

Creating Credit and Rating it: New Kids on the Block in Post Crisis Global Finance

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„One of the most intriguing developments since the financial crash of 2007/8 is the way it propelled Central Banks to the forefront of financial innovation and policy formation. As the political authorities abandoned activist macro-economic management and set their Treasuries and Finance Ministries the sole task of cutting public expenditure and organizing for austerity, the Central Banks took on any management of the economy that was permissible or that they could get away with. ...“

Introduction

One of the most intriguing developments since the financial crash of 2007/8 is the way it propelled Central Banks (CBs) to the forefront of financial innovation and policy formation. As the political authorities abandoned activist macro-economic management and set their Treasuries and Finance Ministries the sole task of cutting public expenditure and organizing for austerity, the CBs took on any management of the economy that was permissible or that they could get away with. And this was aided by their semi-autonomous status, granted to them by earlier political administration's determination to see CBs independent of direct political control, able to pursue monetary policy as they saw fit, but originally set within the bounds of conservative inflation targeting. This is the legacy CBs like the US Federal Bank (US Fed), the European Central Bank (ECB), and the Bank of England (BoE) inherited as they faced the consequences of financial meltdown and monetary turmoil in the wake of the crisis (I come back to the Bank of Japan (BoJ) in a moment). But far from this inheritance completely constraining CBs it actually

presented them with an opportunity: whether by design or fortunate circumstances they have seized the possibility of turning themselves into the premier activists of economic management. We now have what Bowman *et.al.* (2013) have termed a 'central bank led capitalism' on an unprecedented scale and extent. If, as a consequences of prolonged austerity, we add in the likelihood of very low growth rates for many years ahead (which seems feasible, see Alpert 2013) then we may be moving into a new and unusual era for advanced capitalism – *low growth central bank led capitalism*.

This article describes some of these events and tries to assess their possible consequences and implications. The approach adopted here builds upon a 'political arithmetic' that is theoretically parsimonious but empirically rich (see, for example, Englen, *et.al* 2011; Bowman *et. al.* 2013). It shows how central bank led capitalism connects to the rest of the financial system, and how it is being accompanied by interesting and potentially radically different ways of assessing sovereign risk. Indeed, it is the issue of sovereign risk that is posed afresh by the rise of CB activism. Sovereign risk has become a major issue as CBs balance sheets (BS) have exploded in the manner described in a moment, and new ways of calculating such sovereign risk have emerged in its wake.

Central Bank BSs have proved crucial in designing and pursuing economic policies in the wake of financial crises. As we will see CBs have purchased a wide range of financial assets in order to further major macroeconomic and financial stability objectives, which has implied a comparable increase in domestic liabilities. This has led to an unprecedented global expansion of CB BSs. But BSs of the current size could create broad policy risks, beyond the increased exposure of the CB to market de-



The Danish Central Bank, Copenhagen

velopments. These risks include inflation, financial instability, distortions in financial markets, and conflicts with government debt managers. Critics of the CB BS explosion suggest that as huge monetary stimulus have accumulated it becomes increasingly difficult for the CBs to reverse their monetary easing policy and shrink their BS from their current size back down to the pre-2008 level. But the argument here will stress that this is not such a problem as it is often made out to be, for reasons outlined in a moment.

Thus this article should act as an antidote to all those who say, first that not much macro-economic activism can be discerned since the financial crisis – ‘we are all doomed’ by the continued stranglehold of neo-liberal ideology; and secondly, that there has been no, or little, innovation in economic policy making since the crisis. In actual fact we have witnessed a very innovative period, one which continues it will be argued. Quite where all this is going, however, remains unclear. Each CB has its own particular problems to confront – there is no effective ‘global policy coordination’ and nor is there likely to be. For the moment this is wishful thinking. Whilst the US Fed, the ECB and the BoE still retain a residual primary (but fast disappearing – see below) commitment to low inflation targeting, for the BoJ it is precisely the opposite as it tries desperately to *increase* inflation (interrupt its deflationary experiences and expectations). This all makes international capitalism inherently unstable,

particularly in respect to financial and monetary matters (Kindleberger and Aliber 2011; Minsky 1982).

The rest of this article proceeds as follows. The next section outlines the evolution of CB BSs since the crisis. It concentrates upon the four main advanced country CBs already mentioned with something on the Danish Central Bank (DCB) for local interest. After that we turn to the innovative policies that have been responsible for the explosion of BSs. This is followed by a section dealing with the relationship between CBs and assessments of sovereign risk. The responses to this from those institutions dealing with the ratings business is discussed in the penultimate section, where the characteristics of new metrics and those new institutions trying to muscle into the ratings business are discussed. The article ends with a conclusion outlining why this matters and what its ultimate consequences might be.

The Empirics

Broadly speaking a central bank balance sheet gives a snapshot summary of the financial position of the CB at any one time. As BS assets must equal liabilities for convenience in what follows we concentrate upon the asset side. As we will see later, however, ‘reserves of commercial banks’ appearing on the liability side is very important for an examination of the policy implications of the expansion of assets on the opposite side of the BS.

Figure 1 demonstrates what happened to the aggregate assets of the US Fed, the ECB and the BoJ between 2002 and 2012, and for a contrast it includes the Chinese central bank (PBoC). We return to the PBoC in a moment but first we concentrate on the three advanced country CBs.

