

# **The Ultra-Easy Money Experiment**

**by**

**William R White**

**5<sup>th</sup> Lectio Minghetti**

**Bruno Leoni Institute**

**Rome, Italy**

**20 October 2015**

# The Ultra-Easy Money Experiment<sup>1</sup>

Presentation by William R White

## A. Introduction

The first phase of the continuing economic and financial crisis began with the decline in US house prices late in 2005. Since then all parts of the world, in both the real and financial sectors, have come to bear its imprint. The duration, scope and magnitude of what has happened cannot be explained by a process of contagion. Rather, there were weaknesses accumulating in the complex, adaptive system we know as the global economy. The subprime mortgage market in the United States, and the complex financial instruments based on such mortgages, was simply the trigger that revealed a prevailing systemic fragility linked to earlier, excessive credit expansion.

In this presentation I will try to trace the origins of the crisis, and the particular contribution made by expansionary monetary policies both before (unnaturally easy) and after (ultra-easy) the crisis broke. I will contend that the situation we face in late 2015, both in the advanced market economies (AMEs) and the emerging market economies (EMEs), is arguably more fraught with danger than was the case when the crisis first began. Moreover, bad policies are largely to blame.

I am aware that the consensus forecast indicates that global economic prospects are likely to improve next year. I would remind you, however, that actual outturns have been less than predicted (as of the previous spring) in each of the last seven years. In particular, the forecasts of the

---

<sup>1</sup> This presentation is based on a much longer paper published in 2013 by the Austrian National Bank under the title "The Short and Long Term Effects of Ultra-Easy Monetary Policy". The presentation has been updated to reflect the fact that some of the potential risks flagged in the earlier paper have now actually materialized.

Federal Reserve for the United States have been repeatedly revised downwards. This is not surprising since the models underlying most forecasts (including those of the OECD and IMF) do not recognize the importance of credit and the financial system, nor the significance of stocks and “imbalances” that build up over time. The fundamental ontological error has been to treat the economy as a machine, whose properties can be known and controlled by its operator. In reality, it is an evolving system, too complex to be either understood or controlled, in which the future is totally path dependent.

Looking at the individual regions in the global economic system also reveals potential weaknesses. The United States is further ahead in the recovery but faces declining labor participation rates and (like others) weak capital investment. The euro zone faces its own idiosyncratic problems. Japan is conducting an unprecedented experiment with “Abenomics”, but has nevertheless just fallen into a technical recession. China must make a transition to a different growth model, based on internal consumption, and all transitions are dangerous as the current slowdown in China indicates. Moreover, in our integrated global economy, problems anywhere will quickly become problems everywhere. As an example, think of the implications of China’s slowdown for other emerging markets, particularly for commodity producers. Further, our macroeconomic ammunition to fight downturns is essentially all used up. Accordingly, I will finish by noting some other policies that might be more effective in restoring “strong, sustainable and balanced growth” as the leaders of the G20 would like.

## **B. The Run Up to the Crisis of 2007**

How did we get into the crisis? I want to suggest that monetary policy, guided by flawed theory, has played a big role. The flawed theory is, essentially, that inadequate growth and job creation are solely due to inadequate demand and that this can always be remedied with expansionary monetary policy. Moreover, such policies do not have

significant undesirable side effects. They are, therefore, the proverbial “free lunch”.

This theory was first tested in the early 1960s, when people still believed there was a long run tradeoff between unemployment and inflation. However, one significant side effect of monetary stimulus soon revealed itself. The expected “slight” increase in inflation turned into the massive inflationary pressures of the 1970s, as predicted by the theoretical insights of Friedman (1968) and Phelps (1968). The Volcker regime of the early 1980’s dealt with this problem, but the tendency to turn to “easy money” as a cure-all soon reasserted itself.

The “Greenspan put” that followed the stock market crash of 1987 was followed by similar episodes of sharp monetary easing in 1991, 1998 and 2001. Moreover, periods of monetary easing were never matched by symmetric restraint when the economy was recovering. As a result, nominal interest rates ratcheted downwards over the years<sup>2</sup>. These policies were made possible by the persistent downward pressure on global inflation arising from the process of globalization and the return to the market economy of China, the countries of Central and Eastern Europe and many others.

