Growth or Austerity: The Policy Dilemma

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Abstract

The 2008 global financial and economic crisis, which continues to fester, elicited a strong, globally coordinated policy response orchestrated by G20 Leaders. The near-term impact was spectacular, but after about five years the global economy and financial system are still in a shambles in most advanced economies. A new and dangerous fault line has opened up in the Euro Zone. This has generated an animated debate over whether the policy response was entirely appropriate, whether the protracted use of essentially short-term policy instruments has negative medium- to long-term consequences, and what should be the appropriate policy stance going forward. Concerns over public debt, growth and inflation down the road have divided economists and policymakers into two major camps. Those who give precedence to growth favour continuing with macroeconomic stimulus; those that give precedence to the damaging impact of sustained public deficits and debt favour austerity. If monetary policy is ineffective, and public finances are dangerously strained but can also not be repaired without growth, where is the policy space and what are the possible policy instruments to get growth back on track? When and how should these extraordinary policies be rolled back? Finally, what are the policy lessons for emerging markets and developing countries from the recent experience and debate in advanced countries?

1. The Global Financial and Economic Crisis

Global growth averaged 3.4 per cent annually in real terms in the decade 1994–2003 (2.8 per cent in advanced economies and 4.4 per cent in emerging markets and developing economies). It rose to an

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The 2008 financial crisis was triggered by the excesses of financial institutions and markets against a backdrop of rising global imbalances and loose monetary policies. It was thus the failure of the market and the private sector on the one hand, and of the regulatory structure to prevent and rein in these excesses on the other.

impressive 5 per cent in the four years 2004–07 (about 3 per cent in developed economies and 8 per cent in EMDEs). This period is often described as the "Great Moderation", or the "Goldilocks Economy", since it combined record levels of growth with low interest rates and consumer price inflation and overall macroeconomic stability. This macroeconomic stability was more apparent than real, for the Great Moderation was followed by one of the most severe global financial and economic crises in the post-war period. As a result, global growth fell to 2.8 per cent in 2008 and –0.6 per cent in 2009 (0 per cent and –3.6 per cent in advanced economies, and 6.1 per cent and 2.7 per cent in EMDEs).[1] Although the global economy has since grown out of recession, this crisis is by no means over.

The 2008 financial crisis was triggered by the excesses of financial institutions and markets against a backdrop of rising global imbalances and loose monetary policies. It was thus the failure of the market and the private sector on the one hand, and of the regulatory structure to prevent and rein in these excesses on the other. Driven by the need to achieve higher profitability in the face of falling returns and acute competition, private financial institutions, including banks and particularly the relatively unregulated shadow banking system, resorted to innovations and over-leverage which proved to be destructive of the financial system. The ensuing financial panic had a devastating impact on the real economy, as most advanced economies slipped into recession, and growth in EMDEs fell sharply.

2. The G20 Policy Response

The G20 orchestrated a much acclaimed coordinated global policy response to the financial and economic crisis, mindful of the policy lessons learnt from the Great Depression, to which the current Great Recession is sometimes compared.[2]

As a result, the focus was on aggressive liquidity management by central banks[3] (to effectively counter deleveraging and deflationary forces that the policy response to the Great Depression had failed to

[1] IMF, *World Economic Outlook*, October 2012.

[2] Although there are several parallels, it is important to note that the rapid drop in both output and employment was far steeper during the Great Depression. For a detailed discussion of the policy response to the crisis see Alok Sheel, "The Macroeconomic Policy Response to the International Financial Crisis through an Indian Prism", in *Asian Perspectives on Financial Sector Reforms and Regulation*, Masahiro Kawai and Eswar Prasad, eds., Brookings Institution Press 2011. Also available as e-book ISBN: 978-0-8157-2211-3.