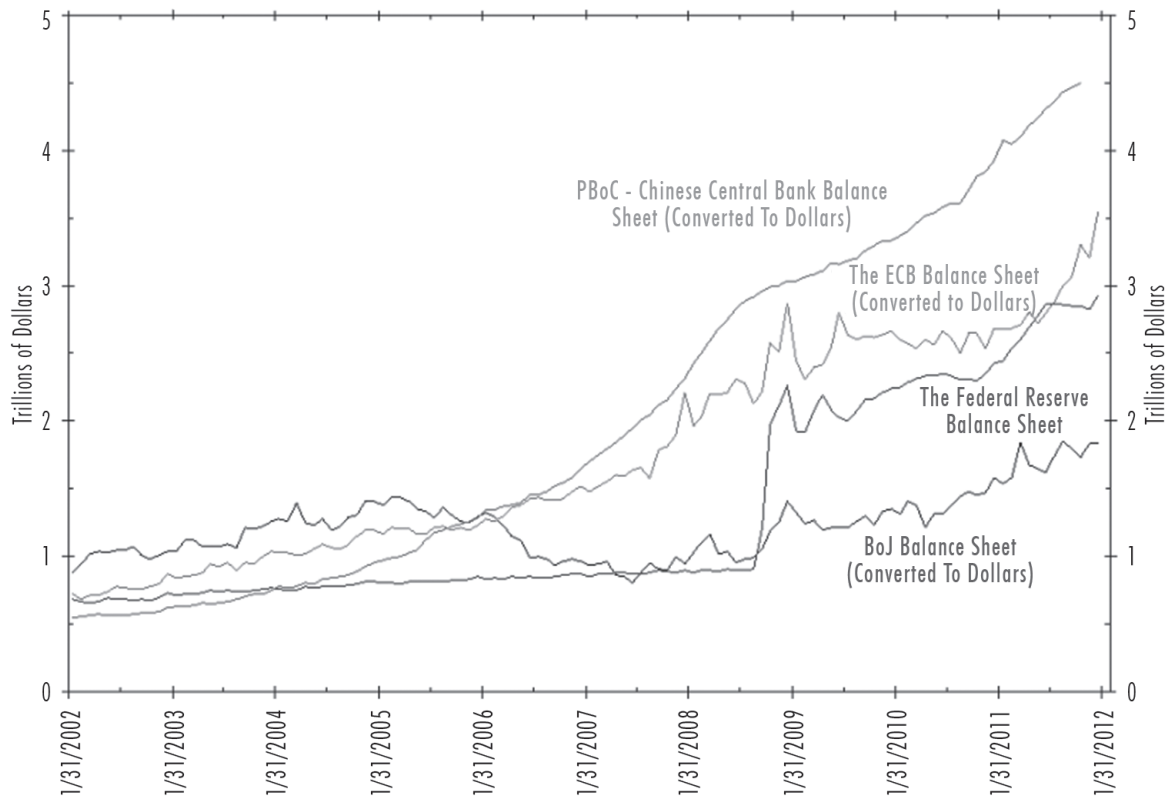
In absolute terms the ECBs assets more than trebled. There were two main noteworthy episodes: the first in the latter part of 2008 and the second in the early part of 2012. The first was associated with the onset of the crisis as the ECB tried to staunch the loss of liquidity in the Eurozone and support its banks whilst the second had more to do with the sovereign debt crisis amongst mainly the countries in the south. But what this diagram illustrates is that far from being moribund the ECB was very active. Despite a hugely constraining political and organizational environment the ECB continually pressed against these obstacles and extended its mandate considerably.

If we now turn to the US Fed the big push happened just after the original crisis during 2008. This mainly involved supporting the domestic banking and wider financial system via the policy of, first, the Troubled Asset Recovery Program (TARP) – an emergency measure in-

troduced to staunch the liquidity losses in the immediate aftermath of the crises -- and then quantitative easing (QE -- more on this innovative policy later). The key element for the expansion of the asset side are the mortgage backed securities (MBS) which the Fed bought-in to prevent the holders of these going bankrupt as their value fell with the collapse of the US housing market. Subsequently this was overtaken by QE driven bond purchases. But note that unlike for the ECB, there was no subsequent sovereign debt crisis to contend with.

Initially the Fed gave assistance mainly to US financial institutions but not exclusively so. It supported Wall Street *and* the international financial system beyond. Again, this marks out the particularity of the US Fed's role. Keoun and Kuntz (2011) estimate that between 2007 and 2010 US\$ 1 trillion was dispensed by the Fed'. Later estimates for overall 'global' support for distressed financial institutions – in the USA and beyond -- suggests this amount was anywhere between *US\$7 trillion and nearly US\$9 trillion*. This just demonstrates the huge amount of public subsidy that has been pumped towards private financial interests: a veritable corporate welfare-ism of unprecedented scale.

Figure 1: Assets of the ECB, the US Fed, the BoJ and the PBoC: 2002-2012 (trillions of US dollars)



Source: Thomson Reuters Datastream.

These trends are mirrored in the case of the BoJ (Iwata & Takenaka 2012) though the cycle of expansion is different. The BoJ embarked on a program of QE in 2001, which lasted until 2006 (this had to do with the much earlier onset of domestic financial disruption in Japan). As a consequence between 1997 and 2005 its assets increased from 12.5% of GDP to over 32%. Subsequently other policies were introduced (corporate financial facilitation, comprehensive monetary easing) so that, after a fall in the BS between 2006 and 2007 it began to climb again to be 30% of GDP by 2012 (Iwata and Tanaka 2012, Figure 1).

But look also at the position of Chinese CB. The People's Bank of China (PBoC) has overtaken the Fed, BoJ and even the whole euro system by assets in recent years and has become the largest central bank in the world². Thus the developments outlined in respect to the main advanced capitalist country CB have not been confined just to these.

In addition we could add in the Bank of England, whose assets double between February 2009 and October 2012 (see <http://www.bankofengland.co.uk/markets/Pages/balancesheet/default.aspx>) and a small open economy like Denmark, the experience of which is illustrated by Table 1.

Table 1: Danish Central Bank Balance Sheet 2000-2012 (assets at year end)

Year end	DKK Billions	% Change	
2000	237.0		
2001	295.3	24,6	
2002	375.4	27,1	
2003	397.3	5,8	
2004	337.1	-15,2	
2005	392.0	16,3	
2006	364.9	-6,9	
2007	424.5	16,4	
2008	635.1	49,6	
2009	550.0	-13,4	
2010	486.1	-11,7	
2011	569.8	17,2	
2012	628.5	10,3	
		Total change	165,2

Source: Compiled from various Danish National Bank statistical sources.

