

Credit Crises and the Shortcomings of Traditional Policy Responses

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Reserve Bank of India

Second International Research Conference on
'Monetary Policy, Sovereign Debt and Financial Stability –
The New Trilemma'.

February 1-2, 2012 - Mumbai.

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A. Introduction

The objective of this paper is to investigate the origins of the current economic and financial crisis, the worst since the Great Depression, and to draw two policy lessons. The first of these has to do with policies to extricate ourselves from the current global crisis. Virtually all of the policies followed to date, while supportive of growth in the short term, seem likely to make our current difficulties more intractable over time. The second has to do with the policy changes required to avoid similar problems in the future. In effect, we need a new “macro financial” stability framework to do this.

The underlying thesis of the paper is that the global economy has been on an unsustainable path for many years, and we have now come to the end of the road. Fundamental policy changes are now required, relying much more on supply side reforms than simple demand side stimulus. Accepting this conclusion also demands a different way of thinking about how domestic macroeconomies work and about the requirements for a stable international monetary system.

B. The Surprising End of the “Great Moderation”

The “Great Moderation” refers to the almost three decades of unusually good macroeconomic performance in the Advanced Market Economies (AME’s) which preceded the onset of crisis in August 2007. The onset of the crisis was a highly non-linear event, and for most policymakers (and others) came as a complete surprise. Moreover, as the crisis deepened and widened, “denial” was the normal response. First said to be confined to the subprime mortgage sector in the US¹, it was then said to be only a liquidity crisis², then a solvency

¹ Consider Chairman Bernanke’s statement in May 2007: “We do not expect significant spillovers from the sub prime market to the rest of the economy or to the financial system”.

² Treasury Secretary Henry Paulson stated in March 2008 “Our investment banks are strong. Our banks are strong. They are going to be strong for many, many years.”

crisis but confined to the financial system, and only much later was it accepted that it would have significant implications for aggregate demand and unemployment worldwide³. Moreover, the associated need for supply side adjustments, that will affect unemployment for a long time, is still not being adequately recognized.

Why this surprise and associated denial? For those in the private sector making huge profits, there was no inclination to question the source of these profits. Similarly, Finance Ministries were satisfied to receive (and generally spend) the associated tax receipts which they judged to be “structural” rather than cyclical⁴. As for central bankers, who were single minded in their focus on price stability, prices were in fact stable. Thus, it was concluded that all was well, and indeed would continue to be well.

Above all, however, the surprise was due to an analytical failure⁵. The macroeconomic models used by academics had no room for crises of this kind. Indeed, lasting deviations from full employment were ruled out by assumption⁶. As for the larger and more structural models used by central banks, the IMF and the OECD, they were generally constructed to ensure that very bad outcomes could be offset by good policy. All of the models in common use essentially assume linearity, have either no or very primitive financial sectors, and focus on “flows” of expenditures rather than the build up of “stocks” (especially of debt) over time. Since it is this stock element that ultimately leads to non linear outcomes, it is not surprising that the models missed it.

³ As late as the spring of 2008 the IMF’s World Economic Outlook was forecasting that world output would grow 3.7 percent in 2008 and 3.8 percent in 2009. The actual outturn was 2.8 and -.7 percent. For the advanced economies the forecasting error was even bigger; the forecast for 2008 was 1.3 percent versus an actual outturn of .1 percent, and the forecast for 2009 was 3.8 percent growth versus an actual outturn of -3.7 percent. A forecasting error of 7.5 percentage points of GDP must be unprecedented.

⁴ There is a methodological shortcoming here. Government revenues and expenditures are cyclically adjusted to reveal the underlying “structural” balance. Unfortunately, this implies that anything not identified as cyclical is named “structural” and is all too easily deemed “permanent”.

⁵ For a fuller discussion see White (2010b)

⁶ This is an important characteristic of “real business cycle” and DSGE models. See Tovar (2008)

The fact that policymakers' analytical frameworks did not include the possibility of crises had many undesirable implications. Not only was the crisis not forecast, but no steps were taken to prevent it in advance. Moreover, no ex ante measures were taken to allow the crisis to be better managed when it did arrive. Consider, for example, that in the United Kingdom prior to the crisis there was no adequate deposit insurance, no special bank insolvency legislation, and inadequate arrangements for inter-agency cooperation during the crisis. At the international level, the shortcomings were even worse, not least with respect to the problems of winding down systemically important financial institutions with global reach.

Misdiagnosis of the severity of the underlying problem also led to inappropriate policy conclusions which have already had important political implications. For example, the fact that the Democratic Party in the US lost control of the House of Representatives in 2010 seemed to reflect the popular belief that President Obama should have been focussing "like a laser" on the economy. Instead, presumably advised that the policy measures already taken would lead to a "typical" recovery, he subsequently pursued a quite different policy agenda focussed on health care and climate change⁷. Similarly, in Europe the governments in the peripheral countries most affected by the sovereign debt crisis have all been replaced and right wing movements in many countries are in the ascendant. In this regard, the 1920's in Central Europe provide lessons that should not be forgotten.

C. The Underlying Causes of the Crisis

There are two schools of thought on this. One might be designated the more comforting school of "what is different". The other could be called the less comforting school of "what is the same"⁸. At the beginning of the crisis, the former school held sway, but more recently the second school has been in

⁷ This is not to deny that the Obama administration did introduce a significant degree of discretionary stimulus, and that they gave the Federal Reserve wide ranging powers to help stabilize the financial system. The irony is that the voters' rejection of the Democrats (for doing too little) implied an embrace of Republican candidates who generally felt that the government had already done far too much in both the fiscal and crisis management realms. .

⁸ For a fuller description, see White (2008a)

ascendance. This is appropriate. While both schools are right, the latter school is more important than the former.

The school of “what is different” essentially blames the crisis on the use of new and untested financial instruments or procedures⁹. This would include the rise of a shadow banking system (SIV’s, conduits and the like), extensions of the originate-to-distribute model, structured products and the expanded role of rating agencies. On the one hand, this school is more comforting because it provides all of those involved in the governance process (internal management, risk committees, supervisors, central bankers and a host of others) with a convenient excuse; namely, that no one confronted with such new ways of doing things could have been expected to foresee the dangers and exposures they might bring in train. On the other hand, this school of thought does put regulatory failures directly in the firing line. The “hands off” approach of the Federal Reserve under Chairman Greenspan, and the “light touch” of the FSA in the United Kingdom, have more recently (and rightly) been the subject of widespread criticism.

The school of “what is the same” is inherently even less comforting. It begins by noting that we have had financial and economic crises from time immemorial; 1825, 1874, 1929, 1990 and 1997 to name just a few¹⁰. Moreover, while each had its idiosyncratic components (e.g. the credit card was invented in the US in the 1920’s), basically they all look much the same. Some piece of good news (new technology, new discoveries etc.) leads to justified optimism and an extension of credit. This flows into the real economy, boosting spending, and into asset prices, boosting collateral. Both factors boost confidence and lead to more lending, leverage and speculation. Over time, lending standards decline and the quality of loans becomes ever more doubtful.

⁹ Galbraith (1990) pp 22-23 says this has been a common feature of earlier downturns; “There will also be scrutiny of the previously much praised financial instruments and practices. What will not be discussed is the speculation itself or the aberrant optimism that lay behind it.” He attributes this to the theology, that “the market” is not supposed to be subject to an inherent and internal dynamic of error”. Much more recently, Lo (2011) reviews 21 books written about the current crisis. With one exception, they all deal with the various ways in which the financial system has developed and become more “elastic” in recent years. Admittedly, since Lo is an expert in finance, he might have been expected to choose books which focused on the “financial” as opposed to the “monetary” roots of the crisis.

¹⁰ On this see Reinhart and Rogoff (2009) and Kindelberger and Aliber (2005).

It seems that this process can end either with a sharp rise in inflation, or an economic or financial crisis of some kind. In the case of a crisis, whether it starts on the real side (less corporate or consumer spending due to high debt levels) or on the financial side (overleveraged lenders cut back) is not so important¹¹. What is important is that the real and financial sectors interact both on the way up and on the way down. It is that interaction between stock imbalances that further contributes to the non-linearity of this “boom- bust” process.

Those responsible for oversight of the economic and financial system over recent decades must find this school of thought less comforting. Against the backdrop of history, most failed to see the evidence that history was repeating itself¹². In the years preceding the crisis, credit and monetary expansion were at very high rates, lending standards were deteriorating, spreads were at record lows for both high risk and emerging market sovereign borrowers, and the price of getting insurance for bad financial outturns had never been so low¹³. In addition, asset prices (especially of housing) were rising rapidly and spending patterns in many countries gave clear evidence of excess. Household saving rates fell to zero or even much less in many English speaking countries, while investment rose to over 40 percent of GDP in China. These patterns (increasingly referred to as “imbalances”) should have been seen as clearly unsustainable.