The analytical mistake made by domestic policymakers in the AMEs was that they failed to recognize the importance of these positive, global supply side shocks. Disinflationary pressures ought not to have been interpreted as indicating the need for ever increasing domestic credit expansion. This is particularly the case since easy money also contributed to the buildup of a host of other imbalances in the domestic economy. As it almost always does<sup>3</sup>, “rational exuberance” was being slowly and inconspicuously

---

<sup>2</sup> It should be noted that fiscal policies in most AMEs erred in the same asymmetric way. Thus government debt stocks ratcheted up, cycle after cycle to essentially “unsustainable” levels.

<sup>3</sup> There is now a huge literature documenting earlier crises in which both the real and financial sectors have been affected. Common themes are some early piece of good news that justifies optimism, associated financial innovation, and a significant expansion of credit and debt.

transformed into “irrational exuberance”. These imbalances are perhaps best treated by looking in more detail at the years just preceding the crisis.

The easing of AME monetary policy in 2001, in response to slowing growth and the stock market crash, was of unprecedented speed and magnitude. In the US at least it far exceeded the requirements of a Taylor rule. Moreover, rates were also kept down much longer than such a rule would have suggested. This led to a whole host of imbalances, both real and financial, in many AME's. In the English speaking countries, household saving rates fell to unprecedented levels and there was an associated build up of household debt. As the prices of houses rose, investment in the housing stock also took off. Similar developments were occurring in peripheral Europe as credit spreads over German Bunds collapsed.

Financial institutions dramatically increased leverage as they increased loans, and the price of financial assets also rose to unprecedented highs. Given that increases in policy rates were being clearly telegraphed in advance, and Sharpe ratios raised accordingly, speculation on further increases was strongly encouraged. Finally, via the mechanism of semi fixed exchange rates (to which I will return), the EMEs actively contributed to an explosion of global liquidity and imbalances in their own economies. In short, by 2007 the global economy was an accident waiting to happen and the policy makers all failed to see it coming. How could this have happened?

I would contend that all the relevant policy makers were seduced into inaction by a set of comforting beliefs, all of which we now see were false. Central bankers believed that, if inflation was under control, all was well. As a corollary, if problems were to emerge, monetary policy could quickly clean up afterwards. Regulators believed that, if single institutions were all healthy, the system as a whole would stay healthy. Bankers and other lenders believed their large profits were due to talent (alpha) rather than risk taking (beta), and so became ever more exuberant. Borrowers believed house prices and the prices of other financial assets were a one way bet.

Even governments were seduced, as buoyant tax revenues were believed to be “structural” rather than cyclical and were quickly spent. To repeat, the economy is not a machine but the product of interacting human agents all vulnerable to aspects of our nature. We seek comfort where we find it.

### C. Crisis in the AMEs and the Policy Responses

When the crisis hit, policymakers in the AMEs initially pulled out all the stops. They used a variety of policies to try to stabilize the situation and in a fundamental sense succeeded. However, each of these policies shared a major shortcoming. Their positive short run effects were offset by negative longer term effects. For example, most AMEs allowed their fiscal deficits to expand rapidly in 2009. However, this quickly led to a rapid increase in debt ratios and, in some cases (e.g. peripheral Europe), market pressure to reverse these developments soon developed.

Similarly, measures to support the financial system were needed and were initially successful. However, they did not address the underlying problems of an over extended financial sector and the need for debt write offs. In effect, most AMEs have chosen the Japanese path rather than the Nordic path to restoring the financial system to good health. And to these unresolved financial problems have been added a whole host of new regulatory requirements that might well be reducing the availability of new credit. Finally, as the weakness of the economy became ever more apparent, the appetite for structural reforms to the real economy also faded.

In short, in the aftermath of the crisis, ultra-easy monetary policy soon became “the only game in town “. Unfortunately, monetary policy shares the shortcoming of all the other policies. Its effectiveness decreases over time, while its negative side effects increase over time. Let me treat these two phenomena in turn. I will distinguish, however, between the undesired side effects in AMEs and those in EMEs. Finally in this section, I will make a few comments about global liquidity. The bottom line is that countries are

increasingly interdependent but, sadly, we lack a global governance structure that recognizes this fact.

### Why ultra easy monetary policy might not stimulate nominal demand

Central banks have resorted to unprecedented policies in response to the crisis, though they have sometimes differed in their peculiarities. First, policy rates in most countries were lowered very quickly to almost the Zero Lower Bound. Forward guidance, mostly implying policy rates would stay “low for long”, was also used to lower the yields on medium term government securities. In addition, central banks massively increased the size of their balance sheets, generally in an effort to lower longer term rates, while often altering their composition as well in order to affect credit spreads.