There were significant increases in the early 2000s (associated with Denmark's domestic bank bailouts) but the big jump associated with the financial crisis occurred in 2008

when the yearly increase was almost 50%. Things slowed down for a few years after that but then began to increase again in 2011 and 2012 as 'safe haven' money began to flow into Denmark (see below). Over the entire period 2000-2012 there was a 165% increase in assets.

Finally, we have a comparison between the four main Western CBs in Figure 2, expressing their assets as a percentage of country GDP. This illustrates the significance of the BoJ's interventions relative to the others despite its smaller overall absolute size. The ECB also looks very exposed, the US Fed the least.

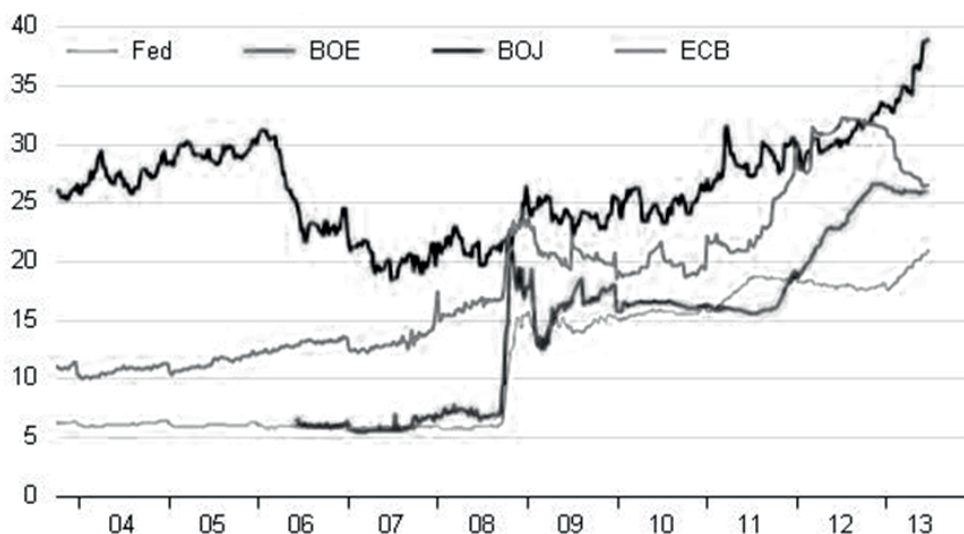
Again, this means the ECB will face a different set of problems in unwinding its position than the US Fed or the BoE (or the BoJ, see immediately below). Different policies will be in order to deal with different circumstances.

What Have Been the Innovative Policies?

The above data illustrated the consequence of CB actions but what exactly were those actions? This section discusses several of the more important policy developments since 2008. But first we describe how the main CBs are institutionally configured.

The BoE is formally a limited liability company fully owned by the UK Treasury. The US Fed is in a more complicated legal position since it is a Federation of several (12) quasi-independent regional banks (Federal Reserve Districts), which have significant private institutional involvement, making the FRS a mix of public and private interests. However, the Federal Reserve Bank has legislative backing, and is a properly constituted central bank and banker to the US government.

In the UK the BoE's Monetary Policy Committee is the body responsible for conducting monetary policy – setting interest rates and determining the general conditions for lending and borrowing. The parallel body in the US Fed is the Federal Open Market Committee. But CBs also act as the banker to the government. For instance as the government's bank the Fed acts as its fiscal agent: the US Treasury keeps an account with the Federal Reserve, through which incoming federal tax revenues and outgoing government payments are made. It also sells and redeems US Government securities such as savings bonds and Treasury bills, notes and bonds, and it issues the nation's coin and currency. In the UK it is the BoE that directly issues TBs on behalf of the government. It also manages the country's foreign exchange and gold reserves. Both CBs also act as a lender of last resort. The ECB is a corporate entity with shareholders and capital stock (€5billion) which is owned by the central banks of all 28 EU member states. It is formally controlled by a Governing Council made up of representatives of the

Figure 2: Balance Sheets Compared: ECB, US Fed, BoE and BoJ (2004-2013 – expressed as a % of GDP)

Source: Thomson Reuters Datastream

Eurozone countries. In a similar way to the other CBs it acts as the Eurozone's banker, issuing Euro currency, managing the foreign reserves of member states and the exchange rate of the Euro, and devising and conducting monetary policy. But it does not have explicit lender of last resort powers.