In addition there were disquieting developments on the supply side of the global economy (“malinvestments” in the parlance of the Austrian school of economics)¹⁴. A number of industries expanded rapidly and ratios of value added to GDP rose to unprecedented levels. For example, in Spain construction

¹¹ A crucial fact from the Reinhart and Rogoff study (p145) is that a large proportion of the financial crises they studied began with a downturn on the real side of the economy; “Severe financial crises rarely occur in isolation. Rather than being the trigger of recession, they are more often an amplification mechanism”. The Great Depression, for example, began with an economic downturn in 1929 while the financial sector crisis erupted only in late 1930.

¹² The Bank for International Settlements was an exception with its staff providing repeated warnings of the dangers building up under the surface of the Great Moderation. See for example, Borio and White (2004) and Annual Reports of the BIS dating back to the late 1990’s.

¹³ See in particular the BIS Annual Report for 2006.

¹⁴ For an overview see Haberler (1984) and Laidler (1999)

related activities peaked at 18 percent of GDP while in the US the profits of the financial services sector rose to 40 percent of all profits. Still more importantly, the export capacity of South East Asia expanded rapidly, even as important segments of their markets became ever more burdened with debt - both internal and external. The idea that these trends might actually have to be reversed, to reflect problems of declining profitability, is still inadequately appreciated.

The role of monetary policy in the AME's leading up to the crisis needs special attention. Policy rates in Japan, the US and the Euro area were respectively, zero, one percent and two percent in the spring of 2003. Casual observation reveals an inflection point at that time in almost all of the data series just referred to¹⁵. Further, some financial specialists have contended that many of the financial innovations that characterized the period leading up to the crisis were themselves a response to the low interest rate environment. Rajan (2005) contends that many of the new instruments were consciously designed to repackage risk, so that a reasonable probability of a **mildly** costly event would be replaced by a much smaller possibility of a **very** costly event. Since most of humanity suffers from what psychologists call "disaster myopia" this effectively made the risks disappear.

In a similar vein, many people were encouraged by mortgage originators and lenders (focussed on short term bonuses and service charges) to believe that an increase in the price of their house was an increase in their wealth. Common sense tells us this cannot be true, since the costs of housing services had risen equivalently¹⁶. However, the increased house price did provide collateral for borrowing, at what seemed relatively low mortgage rates, and many people gave in to the temptation to use their houses as ATM machines. Some have conjectured¹⁷ that this willingness to borrow might also have reflected a strong desire to "keep up with the Jones's" at a time when median incomes (in the US)

¹⁵ The Federal Reserve continues to insist that monetary policy played only a minor role, if any, in causing the crisis. In contrast, John Taylor (2007) notes that the Fed allowed monetary policy to ease much more than a Taylor rule would have suggested between 2001 and 2003 and then tightened too slowly subsequently. He ascribes much of the speculation and leverage which preceded the crisis to these monetary developments. .

¹⁶ For a more formal evaluation of this, see White (2006b) and Muellbauer (2007)

¹⁷ Rajan (2010)

were stagnating and the income gap between rich and poor was rising almost everywhere.¹⁸ At the time, this borrowing and spending was welcomed (by the Fed in particular) as contributing to the “intertemporal optimisation of consumption”. Interestingly, no one at the time dwelt on the inconveniences likely to be associated with “payback” time.¹⁹

It also needs to be emphasized that interest rates were that low in the AME’s because they had been ratcheting down since the early 1980’s. This was the result of central banks being increasingly focused on “price stability”, at a time when the opening up of China and other ex-socialist countries was putting significant downward pressure on global inflation. It is highly debatable, at the level of theory, whether this was in fact the appropriate monetary policy reaction to a series of positive supply side shocks²⁰. Further, and a potential second form of error, the top leadership of the Federal Reserve in particular believed that it was not possible to use monetary policy to lean against the upswing of the credit cycle (the boom). Rather, they preferred to ease monetary policy aggressively to moderate the subsequent downturn (the bust) Such easing, without commensurate tightening in the upturn, began in 1987 after the stock market crash, and was then repeated in 1990, 1997, 1998 and 2001 to 2003. It could be contended that this overly easy and asymmetric policy strongly encouraged the build-up of the stock of debt which is now constraining household spending in the United States (and many other countries) going forward²¹.

While the emphasis thus far has been on policy errors in the AME’s, the contributing role played by Emerging Market Economies (EME’s) and the International Monetary System also deserves to be emphasized. Very rapid monetary expansion in the AME’s should generally have driven down their exchange rates. This would be particularly expected in countries where high spending levels had also led to record trade and current account deficits.

¹⁸ See OECD (2011b)

¹⁹ For a wonderful review of the moral and social dimensions of debt, and the need for “payback” as reflected in the world’s literature, see Atwood (2008)

²⁰ For a review of the prewar literature on this, see Selgin (1999). For a more recent assessment see Beckworth (2008) and Selgin et al (forthcoming)

²¹ This is the basic thesis of White (2009)

However, faced with the prospective appreciation of their exchange rates, many EME's decided to resist this tendency even though they were often running large external surpluses. This applies particularly to China and other countries running "export led growth" strategies, but also to the oil exporters as well as others.

Due to their "fear of floating", many EME's followed a policy of currency intervention, and often easier domestic monetary policies than would otherwise have been the case. The former policy led to a massive reserve build-up, largely in US dollars, and pushed down long rates in the US which encouraged still more debt build-up. The latter policy has led to many of the "imbalances" in the AMEs being exported to the EME's, not least rising house prices. Moreover, it also contributed to the intensification of inflationary pressures in many of these countries. China, India, and Brazil, among many others, found themselves in just such a situation in 2011. In short, the monetary factors leading up to the crisis became truly global and have by no means fully played out.

This raises the still more fundamental issue of how much longer an increasingly globalized economy can live with an International Financial System (really a non-system) that allows such outcomes. Under the gold standard, creditor nations would have been forced to spend more domestically and debtor nations would have been forced to retrench. Under Bretton Woods, the IMF tried to achieve the same outcome through surveillance. However, these efforts generally failed because the Fund had no effective influence over either creditors or the world's biggest debtor - the (then) hegemonic United States. These constraints on the IMF continue to apply. Moreover, in recent decades international debtors have been allowed to dig themselves into ever deeper holes using money freely provided by creditors²². This raises the particular possibility of an eventual dollar crisis (the end of the Triffen paradox²³) which

²² In particular, foreign exchange intervention by creditor countries causes their reserves to increase. These reserves tend to be managed quite conservatively. This gives a special favor to US dollar assets, and to sovereign liabilities more generally, given their relatively greater liquidity.

²³ This refers to the problem first identified by Robert Triffen, a professor at Yale, in the early 1960's. If the dollar is desired as the "risk-free" or reserve asset by other countries, then the US must run a trade deficit to supply such assets. However, as the stock of liabilities to foreigners rises, then the risk free status of dollar assets progressively declines.

would certainly have unpleasant implications for everyone, creditors as well as debtors.

The current European crisis, which has very similar roots²⁴, may be a portent of what is yet to come on a global scale. Just as China imported an inappropriately expansionary monetary policy from the United States, the debtor peripheral countries in the euro area imported an inappropriately expansionary monetary policy from Germany. Perhaps even more important, in the run up to the introduction of the euro and for almost a decade afterwards, creditor banks (largely banks in Germany and France) lent unprecedented amounts at declining interest rate spreads to debtor countries²⁵. This allowed the peripheral European countries to run up large external deficits and associated debts.

Because there could be no nominal exchange rate adjustments within the euro zone, such loans were thought “risk free”. Only more recently has it become widely understood that the decline in exchange rate risk was being offset by an increase in counterparty risk²⁶. The unfortunate characteristic of the latter risk is that perceptions of credit worthiness can and have changed quite suddenly²⁷. This suddenness has been exacerbated by the crucial role played by European banks in the intermediation process. Excessive debts in peripheral countries (both public and private) are now thought to threaten the survival of banking

²⁴The European crisis is essentially a balance of payments crisis linked to excessive credit creation within the euro area. Contrary to what appears to be the official German position, its roots are not in excessive government deficits in peripheral countries. Prior to the crisis, Spain, Ireland, Estonia and Belgium had smaller deficits than Germany. As for government debt levels, these had been declining sharply in Spain, Ireland and Estonia, to pre crisis levels well below Germany. In contrast, the peripheral countries first drawn into the crisis all had massive current account deficits which required external financing. Confronted with a “sudden stop” of such capital inflows, the crisis was on.

²⁵ This development in financial markets in Europe is analogous to the creation of “toxic assets” in the United States. Both increased the “elasticity” of the credit system, amplifying the “imbalances” created by easy monetary policies.

²⁶ A few saw this problem right from the beginning. See Connolly (1997). McCauley and White (1997), pp 348-353 and Box 2, also suggested that the narrowing of spreads in the late 1990’s for sovereigns with initially high debt levels (Belgium and Italy) was hard to rationalize. They made similar comments about the relatively favourable ratings given to these countries by both Moody’s and S and P.

²⁷ Again analogous to the global imbalances, a long period of growth and market tranquility in the euro area (akin to the Great Moderation) reduced the market’s sensitivity to risks accumulating under the surface in the peripheral countries.

systems, not only in peripheral countries, but in core creditor countries as well. Given such potentially non linear interactions, market confidence has become extremely fragile and another “Minsky moment” has become all too possible²⁸. This explains the extreme efforts made over the last few months to restore market confidence in Europe, both in systemically important banks and sovereigns²⁹.

