arrangements to Borrow  
 Source: IMF and Bank calculations.

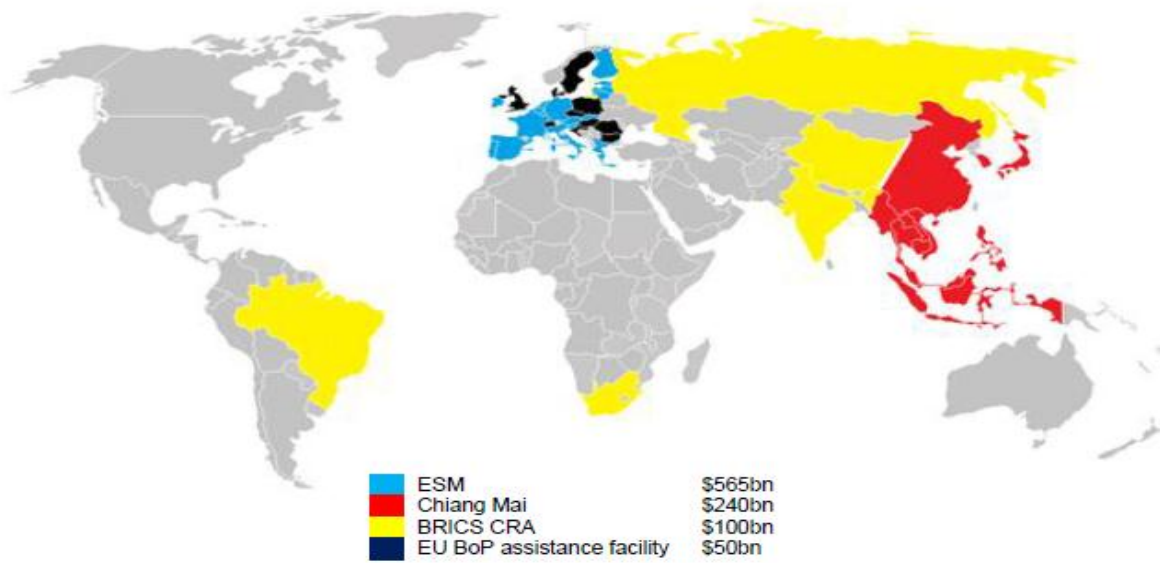
**Chart 3: Regional FX over- and under-insurance (2014)<sup>(a)</sup>**



Sources: IMF and Bank calculations.

(a) Degree of insurance is measured against the standard IMF metric.

**Chart 4: Access to regional financial arrangements bigger than 0.5% of regional GDP (2014)**



Sources: National Sources, IMF and Bank calculations.

## References

Brooke, M et al (2013) Sovereign default and state-contingent debt, Financial Stability Paper No. 27.

Carney, M (2013) The UK at the heart of renewed globalisation,  
<http://www.bankofengland.co.uk/publications/Documents/speeches/2013/speech690.pdf>

Hauser, A (2014) Lender of last resort actions during the financial crisis: seven practical lessons from the United Kingdom in: Rethinking the lender of last resort, BIS Papers, No. 79, pp 81-92

Hume, D (1758) Of the Balance of Trade, in: Essays – Moral, Political and Literary.

Pagan, W (1865) The Birthplace and parentage of William Paterson, founder of the Bank of England, and projector of the Darien scheme.

The Bank of England (2013) A Framework for Stress Testing the UK Banking System,  
<http://www.bankofengland.co.uk/financialstability/fsc/Documents/discussionpaper1013.pdf>

The International Monetary Fund (June 2014) The Fund's Lending Framework and Sovereign Debt – Preliminary Considerations Staff Report, <http://www.imf.org/external/np/pp/eng/2014/052214.pdf>

The International Monetary Fund (July 2014) 2014 Triennial Surveillance Review Overview Paper,  
<http://www.imf.org/external/np/pp/eng/2014/073014.pdf>

The International Monetary Fund (April 2013) The Sovereign Debt Restructuring – Recent Developments and Implications for the Funds' Legal and Policy Framework,  
<https://www.imf.org/external/np/pp/eng/2013/042613.pdf>

Tucker, P (2014) The lender of last resort and modern central banking: principles and reconstruction in: Rethinking the lender of last resort, BIS Papers, No. 79, pp 10-42

Shafik, M (2015) Goodbye ambiguity, hello clarity: the Bank of England's relationship with financial markets,  
<http://www.bankofengland.co.uk/publications/Documents/speeches/2015/speech801.pdf>

Winters, B (2012) Review of the Bank of England's Framework for Providing Liquidity to the Banking System,  
<http://www.bankofengland.co.uk/publications/Documents/news/2012/cr2winters.pdf>