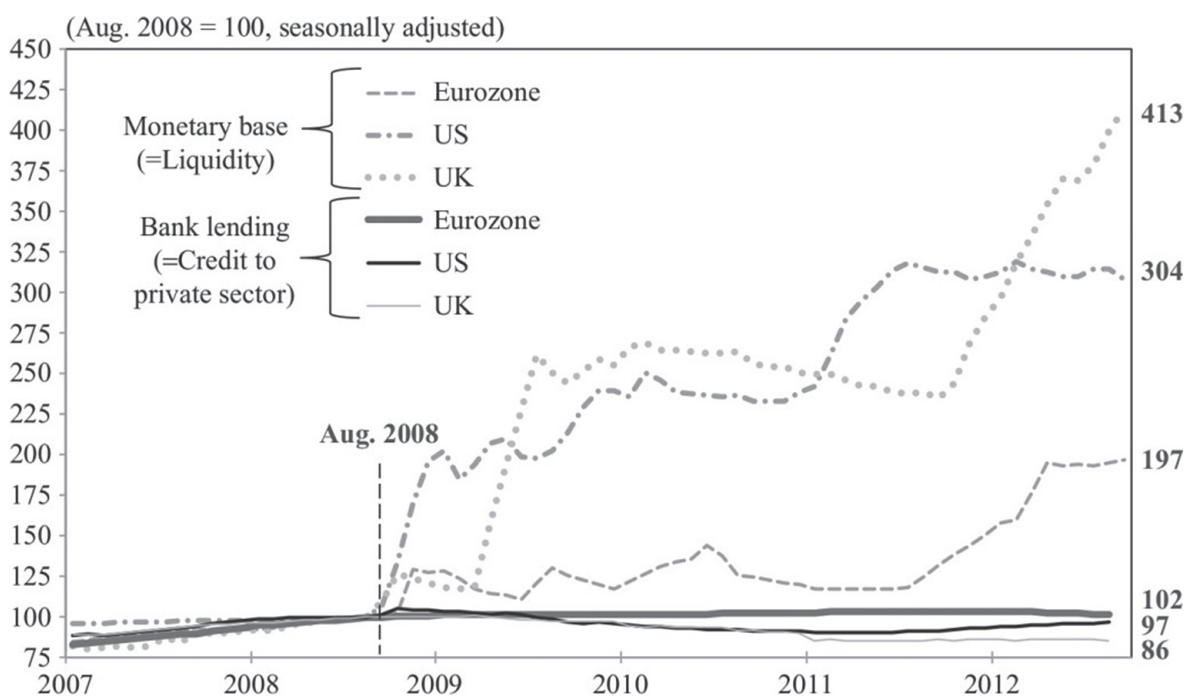
Returning to the policies pursued an early caution is in order since it could be argued that there is nothing necessarily radically innovative about these policy developments. In a moment we discuss 'quantitative easing' (QE) – which is the main claim to innovation in this environment – but it could be said it is nothing more than a revamped form of traditional 'open market operations' (OMO) by the CBs. Whilst recognizing this as a possible argument it is suggested here that what we have witnessed since 2008 exceeds traditional OMO in both its extent and range. OMO is essentially a short term policy instrument designed to affect short-term interest rates and the amount of 'base-money' in the economy. The sheer size of the recent interventions and their longevity is unprecedented – and amounts to more than the orthodoxy of financial policy. In addition, as we will see in a moment, the level and variety of 'subsidies for lending' vastly exceeds normal practice. We concentrate upon QE here for convenience³.

QE (practiced mainly by the US Fed, the BoE and the BoJ, but also the Swiss National Bank) involves the CB 'buying' gilts from the private sector financial institutions in the hope that this will on the one hand help 'repair their balance sheets' and on the other hand stimulate the

commercial banks to extend loans so as to encourage economic activity generally. By selling their gilts and other paper the commercial banks would now have enhanced credit with the CB, which can act as more solid assets in their own BS, thus affording them the possibility of extending their liabilities in the form of credit creation to the private sector (to firms and individuals). This is the basic mechanism. But it can have all sorts of effects. There have been various rounds of QE – the first of which is generally recognized to have helped support share prices (thus shoring up the stock markets) while the second round is helping to restore balance sheets.

But there is a key theoretical issue at stake in this, which illustrates its possible undoing. It is often claimed that this mechanism involves the CB simply 'printing money' – principally in the form of 'central bank base money' – because how else could it 'purchase' the commercial banks assets/gilts? However, this is not altogether the case or quite that simple. Under these circumstances the CB does indeed extend 'credit' to the commercial banking system (which would appear as an increase in reserve balances on the liabilities side of the CB balance sheet referred to earlier), but it does not print money directly, nor extend credit directly to the household or commercial sector. That is the job -- indeed, the whole the rationale -- of the commercial banks themselves. *The CBs policy of QE is based upon a hope and a prayer.* In our financial world it is commercial banks that directly 'control the money supply' not the CB (or, indeed -- and God forbid -- the government). Orthodox monetary policy dic-

Figure 3: Monetary Base and Bank Lending



Source: Koo 2012, Exhibit 10, p.30.

tates that commercial banks should have control over the money supply under capitalism – i.e., private economic agents – not the public authorities: that would be tantamount to socialism, i.e., the administrative control over credit creation and allocation. This capacity to control the money supply by private agents – via the direct extension of credit money to households and firms (creating a deposit for them in their accounts at their commercial bank) -- is jealously guarded by the financial system and even QE could not fully challenge this nostrum. Under a monetized capitalism that agent who controls the money supply has control over economic resources, so it is clear what is ultimately at stake in this process.⁴

Thus what QE amounts to is a very unorthodox form of the orthodoxy. The CB policy of QE may have helped to re-establish the strength and credibility of commercial banks' balance sheets, but there is no necessary link between this and the extension of private credit, i.e., an enhancement of the money supply in the form of loans to the private sector of households and firms. That is a decision left to the commercial banks themselves, and, indeed, much to the frustration of the governments and the relevant CBs, there is growing evidence that they have not done so. As shown in Figure 3, despite the escalation of the monetary base consequent upon bond purchases, the actual bank lending to the private sector has stag-

nated. Of course this may be because there is no demand for loans by the private sector. The private sector is deleveraging to restore credibility to its BSs and increasing savings, which lie dormant in the financial system⁵. Again, this reinforces the idea that the policy is based upon a wish and a prayer.

The alternative would be to issue 'helicopter money' --- where the CB simply drops money directly onto the general public by, say, sending them an individual cheque – but this has been ruled out for fairly obvious reasons. Of course, this whole policy initiative is also predicated on a conception that increasing the (credit) money made available to the private sector will indeed stimulate consumption, commercial activity or investment, or whatever. That is also part of the hope and the prayer. The BoE has purchased £375billions worth of gilts as part of its QE program, which amounts to a direct subsidy to the commercial banks. As mentioned above in the US QE began in 2009, and has been successively extended in various phases. As of December 2012 'QE Infinity' began (sometimes known as QE 4) – infinite bond purchases until the US labour market recovered --see below. But by June of 2013 that labour market improvement was evident and the 'tapering back' of QE was broached by the Fed. The possible reversal of the program threw into stark relief the potential difficulties of unwinding

the CBs BS position quickly and extracting the Fed from its entrenched support of the financial system, something returned to in a moment.