D. Policy Responses to Date and their Shortcomings

Recently, a number of scholarly studies have examined historical data to identify the key characteristics of the recovery phase after economic downturns accompanied by a financial crisis³⁰. The principal conclusion of these studies is that such recessions are generally unusually severe and protracted. Unemployment rates generally are still above pre crisis levels ten years later, while house prices remain below pre crisis levels. Household saving rates rise sharply while investment falls commensurately, and government deficits and exports rise to satisfy the National Income Accounts identity. Even after ten years, the process of deleveraging is often ongoing. Generally speaking, the severity of the downturn is closely linked to the size of the debt build up (often proxied by a debt to GDP ratio) in the period preceding the crisis.

What evidence do we have that “This Time Is Different”? Sadly, the answer is, not much. It is now almost four years since the crisis began and almost every day some new manifestation of the underlying difficulties emerges. While the fate of the euro zone was the centre of global attention for most of 2011, virtually every major geographical area also provided some legitimate cause for concern. This is largely due to the fact that the various imbalances, identified as triggering the crisis, are essentially still intact. In particular, the process of

²⁸ See Minsky (1992). A “Minsky moment” refers to that instant when fears of counterparty risk suddenly explode and lending (even between banks) ceases. For a recent example, recall what happened in the aftermath of the failure of Lehman Brothers. A particular danger, should the crisis affect systemically important sovereigns (Italy and Spain in particular) or banking systems (In Germany or France) in the eurozone, is that it might lead to a breakup of the zone itself. This would then lead in turn to “the mother of all currency mismatch problems”. See Eichengreen (2010) and Global Economics Perspectives (2011).

²⁹ The fact that the nature of the problem seems to have been misdiagnosed must reduce confidence in the proposed solution; namely, near term and long term fiscal austerity everywhere in the euro zone.

³⁰ Reinhart and Rogoff (2009), Reinhart and Reinhart (2010), Schularick and Taylor (2009), World Economic Outlook (2008) and (2009), and Roxburgh C. et al (2010).

deleveraging of private sector debt (affecting both debtors and creditors) has in fact hardly begun, and to this has been added a “new” problem of sovereign debt³¹. Perhaps more ominously, the increase in the ratio of credit to GDP was significantly higher in the build up to this crisis than the average build up in the various crises identified in the historical studies³². Further, to the extent that exchange rate depreciation and increased exports were agents in previous recoveries for individual countries, this seems less likely when a large number of countries have been affected simultaneously, as is currently the case.

Could public policies (in particular monetary and fiscal stimulus) make a material difference? It is important to note that this issue was the essence of the debate which took place between Hayek and Keynes in the early 1930’s³³. Hayek’s view at the time was that the downturn was the inevitable result of the excesses of the preceding period, and should be allowed to run its course. Activism would only make things worse. Albeit, he did admit much later that “secondary depressions”, which built on themselves, should be resisted³⁴. Keynes took the view that policy, particularly fiscal policy, could be effective and should be used to combat “Deep Slumps”. As we all now know, Keynes’ views prevailed and became the standard textbook model for undergraduates in the post War period³⁵. However, whether Keynes would have supported the

³¹ Reinhart and Rogoff (2009) point out that this increase in sovereign debt is very common in the crises they studied. The explosion of sovereign debt in the current crisis reflected an almost continuous rise in sovereign debt ratios in previous decades. In part this reflected the fact that fiscal policy failed to be tightened in upturns as vigorously as it was eased in downturns. In the “boom” leading up to the current crisis, unusually strong revenues (often associated with financial sector profits) were again spent. When these revenues disappeared in the “bust”, and the automatic stabilizers also kicked in, the effect on deficits was dramatic.

³² See Reinhart and Reinhart (2010). The note at the bottom of Figure 8 in their paper says “The median increase in credit/GDP in fifteen post war severe financial crises is about 38 percent, well below the 59 percent surge prior to the current crisis”. In commenting on that paper, White (2010c) provides further arguments to support the view that the current economic downturn might prove particularly damaging. For example, he notes that each of the components of the index used by Reinhart and Reinhart to identify “serious” financial crises likely underestimates the magnitude of the problem facing the financial sector currently.

³³ See Cochran and Glahe (1999)

³⁴ On Hayek’s admission see Haberler (1984) p 422

³⁵ Whether the standard textbook model actually reflected Keynes’ views has been a disputed issue for a long time. See Leijonhufvud (1968). In effect Leijonhufvud criticized the IS/LM framework on very similar grounds to the criticisms now being made about real business cycle and DSGE models. In order to be mathematically tractable, all of these models leave out most of what is really interesting about how different economic agents interact to produce macroeconomic outcomes, including “Deep Slumps”.

use of monetary and fiscal easing as a habitual response to slight downturns and even prospective downturns, as opposed to “Deep Slumps”, seems highly unlikely³⁶.

There have been echoes of the Keynes-Hayek debate in recent discussions about the effectiveness of stimulative monetary and fiscal policies in the AME’s. The authorities in the US and UK initially seemed much more in the Keynesian camp, resorting to massive monetary and fiscal stimulus³⁷, while the central Europeans seemed to have some residual sympathy with Hayek. As a result, the ECB lagged significantly in easing monetary policy, while initial fiscal stimulus tended to be smaller and of shorter duration³⁸. Subsequently, the ECB briefly raised the policy rate as the European economy began to improve while both the Fed and the Bank of England failed to do so in quite similar circumstances.

Over the last few months, against the backdrop of the European crisis, many European countries have intensified their fiscal restraint, and some have introduced “debt brakes” to ensure longer run discipline³⁹. In contrast, the US administration has proposed more fiscal expansion in the short term along with a plan for controlling the growth of sovereign debt only over time. Due to political differences in Congress, neither of these proposals has in fact been acted upon.

In addition to having analytical roots, these biases (for and against macroeconomic stimulus) also reflect differences in historical experiences⁴⁰. For the US, the defining historical moment was the Great Depression, whereas for the Europeans it was the hyperinflation of the 1920’s. Further, Europeans

³⁶ It is often forgotten that Keynes was strongly opposed to inflation. See Keynes (1940)

³⁷ In contrast, when the coalition government replaced the previous Labor government in the UK, they embarked almost immediately on a policy of fiscal retrenchment. Of course, the Labor Government might have done the same if reelected.

³⁸ Of course, it needs to be mentioned that automatic stabilizers in continental Europe are generally much larger than in the United States.

³⁹ The “debt brake” idea was first conceived of by the Swiss, and then incorporated into the German constitution. Since then, the Spanish and Hungarian governments have passed similar legislation. A “debt brake” implies that the cyclically adjusted deficit must be zero over the cycle. In a growing economy, this implies a gradually declining debt to GNP ratio.

⁴⁰ For a fuller analysis of differences between central banks, see White (2011)

have a better social security system, implying they are more prepared than many others (including the US and China) to accept the economic and social costs of economic downturns. For completeness, it should be noted that the Japanese authorities appear divided amongst themselves. Evidently, the Ministry of Finance has signed on to Keynesian prescriptions, whereas the Bank of Japan seems more “Austrian” in its focus on the processes that led to the Japanese bust in the first place⁴¹.

Differences of view among countries as to basic objectives and risks are not without consequences. In addition to helping undermine international cooperation more generally, a topic discussed further below, such differences could have important implications for exchange rates and other markets. Recall how the perception of a US- German divide on interest rate policy contributed to the stock market crash of October 1987. Much more recently, perceptions of policy divisions among the major countries of the euro zone have contributed significantly to the funding difficulties experienced by many European sovereigns and European banks.

The effectiveness of monetary policy

The view of the Federal Reserve over the last few decades has been that monetary policy can be effective in restoring aggregate demand. Moreover, it has advanced plausible arguments to support this view. However, it is also not hard to construct counterarguments⁴². The first argument is that the economic models currently in use all indicate that policy can be effective. The counter argument, implicitly raised above, is that models are not reality. Second, it is argued that easing has always worked to stimulate the economy in the past. The counterargument, again implicit above, is that each bout of easing has had to be more vigorous than the preceding one, precisely because of the “headwinds” of accumulating debt induced by lower rates. In the end, easing might well cease to work at all. Thirdly, when asked to look at the actual experience of Deep Slumps (in particular the US Great Depression and the more recent Great Recession in Japan), the Fed’s view seems to be that they

⁴¹ See Shirakawa (2010)

⁴² These issues are addressed at greater length in White (2009)

were a by product of policy error⁴³. The authorities were not Keynesian enough. The counterargument relies on the much richer spectrum of historical experiences referred to above. Are we to believe there was policy error in every case? Or, rather, are we not led to conclude that all these deep downturns were in large part shaped by the common experience of a credit bubble prior to the crisis?