[3] The lead in this regard was taken by the US Federal Reserve which had at its helm a distinguished scholar of the Great Depression. Chairman Ben Bernanke rapidly lowered the benchmark Federal Funds rate to the zero-bound from 2 per cent over a four-month period between August and December 2008, and expanded the Federal Reserve's balance sheet from around US$900 billion in July 2008 to US$2.2 trillion in April 2009. The balance sheet currently stands at around US$2.9 trillion (as of June 27, 2012) (US Federal Reserve, http://www.federalreserve.gov/). Other advanced country central banks followed the Federal Reserve lead.

address) and an equally aggressive use of fiscal policy[4] (a tool sparingly used during the Great Depression[5]) to restore financial sector balance sheets and to provide short-term fiscal stimulus to support demand and nurse the economy back to growth. Many experts later drew pointed attention to the disastrous impact of the sharp fiscal correction of 1937 in the United States that derailed the strong recovery in the US economy.[6] After sounding an initial note of caution, including the negative impact on debt dynamics of extended fiscal stimulus, the IMF subsequently advised the G20 to stagger the fiscal exit calibrated to the slow recovery, and its assessment of fiscal multipliers also shifted upwards.[7] The G20 was also mindful of keeping international trade open,[8] in view of the negative cascading impact of the Smoot-Hawley tariffs that according to many experts tipped a big recession into the Great Depression.[9]

Over the medium term, it was expected that structural reforms (to boost growth potential and competitiveness) and demand rebalancing (to rotate final consumption demand from deficit countries, where there may be a permanent reduction in demand, to surplus countries) would strengthen the recovery, make it sustainable and also facilitate the rebalancing of demand back from the public sector to the

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[4] The fiscal balance of the United States deteriorated sharply from –1.2 per cent in 2007 to –3.2 per cent in 2008, –10.1 per cent in 2009, –9.0 per cent in 2010 and –8.7 per cent in 2011 (*The Budget and Economic Outlook: Fiscal Years 2012–2022*, Congressional Budget Office of the United States, January 2012). The trends in other major advanced countries were similar.

[5] This is certainly the view of Christina Romer, an acknowledged authority on the Great Depression ("Lessons from the Great Depression for 2009", *Proceedings*, The Brookings Institution, March 9, 2009). However, the role of fiscal policy during the Great Depression is the subject of an ongoing lively debate.

[6] The fiscal balance in the USA was positive at the onset of the Great Depression, and turned sharply negative by the mid-thirties as a result of an expansionary fiscal response to the downturn, leading to concerns about fiscal sustainability. The resultant fiscal tightening coincided with another sharp dip in US GDP which had, by 1937, almost recovered to the 1929 level. The role of fiscal policy in the recovery from the Great Depression before the "second dip" is of course contentious. Till recently the focus was more on monetary policy driving the recovery. (E. Cary Brown, "Fiscal Policy in the Thirties: A Reappraisal", *The American Economic Review*, Vol. 46, No. 5, December 1956, and more recently Christina D. Romer, "The Nation in Depression", *Journal of Economic History*, 1992, where she concludes that it was mainly monetary policy that drove the recovery.) More recently, however, Gauti Eggertson (*American Economic Review,* 2008) and Barry Eichengreen (*Economic Policy*, 2010) have underscored the role played by fiscal policy in the recovery.

[7] See fn 21.

[8] The WTO has made regular assessments of protectionist measures taken by G20 countries since the global financial crisis broke out. While its latest (sixth and seventh) reports sound warnings on rising protectionism, right up to its fifth report, covering the period up to April 2011, it found no significant increase in trade barriers (www.wto.org/english/news_e/...e/g20_wto_report_may11_e.doc; www.wto.org/english/news_e/...e/g20_wto_report_oct11_e.doc).

[9] Expert opinion is more circumspect, sceptical and divided on the issue (Douglas Irwin, *Peddling Protectionism: Smoot-Hawley and the Great Depression*, Princeton University Press, 2011).

private. In other words, two distinct "demand rebalancings" were envisaged: from deficit to surplus countries, and from public to private. The G20 launched their seminal "Framework for Strong, Sustainable and Balanced Growth" at their third ("Pittsburgh") Summit just as it seemed that the global economy had turned the corner and it was therefore time to address long-term issues.

3. Policy Impact

The initial response of the real economy to the strong, coordinated policy actions was encouraging. This was particularly so as at first it appeared that this was not just another recession, or downturn in the business cycle, and that the world could be headed for a second Great Depression. Barry Eichengreen and Kevin O'Rourke famously tracked quarterly data on the vox.eu website, comparing major macroeconomic parameters of the Great Depression with those of the Great Recession. Initial updates were alarming, as the declines in world industrial production, trade volume and equity markets were even steeper during the recent financial crisis.[10] Then, remarkably, the global economy started recovering, and gradually the "D" word yielded to the "R" word. Global growth in 2010 was a robust 5.1 per cent (3 per cent in advanced economies and 7.4 per cent in EMDEs), almost back to where it was before the crisis.