Thus whilst a great deal of effort and energy (political, ideological and economic) has been expended on QE it may have repaid sparse real economic dividends. But what it has done is hugely inflate the CBs BSs -- as shown above -- as they have 'purchased' more and more privately owned assets in an attempt to 'kick start' private sector monetary growth and with it economic activity more generally. Whilst the jury still remains out on what the ultimate effect of it will be on economic growth it is towards a discussion of its consequences within the financial system that we turn in a moment. And what happens here may also ultimately affect economic growth, which is returned to in the conclusion.

But first what other policies have of CBs resorted to?

Ever since Ben Bernanke voiced an official concern in 2012 with US unemployment (that had peaked at 10% in October 2009 -- see < <http://www.federalreserve.gov/newsevents/speech/bernanke20120831a.htm> >), CBs have toyed with a range of possible new policy mandates. As unemployment in the US fell to around 7.5% in 2012, an official unemployment objective was established by the Fed at 6.5%. In fact the US Fed has a 'dual mandate': to both establish stable prices and maximize employment, though the inflation objective had up until the recent past been considered its prime task.

The additional innovative part of this policy was to pre-commit the CB to maintain its policy stance on interest rates until the objectives for inflation and particularly unemployment had been met. But this explicit statement by Bernanke set off a debate amongst other CBs as to whether they should also target unemployment like Bernanke was encouraging⁶. Or should they adopt an explicit growth rate target ('nominal GDP' targeting). Or should they engineer negative nominal interest rates? The BoE floated this idea in February 2013. And the Danish Central Bank (DCB) adopted this policy explicitly. Investors would now *pay* the Danish authorities to lodge their money on overnight deposits in Denmark. In Denmark's case this policy -- and its general policy of keeping all interest rates at zero or as near as possible to this -- is designed to maintain the exchange rate between the Krone and the Euro⁷. Thus here the DCB's policy is principally directed at exchange rate stability, another possible policy target for CBs more generally and another indicator of the different objectives facing different countries in managing their economies. The exchange rate between the Krone and the Euro is the foundation on which all of Denmark's macro-economic policy is based. On the other hand the ECB -- which also toyed with this

idea on negative interest rates in May 2013 -- views this as a policy for stimulating private demand in the traditional manner, not for stabilizing the Euro exchange rate.

Of course the BoJ has also adopted an implicit exchange rate policy, since in keeping interest rates very low the idea is to encourage spending and to see the Yen exchange rate fall, so as to make Japanese exports more competitive. This is viewed as the way out of its deflationary malaise. Although this policy mix is often attributed to the Prime Minister, Shinzo Abe ('Abconomics'), the recently appointed new governor of the BoJ, Haruhiko Kuroda, was the key player in devising the package.

But most 'innovative' CB policies have been associated with direct subsidies to the banks to try to stimulate lending, like QE discussed above. Further example of this are the UK's 'Funding for Lending' (F4L) program (another £80 billion), or its subsidy on mortgages to help buyers climb the housing ladder announced in the April 2013 Budget.

Amongst all of this, however, what is left of inflation targeting, the original mandate for independent CBs? Very little, or so it seems. Inflation has slipped down the policy agenda as CBs have seized the opportunity to exploit their new found freedoms to experiment with policy making. They may not know quite what they are doing, or what they should do. They may all have different objectives. But they have certainly been active. Some would say over active, and they will reap the downside consequences later (e.g., Stockman 2013). But what might those consequences be? This we turn to in the next section.

Central Banks and Sovereign Risk

I outlined the functions of the CBs above to indicate that they are intimately tied to the financial functions of their respective Treasuries, governments and financial systems beyond. They are part of an elaborate and complex of institutions and mechanisms that are scrutinized for establishing the risks and rewards associated with sovereign debt, for instance. In this, of course, the overall fiscal position of the government is crucial but so too is the state of its banking sector and CB. Indeed, it is just this 'fiscal position' that the explosion of CBs BSs indicates. At the end of the day, QE and all the rest represents a fiscal problem for the government and the public since this is a debt that has to be 'repaid', even though it is formally on the books of the CB. The expansion of the CBs BSs indicated above was a result of a decision about public expenditure, involving a huge public subsidy to the financial system. Several possible consequences follow which are only presented here in outlined (Caruana 2012; Weidmann 2013).

First, will it be possible for the CBs to unwind their newly acquired financial positions as indicated by their BS? This issue was posed acutely in June 2013 as the US Fed hinted at a policy of imminent phased withdrawal of QE. Of course this threw the US financial markets into instant turmoil. The prospect of interest rate rises upsets plans and expectations throughout the financial system. But this policy re-adjustment would have implications beyond the US. The economic cycle in the US is in quite a different phase than in Europe. Europe was still mired in deep recession in mid-2013 whereas the US economy was on a recovery trajectory. So despite anything else, this makes prospects of global policy coordination even more unlikely since these two economic blocks were facing quite different current economic conditions. But these involve essentially short-term consideration. What about the longer term?

Economist would answer 'yes' to the longer term prospect of successful unwinding because of their faith in the market mechanism: as conditions improve and the expansionary BS phase comes to an end the CB can re-package their acquired debts and sell them as market sentiment improves. It might even make a profit on these transactions. There may be something in this as will be indicated in a moment, but the medium term uncertainties are legion and the political cost may be prohibitive – fiscal conservatives are incensed by these policies (Stockman 2013). But there are three somewhat alternative policy options available here: explicitly wind down the position as just suggested; hold on to it and keep things as they are (why should the CB really worry about this since it is a sovereign risk and the CB will not default); relatedly, wait for it to be eroded by inflation in the longer-run.

What about the sovereign debt issue? This is related to what has just been said. Given the dangers associated with such a large and swift 'deterioration' of the CBs BS might this not inhibit investors when thinking about acquiring further sovereign debt? The state of the CBs BS is also an indicator of the state of the sovereigns' BS, since this is ultimately a form of public debt. However, as indicated by the discussion of the Danish case, things are complicated by several other factors.