Finally, there is the awkward fact that policy rates in the AME's are effectively at zero and can be lowered no further. The Fed's response (and presumably that of the Bank of England) is that Quantitative Easing (changing the size of the central bank's balance sheet) and/or Credit Easing (changing the composition of the central bank's balance sheet) will work to stimulate spending. These are largely untested propositions given the lack of historical experience with their use⁴⁴. Moreover, the fact that different central banks often seem to believe different things about how these processes might work is not encouraging. The ECB, for example, sees its "non-standard" policy measures, not as monetary policy at all, but as a means of restoring market functioning so that standard measures (low policy rates) can be transmitted to the real economy more effectively⁴⁵. In addition, not only do some of the suggested channels seem to conflict with what has been accepted wisdom for many years⁴⁶, but it has also been suggested that they might prove counterproductive. Bill Gross (2011), for example, contends that policies directed to reducing term premia might reduce the supply of loans for longer term investments.

⁴³ On the US experience, see Bernanke (2002) on the occasion of Milton Friedman's 90th birthday. He concludes with the memorable words "I would like to say to Milton and Anna (Schwartz). Regarding the great Depression, you're right, we did it. We're very sorry but thanks to you, we won't do it again." On the Japanese experience, see Ahearne et al (2002)

⁴⁴ The Japanese tried such policies, beginning in the late 1990's. They continue to be highly skeptical about their usefulness in stimulating demand, even if they did contribute materially to avoiding financial instability. See Shirakawa (2010) and Shirakawa (2012).

⁴⁵ Interestingly, this also seemed to have been the Fed's motivation for the first round of Quantitative Easing (now known as QE1). The motivation for QE2, however, seemed rather different. In effect, it came down to trying to stimulate what would have been considered an undesirable side effect under QE1; namely, causing asset prices to increase in order to increase "wealth" and stimulate spending. The undesirable longer term effects of encouraging a still lower household saving rate in the United States are referred to below.

⁴⁶ For example, it was once commonly accepted (after the failure of "Operation Twist" in the US), that the elasticities of substitution between government bonds of various maturities were so large that changes in relative quantities would have little effects on rates.

Even if we were to accept that ultra-low interest rates and non standard measures (quantitative and credit easing) will eventually stimulate spending, we must also ask at what cost. First, could the result be yet another in the series of bubbles we have experienced so far? Recent developments in the EME's have been referred to and could be just such a bubble. Second, while helpful for recapitalizing banks (who play the yield spread), very low rates penalize insurance companies, pension funds and other forms of saving⁴⁷. This could contribute to more risk taking and eventually more financial instability. Third, the crisis is already estimated by the OECD to have lowered the level of potential in the AME's by an average of three percentage points. By lowering saving, and encouraging the survival of "zombie" companies and "zombie" banks, potential could be lowered even further. Indeed, evidence is accumulating that this has been an important element explaining Japan's secular stagnation⁴⁸.

And finally, there is concern that exceptionally easy monetary policy might in the end lead to a sharp increase in inflation. As noted, this is already happening in the EME's, but could it also be a problem in AME's as well? For those, like the Fed, who focus on the domestic output "gap" as the driver of inflation, such an outcome seems almost impossible. Yet, an "irrational" increase in inflationary expectations cannot be ruled out. One possible trigger might be a sharp decline in the value of the dollar, whose inflationary effects would be compounded if, at the same time, the prices of imported goods (in foreign currency) were rising⁴⁹. Another possible trigger might be concerns about the potential monetisation of large government deficits⁵⁰. This kind of phenomena was seen

⁴⁷ Dickinson (2000). Crédit Swiss has recently estimated that the pension funds of the S and P 500 companies in the United States were underfunded by 450 billion dollars at the of 2011, a large increase from 250 billion at the beginning of the year. See Mc Crum D and Bullock N (2012). For a quantitative analysis of the effects of interest rate changes on public pension funds and defined benefit funds, see Ramaswamy (2012)

⁴⁸ See Peek and Rosengreen (2003) and also Shirakawa (2012). The latter states (p12) "To be more specific, while firms and financial institutions were tackling the business of balance sheet repair, Japan's economy as a whole failed to adjust for a changing environment, such as increasing globalization and a rapid aging of the population".

⁴⁹ Should confidence in the euro be restored, this scenario would seem more likely. Note as well rising wage inflation in China and a number of other Asian countries with large markets in the United States.

⁵⁰ Expectations of this sort might arise even if the monetary authority was resolutely trying to control inflation in the short run. Indeed, if the maturity of the debt were short enough, higher interest rates might swell debt service enough to generate such expectations. In this case, disinflationary monetary policy could actually prove

in Latin America over decades, and the historical studies referred to above also indicate that inflationary outcomes often follow burst bubbles, when government debt levels tend to rise sharply.⁵¹ It also needs to be emphasized that, in a world where both prospective demand and prospective supply are subject to unusual uncertainties, policy misjudgements can by no means be ruled out⁵².

The effectiveness of fiscal policy

A number of traditional arguments can be put forward to support the idea that fiscal expansion is an effective way to support economic recovery. As with monetary policy, however, counterarguments are not hard to find⁵³. First, some would support the use of fiscal expansion on the grounds that fiscal multipliers are relatively large. The counterargument is that the empirical evidence to support this proposition is mixed⁵⁴, and that theory in recent decades (especially the concept of Ricardian Equivalence) actually points in the opposite direction. To add to the confusion, multipliers might differ across countries depending on how open the economy is, and how attentive taxpayers are to growing government liabilities⁵⁵. Second, it has been contended that policy can be made more effective if “timely, temporary and targeted”. Unfortunately,

inflationary. See Leeper and Walker (2011). Their study concludes with the following observation for policymakers. “Because two very different understandings of inflation can be equally consistent with observed data, it would be prudent to broaden the perspective on inflation determination beyond the single, conventional view that dominates policy thinking”.

⁵¹ The most famous example would surely be the hyperinflation in central Europe after World War I. Bernholz (2006) reviews a much wider spectrum of historical experiences.

⁵² Reference was made above to reductions in “potential” estimated by the OECD. It is remarkable, in the face of an unprecedented increase in long term unemployment, that the US authorities seem the least inclined of all the OECD member countries to accept that such a reduction has occurred. Further, with the US government facing a massive increase in debt levels, the political resistance to raising interest rates will be intense.

⁵³ In mid July of 2010, the Financial Times hosted a debate among some of the world’s best known macroeconomists as to whether fiscal deficits, which had grown sharply during the recession, should be “sustained” or “restrained”. The radical differences in the views expressed indicated clearly that macroeconomics is hardly a “science” as many American economists have contended.

⁵⁴ Although the balance of evidence suggests that fiscal multipliers are significantly positive. See the IMF’s World Economic Outlook (2010)

⁵⁵ For example, German taxpayers might be more inclined to increase saving when the government dissaves than, say, American taxpayers.

each of these propositions conflicts with what conventional wisdom over the last two decades has deemed to be either practical or appropriate⁵⁶. Third, it has also been argued that resolute government action to resist the downturn and encourage recovery will increase investor confidence in a self fulfilling spiral of lower interest rates (due to lower risk premia) and more private spending. The counter argument is that fiscal expansion will destroy confidence, prompting either a sovereign credit crisis or a currency crisis, or perhaps both.

This third argument is perhaps the most crucial one. Over the last few years, historical evidence has been produced to support both propositions with the outcomes largely dependent on market perceptions of the longer run costs associated with fiscal expansion. These longer run costs (of fiscal expansion) have much to do with starting conditions. Countries with initially high debt levels run a greater risk of an adverse market response to higher deficits and still more debt. Recognizing such exposures, the Irish and Hungarian governments (among others) actually took steps at the beginning of their respective recessions to use discretionary tightening to offset some of the influence of automatic stabilizers⁵⁷. Initial conditions must also take account of off-balance sheet liabilities. In many countries, a worsening demographic profile implies that fiscal stability is already threatened by rising expenditures on pensions and medical care for the aged. Contingent liabilities of sovereign governments (say to recapitalize exposed banks) are another source of concern.

At the present juncture, even the official liabilities of many of the AME's imply a government debt to GNP ratio that is set to rise forever on the basis of current policies⁵⁸. Evidently, this cannot happen, but the question is how the "unsustainable" might be stopped? Will it be through an orderly and sustained

⁵⁶ Discretionary fiscal policy has been out of favor for over twenty years, on the grounds that it could not be made "timely". Further, it was generally thought that policy had to support an increase in permanent (not "temporary") income before consumption was likely to be much affected. Finally, there continues to be serious disagreement about what "targeting" means in practice.

⁵⁷ Of course, there is no magic number that can tell a government when their debt levels are "too high" and thus likely to spark a negative market reaction (a financing crisis). After wars, many countries have lived for decades with debt ratios much higher than those judged worrisome today. More recently, Japan has been able to sustain without difficulty (to date) a gross debt ratio of over 200 percent of GDP.

⁵⁸ See Cecchetti et al (2010)

application of fiscal discipline, or in a more disorderly way including recourse to much higher inflation? What is sure is that the magnitude of the “swing” in the primary surplus required to stabilize the debt to GDP ratio is very large⁵⁹. Indeed, while subject to significant uncertainty, it has been estimated to be over ten percentage points of GDP in Japan, the UK, the US and Ireland⁶⁰. Of course, this raises in turn broader issues of social and political stability.