These policies were first directed to restarting financial markets that seized up early in the crisis. With time, however, the focus of AME central banks shifted to emphasizing the need to stimulate aggregate demand<sup>4</sup>. The policy essentially succeeded in achieving the first objective, in that markets are now operating more normally. Credit and term spreads also fell sharply from previously high levels. Since there has recently been some reversal of this, the sustainability of this improvement must also be addressed below. However, the second objective of stimulating spending has been much harder to achieve. While many central bankers seem to have been surprised by the lack of response of spending to date, both economic history and the history of economic thought should have given ample warning.

In previous downturns after a credit bubble, at least in those cases where the financial sector itself had been weakened, history records that recovery can take a decade or longer. Moreover, losses to the level of potential are

---

<sup>4</sup> The Federal Reserve was the first and most enthusiastic advocate of such policies. The European Central Bank was much more reluctant, but eventually also subscribed. The Bank of Japan, under Governor Shirakawa, was also reluctant but “Abenomics” subsequently included a massive increase in the size of the Bank of Japan’s balance sheet as one of its three “arrows”.

commonly large and permanent. As for the history of economic thought, Keynes himself said in Chapter 13 of the *General Theory* (1936) that monetary stimulus was likely to be ineffective; “If we are tempted to assert that money is the drink that stimulates the system to activity, we must remind ourselves that there is many a slip between the cup and the lip”. This conclusion marked a sharp change from the policy changes he had recommended in the *Treatise on Money* (1930). Hayek (1930, p21) went even further in suggesting that monetary easing would actually hold recovery back. “To combat the depression by a forced credit expansion is to attempt to cure the evil by the very means which brought it about”

Turning to this particular crisis, a number of reasons can be suggested for the lack of monetary traction. It seems to have less to do with the signal not getting through (since yield spreads fell and asset prices rose) but more to do with there being no spending response. Profound uncertainty about the future, not least the future stance of monetary and fiscal policies, may have suppressed “animal spirits”. The experimental nature of current policies might also have worked in the same direction.

Perhaps most important, a lower discount rate works primarily by bringing spending forward from the future to today. In this process, debts are accumulated which constitute claims reducing future spending. As time passes, and the future becomes the present, the weight of these claims grows ever greater. In short, easy monetary policies are likely to lose their effectiveness over time - and seven years seems rather a long time by anyone’s standards. Today the level of non financial debt in the AMEs is significantly higher than it was in 2007, prompting the question “Deleveraging? What deleveraging?”<sup>5</sup> This suggests that, by following policies that actively discouraged deleveraging, we have set ourselves up for an even more serious crisis in the future.

---

<sup>5</sup> See Buttiglione et al (2014)

### Undesired side effects in AME's

There is a rich historical literature on this topic, only one strand of which might be described as “mainstream”. That strand began with Wicksell (1907) who warned that setting the financial rate of interest below the natural rate of interest would culminate in inflation. There has not thus far been any indication of rising inflation in AMEs, though I will suggest a little later that we might not be totally out of the woods just yet. Other strands of thought that are decidedly not mainstream would include: the concerns of Hayek (1933) about real resource misallocations; Minsky's (1986) suggestion that financial stability breeds instability; Koo's (2003), observations about balance sheet recessions; and insights from economists at the BIS who have identified imbalances of various kinds that are spread via global capital markets. All of these undesired effects of ultra-easy money might now be building up under the surface.

There are clearly grounds for belief that the ultra easy stance of monetary policy since the crisis might have further contributed to a reduction in the level of potential or even its growth rate. In fact both seem to have declined sharply in AMEs in recent years. As Schumpeter might have put it, without destruction there can be no creation. Very easy monetary conditions support “zombie banks” which in turn support “zombie companies” which in turn prey on the otherwise healthy and lower their productivity. Furthermore, the availability of credit to new firms with innovative ideas becomes severely constrained.

Another aspect of this is that is that the functioning of financial markets seems to have changed. There has been a marked increase in the correlation of returns within and across asset classes, as perceptions change as to whether monetary policy will be effective or not. When the mood is positive, financing flows (Risk On) to more risky assets, and when

the mood is negative the opposite occurs (Risk Off). This focus of RORO investors, essentially on tail risks, seriously reduces the benefits of diversification and of value investing. This cannot be good for growth over time.