At this stage it is important to bring in the credit rating agencies, since there are the bodies that actually establish the credit rating for sovereign debt. The three big CRAs are Standard and Poor, Fitch and Moody's (who collectively control 95% of the global credit ratings market). These bodies are important because they have semi-official status as regulatory institutions, fulfilling a public purpose despite them being privately owned (Sinclair 2008). The CRAs assess the risks associated with

financial investment in both private corporations and sovereign debt. They rank various institutions and sovereigns -- rating the debtor's ability to pay back the debt, make timely interest payments and the likelihood of default. Traditionally, the countries we have been dealing with above were 'Triple A rated' by these agencies: as a result their debt was judged as 'risk-less': they were the ultimate 'safe havens'. Recently, however, there has been some down grading of their debt as their fiscal position deteriorated and growth prospects faltered (e.g., for the US and UK). But a problem here is that there is a growing loss of confidence in these bodies in the wake of their role in the run up to the financial crisis. They failed to spot the emerging problems and were compromised by their dual role as both assessors of risks and advisors/consultants to the very financial institutions they are assessing. This disillusionment with the existing CRAs has provided a space for some potential competitors to emerge in the credit ratings business. And this is a further indicator of potential quite rapid institutional change in this world. New bodies are marketing their indexes, claiming they are superior in their methodology in the new period of CB-led capitalism and are not compromised by past mistakes in the old era. Thus whilst we may have another round of potential 'financial innovation' emerging here, this time it is not one involving yet another exotic financial instrument or form of securitized debt obligation (for the foreseeable future that era is probably over) but, rather, a new and better index of sovereign risks, one suitable for a new era of 'sovereign debt crises', fiscal austerity and CB BS inflation.

Sovereign creditworthiness assessment has developed with the huge expansion of the sovereign credit default swap market in the aftermath of the financial crisis which, like credit ratings more generally, constitutes an extension of corporate methodology into the sovereign sector.

A CDS is a credit protection contract whereby credit risk is sold to a third party that agrees to make a payment in the case of a defined 'credit event' in exchange for a periodic premium. Traditionally CDSs are not traded on exchanges but are privately negotiated between two counterparties. However new clearing solutions are increasingly being offered which consolidate these instruments, track them and offer an instant clearing mechanism⁸. In addition, the huge increase in public borrowing indicated above sparked the creation of several tradable indices that track sovereign credit risk of comparable countries: in 2009 the *iTraxx Europe* for 15 countries in the Eurozone, plus Denmark, Norway, Sweden and the UK; in 2010 the *iTraxx CEEMEA* for 15 countries in central and eastern Europe, the Middle East and Africa; and several other indexes for the G7, BRIC and various other combina-

tions of emerging market sovereigns. These indices are owned, managed and marketed by the financial information group *Markit*⁹.

What these particular CDS rating models do is to process the collective market view of issuers' credit condition from CDS prices and convert them into implied rating probabilities of default. Clearly, in normal times the more 'liquid' is this market, the greater is the implied sovereign risk (contrary to the bond market). The traditional CRAs have adopted this methodology for their corporate credit ratings business (Fitch, 2007) and extended it into the sovereign sector. Since 2002 they all began to track sovereign CDS prices in indexes (Gailard, 2012, p. 172) as well as provide market-implied ratings that translate prices from the CDS, bond and equity markets into standard rating language for both the issuer and the security. Like traditional credit ratings, CDSs are 'independent' from factors such as captive buyers and safe haven dynamics of market turmoil, and the CDS market therefore does not replicate the bond market and often diverges. So, for example, as Germany's cost of CDS protection widened by 20% along with the southern countries of the Eurozone in May 2012, *Markit* pointed out that the CDS market may be reflecting real, fundamental concerns about Germany as it is increasingly becoming clear that the 'powerhouse' of Europe is not immune to the Eurozone turmoil, risk of a messy break-up of the Euro, or the unpopular alternative of quasi-federalism.

Thus in the wake of the crisis a range of alternative organizations, calculative mechanisms and indices are emerging in the sovereign risk business that claim a superior methodology and more accurate assessments. But what these approaches share is, first a commitment to key ratios like the debt to GDP indicator, and/or a 'mark-to-market' pricing valuation arrangement that tracks actual market prices for CDS. The *BlackRock* Sovereign Risk Index, on the other hand, rejects these indicators as being inadequate (though it embraces them in part – see below) and adopts a 'research-led' methodology instead¹⁰. *BlackRock* is the leading institution claiming a new role for sovereign debt assessment. Initially comprising 44 countries, *BlackRock's* index produces a ranking of sovereigns according to their relative likelihood of default, devaluation or above trend inflation based on four conceptual categories (*BlackRock* 2011, June):

1) *Fiscal space* contains two equally weighted measures for debt sustainability: 'proximity to distress' (the additional debt that would lead to a country defaulting) and 'distance from stability' (the fiscal adjustment required to reach a sustainable debt level for the future), calculated by a formula that stipulates a 60% target debt/ GDP

rate for high-income countries and 30% for low-income countries (see a criticism of these ratios below).

2) *External Finance Position* looks at the susceptibility to macroeconomic trade and policy shocks outside the control of the country.

3) *Financial Sector Health* considers the share of financial sector debt as % of GDP as well as 'Credit Bubble Risk', and the degree to which the financial sector of a country poses a threat to its creditworthiness if its liabilities are to be taken over by the sovereign (i.e. nationalized).