The desirability of further fiscal stimulus looks even less clear when one factor in the hypothesis that sovereign debt levels, above a threshold of around 80 to 90 percent of GDP, might further reduce potential growth⁶¹. Most AME’s are either at that threshold already or are very close. Cutbacks in desirable government expenditures (say bridge maintenance), higher risk premia in financial markets, and lower investment by those confronted with (or even fearing) higher taxes could all play a role⁶². In sum, expansionary fiscal policy in current circumstances might well have reached the limits of its effectiveness⁶³

The effectiveness of other policies to maintain the “status quo”

Governments have been very active in two other domains as well. Significant steps have been taken to support the financial system in the AME’s. Moreover, government subsidies of various sorts have been used to support employment and also whole industrial sectors. As with the macro policies just discussed, there are persuasive short term arguments to justify what has been done. Nevertheless, these policies again have downsides from a longer term perspective. In effect, they constitute efforts to preserve a production structure that may no longer be appropriate.

To be more specific about these long term costs, it seems generally agreed that the imprudent behaviour of bankers and many others in the financial sector

⁵⁹ In many AME’s debt ratios are already around 100 per cent of GDP. This implies that just stabilizing the ratio at that level would still leave countries prone to a loss of market confidence.

⁶⁰ See Cecchetti et al (2010)

⁶¹ Reinhart and Rogoff (2009). The authors are, however, much more hesitant about this hypothesis than many others who have referred to it.

⁶² Current uncertainty about future corporate taxes is often invoked as an explanation for the refusal of US corporations to invest more heavily, in spite of having ample access to both cash and borrowed funds.

⁶³ As with monetary policy, an asymmetric application of fiscal policy over the business cycle has played a big role in this by allowing debt ratios to ratchet upwards in successive cycles.

contributed materially to the magnitude of the crisis⁶⁴. Significant financial reform, rather than maintenance of the status quo, might then have seemed more desirable. As for support for existing jobs and traditional production sectors, this seems to fly in the face of a changing global environment. With the rise of the EME's, and a new pattern of comparative advantage, governments of AME's might have been better advised to encourage changes in production patterns rather than resisting them.

Turning first to the financial sector, when the crisis erupted it was initially thought that there would be few implications beyond the markets for US subprime mortgages. No policy response was thus required. However, as the turmoil spread, central banks turned to various measures (many of an unprecedented nature) to restore liquidity to markets that had dried up, and to support institutions in need. Later, governments urged private recapitalizations, helped arrange mergers and acquisitions, and themselves took significant equity positions in many financial firms.

What has been remarkable about this process has been the reluctance of many governments both to nationalize financial institutions and to declare them insolvent. In effect, the crisis has continued to be treated as one of illiquidity rather than insolvency. This "muddling through" stands in sharp contrast to the systematic attempt made in the Nordic countries in the early 1990's to restructure and recapitalize the industry as a whole⁶⁵. The aversion to nationalisation, particularly in the US and UK, seemed to have deep ideological roots. Further, the aversion to declaring financial institutions insolvent seemed to reflect, not only the absence of adequate legislation, but a fundamental uncertainty about what the implications of insolvency might be. This uncertainty was due largely to the size, complexity and interdependence of many of the firms in trouble (the so called "too big to fail" problem)⁶⁶. The validity of these concerns was underlined by the problems which emerged following the bankruptcy of Lehman Brothers.

⁶⁴ Consider the numerous measures suggested by the Financial Stability Board (later the Financial Stability Forum) to help prevent a recurrence of such behaviour.

⁶⁵ See Borio C E V, Vale B and Peter v G (2010)

⁶⁶ The so called Volcker rule was conceived of as a means of reducing this interdependence. Thus, it would also reduce the uncertainty about the implications of insolvency and would discourage forbearance.

This “muddling through” approach did maintain a functioning financial system, which is a notable achievement. Nevertheless, it has had a number of implications. Perhaps the most important is that it is not yet clear that the financial systems in the AME’s have been fully restored to good health. Many banks (especially in Europe) have huge maturity rollovers to deal with in 2012. Nor is it clear that capital levels are high enough to deal with still uncertain prospective losses on toxic assets, property, and particularly sovereign credit risks in Europe. As a result, a number of jurisdictions have recently taken steps to raise capital and liquidity requirements quite substantially⁶⁷. Unfortunately, this has led to a tightening of credit conditions that could constrain growth going forward⁶⁸. Evidently, any further easing in economic growth, or worse a “double dip” recession, would bring still further losses.

These policies to support the financial system have had other undesirable side effects as well. First, the failure to deal with problems definitively may also have increased the unwillingness of financial institutions to lend to each other. These tendencies were likely aggravated by the prevailing uncertainty about future financial regulation. The upshot is that central banks have been drawn increasingly into the role of “market maker of last resort”⁶⁹. Second, through mergers and acquisitions, the “too big to fail” problem has become even more serious than it was before. Third, as a result of the involvement of central banks

⁶⁷ Under the arrangements known as Basel 3, a significant tightening of capital and liquidity standards was envisaged. However, mindful of the risks to economic growth, the agreement was that these new standards would be phased in over a very long period (stretching to 2019 and 2020). Nevertheless, given the size of their potential exposure to two large banks, the Swiss authorities moved quickly to raise their near term prudential requirements well above the Basel standards. This initiated what became effectively “a race to the top”. Subsequently, the European authorities also tightened near term capital requirements to try to restore confidence in core European banks affected by the euro zone crisis.

⁶⁸ Raising capital requirements for European banks in the midst of a crisis, ostensibly to prevent future crises, could yet prove to be a disastrous policy error. European banks could use various means to meet the new requirements by June of 2012, not least issuing new shares or cutting dividends and salaries. However, there are also reasons why they might not want to do this. See Pignal and Jenkins (2011). In fact, a number of banks have already announced plans to deleverage (shrink assets), often by reducing international lending. This has begun to raise fears about access to credit in Central and Eastern Europe, as well as a number of Latin American countries, where the bulk of the banking system is foreign owned.

⁶⁹ This phenomenon was first seen in the 1990’s in Japan, after the onset of their crisis. Note too that this is not just a domestic phenomenon. Recently, a whole new set of central bank swap agreements were announced to give non US central banks access to dollars to support domestic banks having trouble funding themselves in the dollar market.

in the support of the financial system, issues concerning their future “independence” have arisen in a number of countries.

It is a fact that central banks took a number of highly unusual actions during the crisis. Not only did they allow the size of their balance sheets to swell enormously, but their actions often had important distributional implications as well; which institutions and sovereigns to support and which not? Since actions with distributional implications are traditionally decided in the political realm, this poses a serious threat to the “independence” of central banks going forward⁷⁰. In the US, the Fed’s actions have already led to calls for more oversight by Congress and more binding legislation. This threat will be further increased once it is better recognized that central banks can also choose whether to take out insurance against deflation or inflation. Evidently such a choice has enormous implications for redistribution between creditors and debtors, with highly indebted governments likely to prefer an inflationary outcome and central banks not. Again, there will be a threat to central bank “independence.”

Finally, to the extent that “price stability” and “financial stability” are increasingly being seen as macro phenomena, with monetary as well as financial roots, these two objectives cannot be pursued separately⁷¹. The use of traditional monetary policy instruments, in the pursuit of price stability, affects output and prices. But so too does the use of macroprudential tools in the pursuit of financial stability. Given this reality, there must be some joint management of all these instruments. As an example of the problem, consider what is happening in the United Kingdom. A Financial Stability Committee has been established at the Bank of England, alongside the existing Monetary Policy Committee, with both to be headed by the Governor of the Bank. However, given this new concentration of power, legislation is now being drafted to make the Bank more responsible to Parliament. To summarize, as a result of developments during the crisis, the “independence” of central banks seems very likely to be further constrained.⁷²

⁷⁰ This point has been made by Leijonhufvud (2009)

⁷¹ See White (2012), the Committee on International Economic and Policy Reform (2011) and Gieve(2011)

⁷² For an early, rather skeptical analysis of the “independence” issue, see Crow (1993). He advises central banks in countries with democratically elected governments to avoid this word. Rather, the focus should be on establishing agreements with governments on the central bank’s mandate, powers and accountability. With governments properly giving the central bank its mandate, and also holding it accountable, “independence” is

As for measures to support both existing jobs and industrial sectors, governments have again taken a variety of actions. As to the former, the most widespread policy has been subsidies for short-time working. These have been used most actively in the manufacturing sectors of continental Europe and Japan. The idea was to reduce layoffs and the associated likelihood that workers might subsequently lose contact with the job market. This would push up the so called “Natural Rate of Unemployment”. As to the latter, perhaps the most notable example was the direct financial support provided by the US and Canadian governments for their domestic car industry. In a similar vein, programs to substitute “cars for clunkers” were seen almost everywhere. These policies directed to maintaining the existing production structure also have important downsides over the longer term. During the boom period, supply capacity in a number of industries became too large relative to underlying demand. In the AME’s, financial services, retail distribution, construction, transportation (including car production) and a number of related industries grew too much. They should now be allowed to shrink, not encouraged to stay as they are. Evidently, there will be the need for active labour market policies and retraining to help minimize the resulting problems of frictional unemployment⁷³.