Against the background of these swings in sentiment, the easy stance of monetary policy also seems to have contributed to financial markets getting well ahead of themselves. As occurred prior to the crisis, “transparency” has once again contributed to this outcome by raising Sharpe ratios and encouraging speculation. Until quite recently, we observed record high equity prices, record low bond yields for “riskless” assets, record low risk spreads, record low costs of cover (e.g.: the Vix), the return of cov-lite and Payment in Kind (PIK) financing, and a general lowering of lending standards. Broadly speaking, only a few months ago the financial markets looked very similar to 2007 just before the crisis erupted. Since then, financial markets have lost some of their exuberance. It remains to be seen whether this is the beginning of a more severe retrenchment or not.

Granted, leverage has been generally less in evidence since 2007, although in a number of countries with “healthy” banking systems and sustained growth in mortgage credit, house prices and household debt continue to make new highs. Further, with innovation constantly occurring, exposures to risk might have been growing in different and less evident ways than before. Recall that the full implications of the growth of the “shadow banking system” only became clear after the crisis began. There are signs of similar structural changes occurring today, in part due to new regulatory initiatives. Perhaps most important has been a remarkable increase in the size of the asset management industry, and it has become much more concentrated as well.

And for the record, it should be noted that central bank policies might have had other downsides as well. First, with income distribution already a source of great concern (due mainly to changing technology and

globalization) the recent stance of monetary policy has likely made it worse. The rich own most of the risky assets whose prices have increased the most. Conversely, the middle classes mainly hold the less risky interest bearing assets whose yields are at record lows.

Second, much of what central banks have done, albeit largely in the pursuit of financial stability, constitutes a significant threat to their “independence” going forward. There can be no doubt that the institutional relationships of central banks with their governments and their internal governance will be actively debated topics in the coming years. Many institutional changes have already been implemented, often hastily in the wake of the crisis. The wildly divergent nature of these changes across countries shows how much serious thinking about these matters still remains to be done.

Finally, what the central banks have done has encouraged governments to believe that the central banks have the economic situation under control. They desperately want to believe this since it absolves them from having to pursue other, politically difficult, policies that might in fact lead to stronger and more sustainable growth over time. I return to these alternative policies in the last part of this presentation.

#### Undesired side effects in EMEs

While again subject to swings in market sentiment (RORO behavior), EMEs generally saw their currencies strengthen as monetary policy was eased in the AMEs. Such “push me” factors have been in evidence for decades. However, Shin (2011) and, Rey (2013) and others have described in more detail some changes in the international transmission mechanisms that have influenced how the “spillover” process currently works. The implication is that there is clearly an element of truth in the accusation that AMEs are engaged in “currency wars”. At the same time, many EMEs also have important channels through which “pull me” factors provided support for their exchange rates as well.

The governments and central banks of EMEs resisted this upward appreciation for a variety of reasons, some less justifiable than others. One concern has been a loss of competitiveness, of particular political importance in countries with export led growth strategies. This would seem less justifiable, particularly for countries (like China) with large current account surpluses. Another concern, perhaps more justifiable, is that currency appreciation might well become unreasonably large. It is now generally accepted that the law of Uncovered Interest Parity only applies over very long periods, with momentum trading generally gaining lasting force prior to an eventual mean reversion.

The resistance to exchange rate appreciation took many forms. A few countries used capital controls while others turned to so called “macro prudential” policies with the same intent. More common was foreign exchange intervention, which was often reflected in a large expansion in the balance sheet of the central bank, and the pursuit of easier monetary policies than would otherwise have been the case. As a result, the rate of credit expansion in many EMEs shot up and the ratio of non financial debt to GDP also expanded enormously.

The upshot of these policies is that inflation rose in many EMEs to uncomfortably high levels (between 5 and 10 percent for the BRIICS, as of early 2014). As well, many of the imbalances previously seen in the AMEs were “imported”, via semi- fixed exchange rates, into the EMEs as well. Not least, there was a sharp increase in property prices and growing evidence of over building in a number of countries. Similarly, there was in many countries a massive increase in the capacity to produce commodities and the products required to support the building and construction industries<sup>6</sup>.