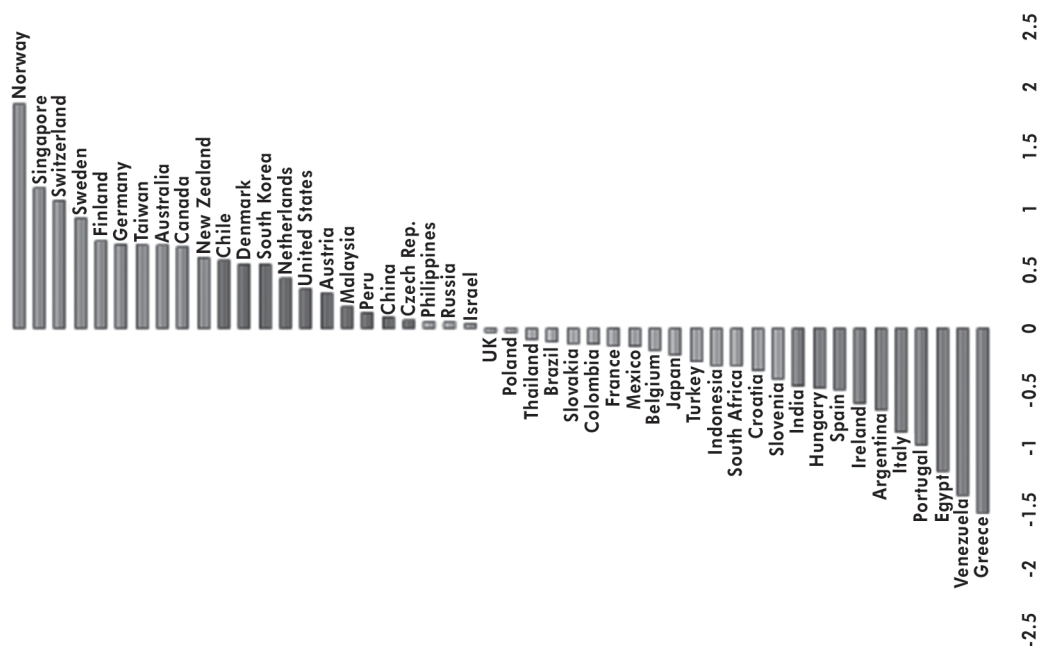
4) *Willingness to pay* assesses the particularity of sovereign creditworthiness by examining the 'qualitative cultural and institutional traits that suggest both ability and willingness to pay-off real debts'.

These features are combined into a weighted index (40:20:30:10 respectively), an example of which is given in Figure 4.

Note that the classic safe haven countries like the US, UK and Germany are not at the top of this list but in the medium range of the index and the most credit-worthy countries are not the most liquid but those most isolated from risks associated with external and internal financial shocks. Thus Norway, Singapore, Sweden and Switzerland take the prime spots and Chile and South Korea feature in the top 10. The result is a new sovereign risk world order where the traditional roles of developed and emerging economies are unsettled or even reversed.

BlackRock acknowledges that its sovereign risk index places great emphasis on the relative ranking and ordering of sovereigns and in that respect differs from credit ratings – where countries can share the same absolute ratings¹¹. The index is further a conscious move away from 'insurance-weighted indexing' described above, that has until recently dominated bond indexing and weights bond portfolio shares according to those countries who issue the most debt. Market value weighted indexes that favour capitalisation, liquidity and demand over fundamental analysis are argued to overweight large issuers of liabilities, impeding proper 'price discovery' in traded debt markets. With sovereigns in particular much idiosyncratic risk remains that cannot be diversified away and holds no reward for bearing it, so traditional Capital Asset Pricing Model considerations are not relevant. By contrast, *BlackRock* holds that the key advantage of its research driven as opposed to market driven index is that it does not favour the weaker credit issuers with higher portfolio representation. It claims that most bond indices reward failure (giving high weights to heavy issuers) and penalise success – whereas its index rewards success and penalises failure, putting it on a par with equity-based indices.

Figure 4: The BlackRock Sovereign Risk Index (June 2013)



Source: < <http://www.blackrock.com/corporate/en-dk/news-and-insights/blackrock-investment-institute-risk-index#> > -- accessed October 7, 2013)

So what we are witnessing is a world no longer defined by the bell curve but one in which the average outcomes – for growth, inflation, corporate and sovereign defaults, and the investment returns driven by these outcomes – will matter less and less for investors and policymakers, where the distribution of outcomes is flatter and the tails are fatter and the mean of the distribution becomes an observation that is very rarely realised. Their sovereign risk index is based on a new understanding that while the past empirical experience for developing market economies is limited, going forward the risks are likely to be quite different. Along with traditional interest rate and liquidity premia, compensation for credit risk is now being built more explicitly into the yields of all countries, irrespective of their historical default experience or share of global production. In fact, developed economies can present greater systemic risk because of their deeper financial markets *BlackRock* argues. So a more intelligence based approach is needed, that dispenses with past correlations as indicators of future trends and instead relies on intuition, simplicity and fast repositioning conducted on an almost day by day basis.

This also indicates to a move away from bond markets as the prime site for risk assessment. Thus new financial regulations such as the Basel III banking regulation¹², which stipulate that banks do not have to provide collat-

eral against their investments in government bonds with ratings of AA- or higher and investments in bonds issued by the home government require no buffer regardless of the rating, are totally inadequate, it is suggested. The bond markets are systematically rigged by governments and CBs, it is claimed by the likes of *BlackRock*, captive to an insurance based safe haven dynamic which will only lead to trouble.

Credit rating agencies, for example, unlike the decentralised knowledge production of the market, use methods that show a striking similarity to central planning, it is suggested (Rona-Tas & Hiss 2011). Just like planners, these agencies collect information in a bureaucratic fashion as local knowledge percolates up through standardised forms and reports, and then apply complex, scientific methods to analyse this information. Just as central planners do, these agencies present themselves as actors following only their own principles, unaffected by their social environments. But, perhaps somewhat ironically, the *BlackRock* index could be accused of similar sins.

5. Conclusions

So what is the bottom line in respect to sovereign debt, economic growth and the possible new era? A lot of the *BlackRock* criticism of other calculative methods is, of

course, marketing hype: it needs to justify its product and differentiate this from the competition. There is not going to be a rapid erosion of the traditional CRAs role and a complete undermining of their position. But ultimately does it matter whether governments and their CBs are heavily in debt, or more heavily in debt than they used to be (other than in periods of severe national crisis like Wars). This issue was posed recently in a slightly different context, around the Rogoff and Reinhart (R&R) dispute over the importance of different debt/GDP ratios for the prospects of economic growth. R&R had argued a debt/GDP ratio of over 90% was historically associated with significantly slower growth rates (R&R 2009, 2010). This has been used by ‘fiscal conservatives’ to argue the need for severe austerity and a cut back in public expenditure. Subsequently it was discovered that there were several ‘errors’ in the original R&R analysis, in terms of coding the data (Denmark, along with four other leading OECD countries were left out), in dealing with outliers and with the presentation and interpretation of results (Herndon, *et al.*, 2013). The outcome is that it is disputable whether the ‘90% rule’ is robust and that a causal relationship between high government debt/GDP ratio and low growth can be established (it might go the other way (R&R 2013) – note also that *BlackRock* has its own % rules which seem equally as arbitrary).