Still more troublesome, unsustainable global trade imbalances also built up. This implies that countries with large trade surpluses should be taking steps to produce more non tradable goods and services, while countries with large trade deficits should be doing the opposite. In contrast, it is remarkable that the countries which have relied the most on short time work have generally been countries with large trade surpluses. In the specific case of China, the government used a variety of means to support export industries during the crisis (including measure to hold down the renminbi) which increases the threat that China’s initial massive trade surplus could grow even bigger as a

then limited to the independent use of central bank instruments to achieve its mandate. In the Canadian case, even this “instrument independence” is limited in that the Minister of Finance can send the Governor of the Bank of Canada a “directive” to change the Bank’s monetary policy. Such a directive has never been sent.

⁷³ Recent labor market analysis at the OECD supports the introduction of “active flexicurity” systems, as practiced in Denmark. Such systems rest on three pillars; significant reductions in employment protection, better benefits for the unemployed, and government encouragement and support to ensure the unemployed seek and find work.

result⁷⁴. In short, the jobs being saved in countries with large trade surpluses also seem likely to be jobs that will disappear with time.

E. A Possible Way Forward

The broad conclusion to be drawn from the above comments is that traditional macroeconomic policies to support near term growth might not succeed in providing the “strong, balanced and sustainable growth”, to which the G 20 is committed. Indeed, continuing to rely on such near term policies could make our longer term prospects worse not better. The same could be said for the other policies directed essentially to maintaining the pre crisis production structure. What then can be done if governments can no longer rely on quick fixes?

In principle, there are ways to restore sustainable global growth even given our current, bad starting point. The policies that might be suggested are more international cooperation, more attention being paid to debt restructuring and outright debt reduction, and structural policies to raise potential growth in ways that are compatible with sustainable patterns of international trade. Absent concrete progress in implementing such policies, the danger remains that the ongoing economic and financial crisis could enter an even more destructive phase. Unfortunately, even if the political will can be found to pursue these policies, they will take considerable time to bear fruit. Whether social and political order can be maintained in the interim thus becomes an important complementary issue.

International cooperation

International cooperation must be premised on the understanding that creditor and debtor countries are mutually interdependent. If debtors fail to pay, because they cannot or will not, then it is the creditors that suffer the losses. Cooperation comes down to efforts to minimize the size of those losses. To this end, countries with large current account surpluses should be spending more,

⁷⁴ In fact, China’s trade surplus fell sharply in 2011. This was in part due to a massive increase in imports of investment goods, whose effects on export potential might be seen only later, and to the slowdown in exports associated with recession in many advanced economies.

and those with deficits should be spending less⁷⁵. In addition, the nominal exchange rates of creditor countries should be allowed to rise, leaning against any potentially inflationary pressures arising from more spending. This might have been of particular help to China in the last few years, when inflationary pressures were becoming worryingly strong. Resulting shifts in the terms of trade would also contribute to desired shifts in saving patterns, while the exchange rate changes in themselves would affect the demand for imports and exports such that they reduce global imbalances.

Against the backdrop of concern about renewed internal imbalances in many countries, the particular kind of spending also matters. In China, and a number of other creditor countries, there is a need to stimulate domestic consumption which is currently very low. Current extraordinarily high investment levels need to be cut back, before they too culminate in a crisis of unprofitability and further reliance on already saturated foreign markets⁷⁶. Allied with this would be deregulation of product markets in China, and most other creditor countries, to make it much more profitable to produce domestic (non tradable) services. In the United States and a number of other debtor countries, the main need is to cut consumption, allowing more room for investment in tradables. Evidently, such shifts in the pattern of production will not occur without an exchange rate incentive and without confidence that creditor countries will allow foreign made goods and services to be imported. The danger posed to global growth by a rise in protectionism is well understood. What is less well understood is that even the fears of protectionism can be very harmful⁷⁷.

Unfortunately, there are significant impediments to achieving the degree of international cooperation required⁷⁸. First, for the reasons discussed above, different countries often emphasize different objectives and different risks in

⁷⁵ This suggestion, and those in the following paragraphs, have been made repeatedly by both the IMF and the OECD.

⁷⁶ Very recently, there have been particular concerns expressed about the further expansion of supply potential in a number of Chinese industries where profits are already under threat; solar panels, wind turbines, container ships and steel to name a few.

⁷⁷ Together with uncertainty about future tax liabilities, and concerns that interest rates must eventually revert to normal levels, concerns about prospective protectionism could also impede investment in deficit countries like the United States.

⁷⁸ Salter (1933) provides a sobering assessment of the shortcomings of international financial cooperation in the period between the two World Wars. Much of what he writes still resonates today.

assessing their macroeconomic options. Second, there still seems to be a strong “go it alone” mentality in both the US and China. The former attitude perhaps reflects the traditional (if fading) status of the US as the post War global hegemon⁷⁹. The latter, with arguably much more ancient roots, reflects a profound unwillingness (apparently broadly shared by ordinary citizens) not to be pushed around by foreigners⁸⁰. China’s rejection of calls for a renmimbi revaluation seems to reflect such attitudes, as well as internal political pressures from State Owned Enterprises (SOE’s) whose profits might well suffer⁸¹.

A third impediment to more international cooperation is that a number of creditor countries, not least Germany, still have an attitude of moral superiority⁸². This leads to the suggestion that required policy adjustments should be primarily carried out by countries (like Greece, Ireland and Spain) running large trade deficits, rather than by creditor countries (like Germany and the Netherlands). This threatens a more deflationary outcome in a European environment already threatened by deflation. Finally, many creditor countries with large reserve holdings in US dollars (in particular China and Japan) are perfectly aware that they are caught in a situation from which there is no easy exit. Allowing their currencies to rise could help avert a potentially more disastrous outcome over time, but only at the expense of substantial (and up front) revaluation losses on their reserve holdings.

⁷⁹ The second round of Quantitative Easing in the US was introduced primarily for domestic reasons. However, its international ramifications, not least capital outflows to EME’s, were significant enough to prompt the Brazilian Minister of Finance to express fears about “currency wars” and the threats posed by competitive devaluations.

⁸⁰ The most senior Chinese leadership seems to accept the need for major policy changes within China. In a speech in Tianjin in the summer of 2010, Premier Wen Jiabao said “In the case of China, there is a lack of balance, coordination and unsustainability in economic development”. These words are almost identical to those used in a speech made by Premier Wen in 2005. The fact that seven years have passed provides a clear indication of the implementation challenge in China.

⁸¹ See the last OECD Economic Survey of China; Economic and Development Review Committee (2009) and Lardy (2012). Note as well that many of the SOEs, and even ostensibly private companies, are still strongly influenced by members of the Communist Party. This implies a resistance, at the very core of the political establishment, to any change in the (so far successful) export led growth strategy.

⁸² In this regard, it may be significant that in German the root word for “sin” and “debt” (Schuld and Schulden) is the same. Also see Atwood (2008)

The formal structures for achieving better international cooperation have been evolving in a desirable way, but are still not adequate to deal with the problems at hand. The increased authority of the G20 process at least brings all the principal creditors and debtors around the table. However, this recognition of the enhanced importance of the major EME's is not yet reflected in the governance structure of the IMF. Moreover, as the global economy seemed to strengthen in 2010 and into 2011, the urgency of the G20 deliberations faded and attention shifted from crisis management to crisis prevention⁸³. While the European crisis reversed this tendency, the general conclusion reached at the Cannes Summit was that this problem had to be solved in Europe. While widely recognized that a European failure in this regard could have devastating global implications⁸⁴, this recognition was insufficient to generate offers of financial support, especially from large creditor countries⁸⁵.

Debt reduction

If debts are unsustainably high, and/or threaten to impede recovery in many jurisdictions (as deleveraging proceeds), then a more formal process of debt reduction has many attractions. This applies to household debts in a number of countries but to sovereign debts in others. It is of course true that, for countries with large foreign debts denominated in domestic currency (the US today and the UK in the early 1930's), depreciation is an informal method of achieving debt reduction⁸⁶. However, in some countries (like those in the euro area) depreciation is not an option, and in some others (where debts have

⁸³ See G20: The Seoul Summit (2010) and G20: The Cannes Summit (2011).

⁸⁴ For many EMEs, including China, the European Union is their largest export market. Further, European banks have a major presence worldwide. As noted above, their withdrawal from certain geographic areas could have a material effect on credit availability. Given interconnections through the interbank and other markets, financial instability in Europe would likely lead to financial instability almost everywhere.

⁸⁵ For example, China and Japan among others could have agreed to exchange some of their foreign exchange reserves held in Bunds for bonds issued by the larger peripheral countries like Italy and Spain. This would have helped "ring fence" these systemically important countries from the problems affecting the smaller peripherals. One reason for this decision by large non-European creditors (relatively poor) was that they were unwilling to put their tax payers' money at risk, when large European creditors (relatively rich) were themselves hesitant to do so.

⁸⁶ When the UK went off the gold standard in 1932 and the pound depreciated, this was explicitly described as a "default" in the US press.

been incurred in foreign currency) depreciation would actually increase the burden of debt service.