Credit “booms” are commonly followed by a credit “bust” and this may already have begun. In fact there has already been a marked deceleration in the growth rates of all the large EMEs, most notably China and Brazil.

---

<sup>6</sup> China is a leading example, with massive increases in the capacity to produce steel, aluminium, cement, glass etc.

Inflation has for most EME's fallen to very low levels, in spite of sharp depreciations of EME currencies against the dollar in particular. Commodity prices have now been falling for over two years, and producer prices in virtually all EMEs have been declining.

To these current difficulties in the EMEs we must add prospective difficulties. Previous capital inflows have in the last few quarters turned into increasingly disruptive outflows and foreign exchange reserves have fallen sharply. "Pull me" factors may now be in the course of reversing. Many EMEs are now seen to have deeper structural problems than earlier envisaged. As well, the recent buildup of debt levels in EMEs inherently leads to strains and payback issues, just as in the AMEs. At the same time, "push me" forces could also reverse. Stronger growth in AMEs would presumably lead to higher interest rates and provide such an incentive. However, weaker growth in the AMEs could be even more disruptive. A return to Risk Off behavior could follow, at the same time as exports from EMEs to AMEs were threatened. Indeed, observing the continued strength of the dollar, along with continued low Treasury rates, implies that the swing to Risk Off might already be well begun.

Adding to concerns about such outflows must be the nature of the inflows. Whereas in earlier years they were mostly driven by cross border bank loans, the flows in recent years have been dominated (especially in South East Asia and Latin America) by off shore issues of EME corporate bonds purchased largely by asset management companies. Since most of these bonds have been denominated in dollars and euros, in response to low interest rates, this raises the specter of currency mismatch problems. The fact that many of the corporate borrowers have rather low credit ratings also raises concerns.

How those who bought the bonds might react, if losses began to cumulate, is another issue. Although it is not the asset management firm that takes the losses, they must be concerned to protect their customers since relative performance is important. Another issue is the reaction of ultimate

lenders who might be tempted to withdraw their funds. In this context, one is reminded of the global implications of deposits being withdrawn from US money market mutual funds in 2008. This posed huge liquidity problems, in particular for European banks who had borrowed dollars from such funds to finance US dollar assets. In the end, the Federal Reserve was forced to reopen US dollar swap lines that it had closed only a few years earlier. All that can be said with certainty is that we are in uncharted territory.

### The problem of “global liquidity”

The interactions between AMEs and EMEs through financial markets have now grown profound. While the influence of AMEs on the financial markets of EMEs has been discussed above, the reverse effect of EMEs on AMEs is growing increasingly important. Not least, the reinvestment of foreign exchange reserves and the assets of Sovereign Wealth Funds (when they were rising) eased general credit conditions in AMEs as well. Beyond this, property prices in large “gateway” cities in AMEs have been increasingly influenced by private purchasers from EMEs. This implies that financial and property markets in AMEs might well be affected by changes in circumstances in EMEs. On the one hand, capital outflows from EMEs might result in a rundown of foreign exchange reserves that could help raise bond rates in AMEs. On the other hand, the capital outflows might be directly invested in property, raising prices further rather than lowering them.

Given these complex interactions, a whole new strand of literature is developing on the nature of global liquidity and international credit bubbles. While it is still the case that the dollar, and the policies of the Federal Reserve, remain at the heart of the global financial system, there is an increased interest in global aggregates for credit, money and the prices of financial assets. This is very much to be welcomed. It recognizes the changing reality of globalization.

Less welcome, however, is the new focus it provides on the governance mechanisms for this changing global reality. On the one hand, to the degree

the Fed still sets global monetary policy, there is a deficiency. The Fed's policies must, by law, be set with only American interests in mind. Others must then protect themselves as best they can, perhaps by rolling back open markets through intrusive capital controls and macro prudential policies. On the other hand, given the increased degree to which global financial conditions now depend on the collective behavior of a number of monetary authorities, there is no mechanism to control that behavior.

We desperately need to revisit the issue of the international monetary system and the rules that might govern it. We have no global anchor. Today, absent any rules but domestic self interest, virtually all central banks (and certainly all the major ones) have the monetary and credit spigots wide open in pursuit of their domestic interests. What this collective monetary experiment might eventually imply at the global level still remains to be seen.