However, this tends to ignore a key point about the *demand* for government debt (Lysandrou 2013). In the aggregate investors are desperate for ‘safe havens’ and good quality public debt because there is a surplus of savings in the international system. In part, this is why Denmark can offer negative or zero interest rates and still attracts funds: it is considered a super-safe haven. The private sector is amiss in providing this – it is not investing much so not issuing new shares, it has been ‘buy-back big time’ for corporate shares as companies have been trying to boost ‘shareholder value’ and provide incentives and the right conditions for enhancing executive remuneration, and the corporate sector’s BSs are in a complete mess. This means the supply of corporate paper has been diminishing and its reliability challenged. The only alternative ‘relatively’ safe havens are sovereigns, even though some of them are being slightly downgraded by the established CRAs. So there is no shortage of demand for government debt, indeed there is a deep market for it. This is also because, relative to their growing significance in terms of global GDP, the emerging market economies are much smaller issues of securities, so demand has been concentrated on advanced country securities. Generally, this makes it easy for sovereigns to maintain very low interest rates. But its implication is clear. There is no real ‘crises of sovereign debt’ so CBs might be able to easily

unwind their positions. And governments need not worry unduly about their fiscal position. They could quite easily issue more debt, which would be eagerly absorbed by investors who have ‘nowhere else to go’.

Notes

1. Clearly, this figure underestimates the final total for the US financial system as a whole as it does not include support for Freddie Mae, Freddie Mac or AIG, for instance. It just records amounts extended to banks.
2. „During 2008-2012, China’s broadly-defined money stock (M2) doubled in size, increasing from 47.5 trillion yuan (7.5 trillion dollars) to 97.4 trillion yuan (15.7 trillion dollars). As a result, the Chinese economy is heavily levered—outstanding bank loans more than doubled, climbing from 30.3 trillion yuan (4.9 trillion dollars) in 2008 to 67.2 trillion yuan (10.8 trillion dollars) in 2012; outstanding bonds also rose from 12.3 trillion yuan (2 trillion dollars) to 23.8 trillion yuan (3.8 trillion dollars); and trust funds increased from less than one trillion yuan (16 billion dollars) to 7.5 trillion yuan (1.2 trillion dollars)“ (Yu and Lan 2013, p. 20)
3. In the USA QE was preceded by the Troubled Assets Relief Program (TARP), mentioned above – an emergency measure introduced in October 2008. QE proper began in March 2009. But sometimes TARP is designated QE 1, so the QE policy sequence often discussed in the literature would be shifted along by one digit for each phase.
4. This can account for the basic ‘failure’ of the orthodox monetarist project of the 1980s of trying to control the economy by controlling the money supply. The only way the authorities could actually have directly controlled the money supply would have been by fully socializing the financial system, not something monetarism could have contemplated. Paradoxically strict monetarism requires financial nationalization.
5. The success or otherwise of the various QE programs in the US remains controversial. It has certainly worked to keep long-term interest rates low. In part this was aided by another novel policy development undertaken as part of QE2, namely ‘operation twist’: the US Fed’s policy of selling short-term Treasuries to fund the buying of the long-term bonds. This ‘twisted’ the yield curve (short-term rates rose and long-term rates fell).
6. In the UK a huge fuss was made when the new Governor of the Bank of England (Mark Carney) announced a similar pre-commitment strategy to target unemployment (at 7%) by the BoE in August 2013.
7. In May 2013 the overnight deposit rate was -0.1%, and the benchmark lending rate just 0.3%. The background to Denmark’s financial problems is admirably sketched by Frances Schwartzkopf: ‘ECB Agenda Tests Central Bank Extremes in Denmark: Nordic Credit’ *Bloomberg News*, 10 May 2013. < <http://www.bloomberg.com/news/2013-05-02/ecb-agenda-tests-central-bank-extremes-in-denmark-nordic-credit.html> > (accessed 23 June 2013)
8. For example ‘Cleared OTC Credit Default Swaps’, marketed by the *CME Group*, see < <http://www.cmegroup.com/trading/cds/> >
9. See < <http://www.markit.com/en/> > ‘CDS Index Pricing and Trade Volume’ and < http://www.markit.com/assets/en/docs/faqs/Markit_FAQs.pdf > ‘About *Markit* and CDS Data’. *Markit* receives CDS data from market makers off their official books and records. This data then undergoes a process of ‘cleansing’ to test for stale data, outliers and inconsistencies. *Markit* claims this ensure supe-

rior data quality for an accurate mark-to-market and better risk surveillance.

10. *BlackRock* is a world-wide US based investment company, claiming to be the largest fund management company in the world.
11. Much of the following information about the *BlackRock* approach to sovereign risk assessment comes from its periodic 'investment insights' which can be accessed from < <http://www.blackrock.com/corporate/en-dk/news-and-insights/blackrock-investment-institute?page=1> >. I would also like to acknowledge several unpublished papers by Nina Boy, particularly her 'The Emperor's new clothes – or how do political-economic fictions fail? The crisis of sovereign credit', which contain stimulating suggestions about the importance of *BlackRock's* interventions in the sovereign debt market, many of which are developed here.
12. Basel III is a regulatory mechanism devised by the Basel based Bank for International Settlements which establishes capital adequacy standards for major international banks. As its name implies Basel III is the third such set of regulatory instruments issued by the Bank.

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