In fact, there has been recourse to formal debt reduction and restructuring since ancient times⁸⁷, justified not only on moral and social grounds, but also in recognition of the fact that “half a loaf is better than no loaf”. This recognition reflects the view that delays in recognizing harsh facts (you will not be repaid in full) results in the losses being greater than otherwise. Debtors are given more time to make still more losses, or will “gamble for resurrection” with the creditor’s money. Another argument for debt reduction in the euro area (affecting sovereign debt in particular) is that many debtor countries also became highly uncompetitive. However, using domestic deflation to restore competitiveness (in the absence of the possibility of devaluation) would only worsen those debt burdens in real terms. Thus, debt reduction would seem a necessary, if not sufficient, condition to restoring sustainable growth for some peripheral countries.⁸⁸

Unfortunately, there are today many impediments to debt forgiveness. General schemes to alleviate the burden of household debt lead to worries about equity and moral hazard⁸⁹. As for individual renegotiations, the sheer scale of the problem is daunting⁹⁰. In the United States, around one out of five mortgages in the United States are now greater than the value of the house. The physical apparatus to renegotiate so many individual mortgages is simply not there. Moreover, given negative equity, such mortgage holders are not eligible to refinance their mortgages, as others can do, when mortgage rates fall. In addition to the scale problem, many mortgages are encumbered by second mortgages or have been wrapped up in structured products that explicitly forbid restructuring of the underlying securities. Inadequate documentation to allow legal rulings is another emerging problem, and

⁸⁷ See Graeber (2011) and Atwood (2008).

⁸⁸ Not sufficient because the problem of being uncompetitive would remain.

⁸⁹ General write-downs (whether via reduced principle or a lower interest rate or extended duration) would benefit many who would otherwise have serviced their debts regardless. Moral hazard is self explanatory.

⁹⁰ For a fuller account of problems in the US mortgage market, see Ellis (2008)

potentially a serious one. If banks cannot prove they own a property, how can they legally foreclose on the occupants⁹¹?

As for restructuring or forgiving sovereign debt, there would be serious worries about contagion (particularly in Europe) once this process began. Moreover, as is true for all forms of explicit debt reduction, some creditor must formally recognize the losses. This raises the question of whether European banks could remain solvent in such circumstances, and whether existing legislation would be adequate to allow an orderly wind down. In the limit, it also raises the question of whether the initially solvent governments of countries where such banks reside would have the fiscal resources to support their banks in such circumstances. Concerns of such a nature might help explain the initial fierce resistance of the German and French governments to suggestions of the need for debt restructuring in some of the peripheral countries in the euro zone⁹².

Structural reform

A complementary way to make the burden of debt more bearable is to grow your way out of it. If demand side measures have lost their potency, then structural measures to increase potential growth are an attractive alternative. The need for this is further enhanced by the fact that the crisis itself is estimated by the OECD to have reduced the level of potential by an average of three percentage points in the OECD area. One reason for this is that both creditor countries and debtor countries seem to have been affected by an increase in long term unemployment and lower participation rates. Moreover, there has also been a decline in the effective capital stock due to both a higher cost of capital (via higher risk premia) and accelerated obsolescence. This latter phenomenon is related in large part to the reversal of the real “imbalances” referred to above.

⁹¹A number of large US banks (including Bank of America, Citigroup and JPMorgan Chase) have cut down significantly on their mortgage servicing business. This reflects the rising costs of defaults and renegotiations, fears of law suits over inadequately documented foreclosures, and the threat of heightened oversight from the newly created Consumer Financial Protection Bureau. See Nasiripour (2011)

⁹² After a time this stance was replaced by one which insisted on a “voluntary” restructuring of Greek debt by private sector bondholders. The first proposal was for a 20 percent haircut, but this has since risen to 50 percent. However, recognizing the dangers of contagion, the Europeans have continued to insist that no other peripheral country needs sovereign debt restructuring.

Over the years, the OECD has done a great deal of work on such issues. Their publication “Going for Growth” provides a handy summary of much of this work⁹³ as it applies to labour markets, product markets, financial markets, pensions, environmental issues and many issues related to the efficient provision of government services. As well, the OECD has carried out a significant amount of research into how structural policies might be applied to reduce current account imbalances. Some of these are intended to affect the demand side of the economy (saving and investment respectively) while others are intended to shift resources between the production of tradable and non-tradable⁹⁴.

Perhaps the suggestion closest to being a “silver bullet” has to do with raising the effective age of retirement, particularly in countries with significant debt problems and the threat of a deep and long lasting economic downturn. The income from more work⁹⁵ would contribute to more spending, to more saving and more taxes, while reducing the burden of future pensions at the same time. Basing labor market policies on the “active flexicurity model” would also offer great promise, especially in the peripheral countries of Europe where dual labor markets are well entrenched. The current system benefits insiders (mostly old) at the cost of outsiders (mostly young), and has contributed to the very high level of youth unemployment in Spain and Italy in particular.

Unfortunately, as with the other desirable measures discussed above, structural reforms are not easy to carry out. Those who will benefit (the many) often do not realize it. Consider, for example, the point made just above about later retirement, and recall that the protests in France in 2010 were in large part led by young people.⁹⁶ In contrast, those who will lose their rents from structural reform (the few) know it very clearly and organize themselves to resist it. Further, the pain from structural reform comes up front and the gains

⁹³ OECD (2011a)

⁹⁴ Economics Department (2010a) and Economics Department (2010b)

⁹⁵ Note that the length of life is also rising. A standard set of OECD recommendation in this regard is to raise retirement ages, equalize them for men and women, and then index them to life expectancy.,

⁹⁶ Young people should have seen that it was their tax burden (for pay as you go pensions) that would be reduced. In contrast, they focused on the fallacy that only a given number of jobs exist. Thus, longer working lives for older workers was thought to mean fewer jobs available for younger workers.

only materialize later. In democratic societies, often populated by people with excessively high rates of time discount, political support can prove fleeting.

Conscious of the political economy aspects of such reforms, the OECD has in recent years done a great deal of research⁹⁷ into what they now call “Making Reform Happen”. Evidently, such work has called for close collaboration between economists, political scientists, sociologists and other disciplines as well. Identified prerequisites for successful reforms include a planning process which considers sequencing, procedures to handle vested interests, and ways to tackle simultaneously the need for fiscal consolidation⁹⁸. Also essential are ways to mobilize broad public support. Not least, the public must be convinced that the reforms are “fair” and that one group of insiders is not just being replaced by another. Analysis of past reform efforts reveals that public support is most often forthcoming when all the other alternatives have been clearly exhausted. Against this background, the current crisis provides an opportunity for structural reform that should not be missed.

F. Moderating Future Crises

As noted by Reinhart and Rogoff (2009) and others cited above, financial and economic crises of the sort we are living through have been recurrent features of life for millennia. They have occurred under widely different monetary and regulatory regimes, and seem to have their roots in human nature⁹⁹. The implication would be that, while future crises might be moderated, they cannot be avoided. This leads to the conclusion that we should be taking steps in advance to moderate the associated costs of inevitable crises. Since we are not yet out of the current crisis, it might seem odd to be so forward looking. Yet, as with structural reform more generally, the current crisis presents a political window of opportunity for financial reform. This opportunity has not yet been

⁹⁷ OECD (2010)

⁹⁸ The principle complication when structural reforms must be implemented at a time of fiscal consolidation is that there are no funds available to buy off vested interests.

⁹⁹ Both the Bible and the Koran contain the story of Pharaoh’s Dream. The basic lesson of the story is that we should avoid the temptation of assuming good times will go on forever. This tendency to extrapolate recent developments is still with us.

fully exploited. Three particular suggestions might be made. However, each one suffers from being either analytically controversial, or politically difficult, or both. Taken together, they constitute what I have called elsewhere a “macrofinancial” framework for economic stability¹⁰⁰.

First, policy instruments should be used more actively to “lean against the wind” during the upswing of the cycle when rational exuberance is being transformed into irrational exuberance. Agreed, it is not easy to know when to do this¹⁰¹, but the problems are not inherently more difficult than the problem of measuring the “output gaps” which drive policy decisions today¹⁰². It is also likely preferable that policy instruments be determined by rules (like dynamic provisioning for example) rather than discretion, since there could be a marked reluctance for the authorities to act at times when rising asset prices give the appearance of permanent increases in wealth¹⁰³. The authorities, as well as the private sector, can get caught up in the prevailing optimism.

A variety of policy instruments could be considered to help lean against the wind. There now seems general agreement on the use of regulatory (macroprudential) instruments for such purposes; provisioning, capital requirements, loan to value ratios, primary and secondary reserve requirements, etc. While there is less agreement on the use of the monetary policy rate, a debate is at least underway¹⁰⁴. Less consideration has been given to the use of tax policy. The tax deductibility of mortgages and corporate debt clearly contributes to higher levels of indebtedness. These provisions might also be changed to have a more counter cyclical influence¹⁰⁵.