## D. The Need for “Exit” and Possible End Games

Simple uncertainty about the full effects (not only unexpected but potentially undesirable) of today's radical monetary policies might, in itself, seem to argue for their moderation. Yet there is another powerful argument for eventual exit. If the effects on aggregate demand decline with time, while the undesired side effects cumulate with time, at some point these two functions must intersect. At that point monetary policy would have to be judged to be doing more harm than good. At this due date, “exit” would then be warranted.

### Why “exit” threatens to be delayed

Unfortunately, there are a whole host of reasons to expect “exit” to be delayed until well after its due date. The first concern is uncertainty given the unprecedented character of the policy setting. The modalities of “exit” are still being widely debated. Is it possible to raise policy rates while maintaining a swollen central bank balance sheet? What side effects might

follow new procedures to make this possible? In principle, what should be the order in which previous policies should be reversed? What might a “new normal” policy setting look like? Is full transparency a good thing or a bad thing?

And to this uncertainty must be added the even greater uncertainty over the implications of tightening. What happens if exit is “too fast”, say as in the US in 1937? Could sustainable growth also be threatened by exit being “too slow”, as in the US in the early 1970’s? In any event, what is the level of post crisis “potential” in the United States. To what extent, and through what channels, might international developments abroad feed back on US inflation and unemployment?<sup>7</sup> On all of these questions, reasonable people could easily propose different answers.

Exit will also be delayed due to pressure from those benefiting from the status quo. As noted above, debtors are gaining at the expense of creditors, and governments are essentially the biggest debtors of all. Indeed the sustainability of sovereign debt service for some countries would be highly questionable even if rates were to rise less than to the “old normal”. Some return to the post War period of financial repression might then be expected. Moreover, those currently speculating in risky financial markets are making huge profits and they will lobby vigorously to ensure this continues. Not least, they will emphasize the dire results of raising policy rates for zombie banks and companies with high levels of leverage and debt respectively. This predicament is what the BIS increasingly refers to as “the debt trap”. Raising rates is not an option, but leaving rate low only makes the underlying problem worse.

To all this we must add that central bankers too are human. They will worry about the capital losses they might have to record when credit conditions tighten. Losses could easily damage their reputation for “competence”. As

---

<sup>7</sup> Developments in China seem to have exerted a significant influence on the FOMC’s decision this September not to raise the policy rate. Members of the FOMC have taken pains to emphasize that this was not done in China’s interests, but due to the associated knock on effects (perhaps aggravated by associated slowdowns elsewhere) on the United States itself.

well, the possibility of a popular call for recapitalization, and the need to strike a political deal with their respective Treasuries, would be a further source of concern. Finally, if tightening did prove to be “too fast” and the economy then faltered, central banks are aware that the blame will fall totally on their shoulders. For these reasons directly affecting the central bank’s own interests, plus all the indirect pressures noted above, the bias seems likely to be that of exiting “too late”. In effect, staying put will become the central banks’ default option.

### Possible end games

Given the enormous uncertainty remaining as to what should be done by central bankers (an analytical issue), what could be done (a legal and regulatory issue) and what will be done (a political economy issue), the best I can do is suggest certain scenarios. In any event, one characteristic of complex systems is that precise forecasting is literally impossible. In the scenarios which I sketch out, policies other than monetary policy are taken as given.

One possibility is that the current, relatively slow pattern of global growth continues, or even weakens further as the headwinds of debt accumulate. In that case, both policy rates and longer term risk free rates will stay very low. However, in this environment, current equity prices and risk spreads will be increasingly seen as unrealistic. Resulting sharp declines in the prices of such financial assets are likely to catch out many speculators and could, potentially, do further harm to banking systems in countries already affected by the crisis. Unaffected AMEs, where household debt and property prices have continued to rise since 2007, might be particularly affected. Banks everywhere will, in any event, be further weakened by slow growth that raises the number of non performing loans. Both the demand for and the supply of credit will remain very subdued.

In this scenario, the current low level of inflation (in the AMEs) seems likely to decelerate further. A dangerous, Fisher type debt-deflation could very

well emerge with falling prices exacerbating the real burden of debt service. Expectations of future deflation might become increasingly entrenched, with further negative effects on current spending. Given the biases noted above (leading to “exit” being delayed), still more aggressive use of monetary policy would likely be the chosen option to respond to this, with central bank balance sheets expanding still further.

On the one hand, this might finally succeed in promoting more spending and the expansion of the real economy. Deflationary expectations might then be avoided. The possibility cannot be ruled out that the tepid response of spending to the monetary stimulus to date has been simply due to the stimulus being too small. On the other hand, there is also the possibility that this process might get out of hand. Still more monetary expansion might cause inflationary expectations to ratchet sharply upward, leading to a sudden fall in the demand for both base money and broader stocks of money as well. While the demand for real assets would rise, the effects on current production of significantly higher levels of inflation are harder to predict but could well be negative.

A sudden speeding up of the inflationary process would be more likely in countries where both government deficits and debts were very large. Thus governments would have to borrow but could not get adequate private sector financing. This would raise expectations of “fiscal dominance” further eroding the private sector’s demand for government paper. Bernholz (2006) has pointed out that such processes, potentially leading to hyperinflation, are not uncommon in history. Such outcomes would also be consistent with those described in the famous article by Sargent and Wallace (1981). At the moment, Japan is clearly the country to watch in this regard.

A second scenario could have a happier ending, though even that is not guaranteed. Suppose that significantly faster growth does reemerge in the global economy, and that bond markets react in an “orderly” way. Thus monetary policy could begin to tighten and low bond rates would move up

only slowly. Ideally, they would rise less than the increased real growth rate, implying a gradual reduction in the burden of debt over time. In this world, current high equity prices and tight risk spreads might seem generously valued, but they would be fundamentally justified by future growth prospects.

For this scenario to be realized, it must also be assumed that central banks, in spite of the “exit” bias referred to earlier, do not make any significant mistakes with respect to controlling inflation. Were inflation and inflationary expectations to rise in this faster growth scenario, a belated monetary response might lead to recession, as has been common in the post War period. In this case, we would be back to the first scenario which is not where we want to be. The risk of such a policy mistake (exiting “too late”) is not insignificant. Orphanides (2001) has documented how hard it is to calculate output “gaps” based on real time data. Borio et al (2013) show that it is even harder in the wake of a financial boom that gives a falsely high reading for potential.

A third scenario is a variant of the second. Suppose again that significantly faster growth does reemerge in the global economy, but that bond markets react in a “disorderly” way. That is, long rates rise faster than the projected increased rate of growth in the real economy implying that debt service burdens worsen rather than ease. There are various reasons why this might be expected.

First, if unusual central bank actions were successful in holding bond rates down, as suggested above, then the reversal of such policies should reverse these results. Momentum could develop quickly and overshoots in financial markets are common. Second, private sector investors have also been encouraged by central banks to be long risk and short volatility. A rush to the exits could have significant effects on both. Third, trading of a stabilizing kind might also be impeded by the lack of collateral, now tied up in various ways due to both recent regulatory changes (e.g. exchange traded derivatives) and to the expansion of central bank balance sheets.

Further, reflecting new capital charges, dealers' inventories of risky securities (corporate securities in particular) are now far below where they were prior to the crisis. Fourth, if what happens in AME's leads to capital outflows from EMEs, sales from reserve managers would put still more downward pressure on bond prices in AMEs.

In this case, sharply higher bond rates and associated financial disruption could also abort the recovery in AMEs, even in the face of further central bank easing to avoid this outcome. Capital outflows from EMEs might lead to the same outcome in their case. Even assuming that inflation and inflationary expectations were not shocked upwards by ever more aggressive monetary easing, we are again back to the first scenario where we do not wish to be.

## **E. A Better Way Forward Than “More of the Same”?**

The above scenarios are stories not forecasts. Nevertheless, they indicate some of the profound risks we face in relying totally on central banks to restore strong growth. If it succeeds, which seems doubtful, it seems unlikely to be either “balanced or sustainable”. Much better would be other policy measures which would begin by recognizing that the fundamental problem is one of excessive debt and possible insolvency. Such problems must be solved by governments, not central banks. Other policies, again in the realm of governments and not central banks, would also help materially.

First, debt restructuring and outright forgiveness must be used much more aggressively. As noted by Reinhart and Rogoff (2013) “It is difficult to envision a resolution to the current five year old crisis that does not involve a greater role for explicit restructuring”. A number of commentators have suggested debt for equity swaps, as a means of crisis resolution, and more use of risk sharing instruments to help prevent future crises<sup>8</sup>. Debt restructuring and forgiveness will in turn likely call for the recapitalization

---

<sup>8</sup> For example, see Buiter (2009)

of banks and sometimes for the closure of financial institutions. The legal framework must be made ready for this.