¹⁰⁰ See White (2005) This framework envisages the use of monetary policy along with “macroprudential” instruments to lean against the credit cycle. Note that the objective is neither “price stability” nor “financial stability”. While each is desirable, neither is adequate to avoid costly macroeconomic crises. See White (2006a) on the former and White (2010a) on the latter. Recall as well one of the principal findings of Reinhart and Rogoff (2009); the majority of crises begin on the real side of the economy implying that financial stability is no guarantee of macroeconomic stability.

¹⁰¹ Yet a lot of progress is being made. See Borio and Dhreman (2009) and Barrell et al (2010).

¹⁰² See Van Norden and Orphanides (2002)

¹⁰³ This point is made persuasively by Brunnermeier et al (2009)

¹⁰⁴ See White (2009) and, more recently, the Committee on International Economic and Policy Reform (2011)

¹⁰⁵ Various recommendations can be found in CGFS (2006)

More broadly, the OECD has for years been recommending that medium term fiscal frameworks be strengthened. Such a framework would include explicit debt targets, multiyear budgeting, and strict expenditure ceilings to ensure that revenues accruing through credit booms were not spent. Further, an “independent” fiscal council with a clear mandate, adequate resources and powers, and democratic accountability would help ensure this framework was observed in practice. Such a medium term orientation for fiscal policy would also help prevent the kind of procyclical fiscal policies that characterized the years leading up to the current crisis.

Second, we need a serious reexamination of the use of monetary policy to “clean up” after the burst of credit bubbles. This has been standard practice over the last twenty years, if not even longer; the so called “Greenspan put”. Moreover, as this monetary policy easing had diminishing effect over time, not only did it have to be used increasingly vigorously in successive cycles, but eventually other supportive measures (like QE1 and QE2) had to be used as well. The extraordinary measures of the last two years must then be seen as the inevitable result of the policies followed earlier. Thus, of even greater importance than devising an “exit policy” from the current extreme policy settings, is devising an “exit strategy” from the unsustainable path on which we have put ourselves.

Third, we need to take measures ex ante to ensure that we can more easily manage financial crises when they do occur.

One important issue is that of institutions that are so big/complex and interdependent that their failure would have huge and essentially unpredictable implications. In sum, they currently cannot be allowed to fail. To deal with this, we must take steps to lower the Expected Economic Loss (given the failure of such an institution) to acceptable levels. This could be done by some combination of lowering the probability of default, and lowering the loss given default.

To lower the probability of default, capital requirements could be raised (on average) and made both more countercyclical and more tailored to the contribution made by individual institutions to systemic risk. There are

proposals extant (Basel 3) for dealing with each aspect of this suggestion¹⁰⁶. In addition, risk taking could be reduced, either by regulation or by legislation, to preclude financial institutions with “utility” like functions from undertaking certain other functions like proprietary trading.

As to lowering the potential losses given default, what is first required is domestic legislation allowing the rapid closure of financial institutions. In addition, institutions should develop “living wills” to provide guidance as to how such legislation would be practically applied. For internationally active institutions, further requirements would be international agreements on information sharing, burden sharing in the case of default, and prior agreements as to how different national laws would be applied in a coherent and consistent way.

The issue of insolvency legislation for large, internationally active banks provides an illustration of how difficult it will be to implement these suggestions. Such legislation is required even if relatively greater reliance is put on measures (“bail-in bonds” for example) designed to avoid bankruptcy in the first place. However, getting internationally agreed standards and practices will not be easy. The fact that the recent Dodd-Frank bill in the US emphasizes early and orderly closure, while the Europeans seem to prefer the “bail in” alternative, gives some indication of the continuing problems in this area. Until these issues are resolved, the “too big to fail” problem will remain a very significant threat to global financial and macroeconomic stability.

Moreover, the “too big to fail” issue is only one of the problems that could lead to financial crises having greater costs than might otherwise have been the case. In particular, it was contended above that measures to date to address the issue of systemic risk have been inadequate. Interactions within the financial system and between the real economy and the financial system constitute a “complex” system which might be thought to share characteristics with other complex systems¹⁰⁷. Scientists working on earthquakes, forest fires, epidemics, and other such complex systems contend three things. First,

¹⁰⁶ See in particular Basel Committee on Banking Supervision (2009), (2010) and (2011)

¹⁰⁷ For popular introductions to this literature see Buchanan (2002) and Beinhocker (2006)

systemic crises are inevitable¹⁰⁸. Second, their timing is essentially unpredictable. Third, the magnitude of the crisis bears no relationship to the size of the shock that sets it off. Recall, for example, how in the Asian and LTCM crises, market risks became transformed into counterparty risks, and then liquidity risks, and how operational breakdowns were only just avoided. The conclusion this points to is that we need a deeper understanding of how systemic crises propagate themselves, and then need to focus on the steps needed to prevent this from happening. In the area of forest management, for example, artificial fire breaks and a regular clearing out of underbrush (by letting small fires burn) are examples of good practice.

Against this background, it is worth noting that the Basel 3 proposals do make an effort to identify institutions having characteristics (like size, complexity and interconnectedness) likely to make their failure particularly costly. However, instead of trying to constrain directly those characteristics (limitations on size, interconnectedness etc.) which would lower the potential losses given default (analogous to a firebreak in forestry), the Basel proposals instead focus on raising capital requirements and reducing the probability of default. Moreover, these increased capital requirements continue to be based on measures of “risk weighted” assets, even though a number of commentators argue that the “risk weight” approach of Basel 3 actually increases systemic risks. For example, it is contended that attempts to game the system of risk weighted charges (as indicated in the past by the rise of the “shadow banking system”) encourage higher leverage¹⁰⁹. At the same time, such actions also increase interdependence and thus systemic risk in turn.

As we attempt to deepen our understanding of the character of systemic problems, Helwig (2010) and Slovik (2011) suggest the possibility of an interim solution; namely, to demand much higher capital ratios for all banks and to base those requirements on the level of unweighted assets. The introduction, under Basel 3, of an overall leverage ratio (based on unweighted assets) to

¹⁰⁸ More particularly, the incidence of crises follows a power law, in which the frequency of crises varies inversely (to a power) with the size of the crisis.

¹⁰⁹ In particular, see Helwig (2010) and Slovik (2011). Slovik documents how, for systemically important banks, the ratio of unweighted bank assets to risk weighted assets declined from almost 70 percent in 1991 to almost 35 percent in 2008.

complement risk weighted capital ratios, goes in this direction, but the leverage allowed continues to be very high.

Crises would also be managed better if certain procedures were decided upon in advance. As for the public sector, the various shortcomings in this regard (preceding the current crisis) were referred to above. The basic problem is that, without explicit agreements on what governments will do and will not do, an emergency will inevitably result in the application of the worst and most costly safety net instruments available. For example, in the absence of explicit and limited deposit insurance in most European countries, they wound up in the end (following an initial decision by Ireland) guaranteeing essentially all the liabilities of European banks. As for the private sector, Rogoff (2011), Schiller and Weiss (1999) and others have suggested much greater reliance on debt contracts with contingency clauses. This would provide a less disruptive alternative to normal bankruptcy.

G. Concluding comments

The global economy has been on a bad policy path for many years. In the AME's, we have leaned inadequately against the upswing of successive credit bubbles, and we have relied too heavily on macroeconomic stimulus in downturns. Unfortunately, when the current crisis hit, the macroeconomic policy response was essentially "more of the same" and then "still more of the same". Having been much overused, these traditional policies of macroeconomic stimulus will no longer suffice to put the AME's back on a sustainable growth path. With many EME's having resisted exchange rate appreciation, their own future prospects are now also threatened by both inflation and imported "imbalances". The discipline provided by a "better" international monetary system might have helped mitigate these problems.

Solutions for these deeply imbedded problems will not be easy to find. In this paper it has been suggested that enhanced international cooperation, explicit attempts to restructure and reduce excessive debt levels, and structural reforms to improve the functioning of our economies might provide a surer, if slower, means of restoring sustainable growth. It was also noted that there are formidable obstacles to the implementation of each of these suggestions. Recognizing the social and political dangers associated with a long period of

slow global growth, committed political leadership is required to remove these obstacles. We need both “magnanimity and courage”¹¹⁰

Looking forward, steps need to be taken to avoid a repetition of the circumstances that contributed to the current crisis. Most important is the need for an analytical framework that, not only recognizes the fundamental importance of the financial system, but also that today’s policy prescriptions can have longer lasting effects (due to credit-financed stock accumulations) that work in the opposite direction to those originally intended. As a corollary to this, there should be less tolerance of extended, credit fuelled upswings that invariably end in tears. Similarly, there should be greater tolerance for small economic downturns that would act as warnings to both borrowers and lenders not to overextend themselves. In this way, the serial cycles that have brought us to our current state might be most effectively avoided.

All this said, we should also continue to take steps now to help manage crises better in the future. It is only human to hope for the best, but it is only prudent to plan for the worst.

¹¹⁰ The full quote is from the last paragraph of Salter (1933). “To face the troubles that beset us, this apprehensive and defensive world needs now above all the qualities it seems for the moment to have abandoned – courage and magnanimity”. Above all, Salter was appealing to the creditors of his time. The irony today, is that the debtors of yesterday are the creditors of today, but the appeal still seems likely to go unheeded.

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