Second, structural reforms should be aggressively pursued to promote growth, and the capacity to service debt, as well as to help resolve trade imbalances. Freeing up the services sector in many countries with large trade surpluses would be particularly helpful in achieving both objectives. Raising retirement ages everywhere is crucial.

Third, major increases are required in public investment in infrastructure. This will increase both demand and supply potential going forward. Both are required for “strong, sustainable and balanced growth”. Financial markets must be made to understand that an increase in government liabilities, matched by productive assets, is very different from an increase in liabilities alone. Hopefully, such action would help to stimulate private investment as well. In any event, we should identify why private investment levels in AMEs are so low and propose measures to raise them, including changes in compensation practices that effectively encourage asset stripping.

Fourth, governments should use what measures they still have at their disposal to increase aggregate demand. A few still have fiscal room, and current account surpluses to match. Moreover, the available room for near term fiscal easing could be expanded by the communication of credible plans to get sovereign debt ratios on a declining path over time. As well, China should pursue vigorously its stated intention to increase consumption through ending financial repression, allowing more exchange rate appreciation and raising wages. Other countries that have used similar strategies to pursue export led growth, and incidentally large trade surpluses, need to ask themselves whether such strategies are not harmful to hopes for global recovery. They too may have gone past their due date.

We should be under no illusions as to how hard it will be politically for governments to carry out the policies suggested here. That is why they

have come to rely so heavily on central bank stimulus in the first place. As suggested above, absent these government policies that could work, we are destined to follow “more of the same” central bank policies that likely will not work to strengthen aggregate demand and also threaten material economic damage over time. Moreover, “déjà vu all over again” raises still broader risks. Future economic setbacks tied to ultra-easy money could threaten social and political stability, particularly given the many signs of strain already evident worldwide. In short, the policy stakes are very high.

## Bibliography

1. Bernholz P (2006) “Monetary Regimes and History: Economic and Political Relationships” MPG Books, Cornwall, UK.
2. Borio C, Disyatat P and Juselius M (2013) “Rethinking Potential Output: Embodying Information about the Financial Cycle” BIS Working Papers 404, Basel, February
3. Buitter W (2009) “Islamic Finance Principles to Restore Policy Effectiveness” Financial Time/Blog/Maverecon, July 22
4. Buttiglione L, Lane P R, Reichlin L and Reinhart V (2014) “Deleveraging? What Deleveraging?” 16<sup>th</sup> Geneva Report on the World Economy, International Centre for Monetary and Banking Studies, Geneva
5. Friedman M (1968) “The Role of Monetary Policy” American Economic Review 58 (1) March, pp 1-17
6. Hayek F A (1933/2012) “Monetary Theory and the Trade Cycle” Translated by N Kaldor , Mansfield Center, Connecticut, Martino Fine Books
7. Keynes J M (1930) “The Treatise on Money” Harcourt Brace and Company , New York
8. Keynes J M (1936) “The General Theory of Employment, Interest and Money” Cambridge University Press, Cambridge UK
9. Koo R (2003) “Balance Sheet Recession” John Wiley and Sons, Singapore
10. Minsky H P (1986) “Stabilizing An Unstable Economy” McGraw Hill, New York
11. Orphanides A (2001) “Monetary Policy Rules Based on Real Time Data” American Economic Review, 91, pp 964-985

12. Phelps E S (1968) "Money Wage Dynamics and Labor Market Equilibrium" Journal of Political Economy, Chicago University Press, 76, pp 678-711
13. Reinhart C and Rogoff K S (2013) "Financial and Sovereign Debt Crises: Some Lessons Learned and Those Forgotten" " International Monetary Fund Working Paper 266, Washington DC
14. Rey H (2013) "Dilemma not Trilemma: The Global Financial Cycle and Monetary Independence" Symposium on "The Global Dimensions of Unconventional Monetary Policy", Sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August
15. Sargent T J and Wallace N (1981) "Some Unpleasant Monetarist Arithmetic" Federal Reserve Bank of Minneapolis Quarterly Review, Fall, pp 1-17
16. Shin H S (2011) "Global Liquidity" Remarks at an IMF Conference on "Macro and Growth Policies in the Wake of the Crisis" Washington D C, March 7-8