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The biggest difference between the Great Depression and the Great Recession is statistical. US GDP fell by 29 per cent, German and French GDP by 15–16 per cent, and even in the UK and Italy, where the impact was less, the fall was 5–6 per cent. In comparison, despite the recent recession being the worst on record in the post-war period, the decline in growth between 2007 and 2009 was only 4–5 per cent in the major advanced economies.[11] Thus the G20 could declare at their third Summit at Pittsburgh in November 2009 that "It (i.e. the policy response) worked".[12]

4. The Recovery in Comparative Perspective

In retrospect, it is clear that the G20 declared victory too early, without waiting for the rotation of demand either from deficit to surplus countries, or from the public to the private sector, which alone could have made the recovery self-sustaining. The nature of the recovery from the Great Recession is intriguing. Just as it initially appeared that

[10] Barry Eichengreen and Kevin H. O'Rourke, "A Tale of Two Depressions", http://voxeu.org/article/tale-two-depressions-what-do-new-data-tell-us-february-2010-update.

[11] The numbers for the Great Depression are derived from Angus Maddison, "Historical Statistics of the World Economy: 1–2008 AD" (http://www.ggdc.net/MADDISON/oriindex.htm), and those for the Great Recession from IMF, *World Economic Outlook,* April 2012.

[12] G20 Leaders' Statement, Pittsburgh, September 24–25, 2009, http://www.g20.utoronto.ca/2009/2009communique0925.html.

the deterioration in macroeconomic variables was worse than in the initial quarters of the Great Depression, it now appears that the present recovery in advanced economies is weaker than it was from the Great Depression. Global growth fell back to 3.8 per cent in 2011 (1.6 per cent in advanced economies and 6.2 per cent in EMDEs), and is projected to be even lower, at 3.3 per cent in 2012 (1.3 per cent in advanced economies and 5.3 per cent in EMDEs).[13] What this means is that while on average global growth is currently not appreciably below the pre-boom period, EMDEs are growing at a rate higher than, and advanced countries at about half, the pre-boom growth rates. This is despite the fact that advanced economies are still on macroeconomic life support.

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Economic history indicates that the worse the recession, the more robust the rebound to make up the lost output. By this yardstick, since this is the worst recession in the post-war period, it was expected that the recovery in advanced countries would also be the most robust. This, however, does not appear to be happening. The current recovery has consequently been described by some experts as the "worst economic recovery in history".[14] We need to understand why this is the case.

Following steep falls in output in four successive years between 1930 and 1933, the American economy grew at around 10 per cent annually, well over its trend growth rate, over the next four years. The output loss was fully recovered by 1937, at which point the US economy fell into what is described as a "second dip" recession, from which it emerged only after the onset of the Second World War. Likewise, the UK, Germany, Italy, and Australia recovered the entire output loss by 1934–1935, and Japan by 1932.[15] The recovery from recessions in the post-war period was equally rapid, as they were followed by quarters of above trend growth that quickly recouped the lost output.

During the Great Recession, US output at constant prices fell for only two successive years (2008 and 2009), but it never witnessed the above trend recovery that was a characteristic of past recoveries, including from the Great Depression. Thus, despite the relatively modest decline in aggregate output compared to the Great Depression, nominal GDP returned to the pre-crisis level in the US only by 2011. Growth continues to be below the pre-crisis trend. The United Kingdom and the Euro Area have still to return to their pre-crisis nominal GDP

[13] IMF, *World Economic Outlook,* October 2012, p. 190.

[14] Edward P. Lazear, "The Worst Economic Recovery in History", *The Wall Street Journal*, April 3, 2012. Harvey Golub, "How the U.S. Recovery Went Wrong", *The Wall Street Journal*, May 24, 2012. Edward Lazear was chairman of the US President's Council of Economic Advisers from 2006 to 2009 and is a Professor at the Stanford University's Graduate School of Business and a Hoover Institution fellow. Harvey Golub is former Chairman and CEO of American Express.

[15] Maddison, *op. cit.*

levels, and have instead slipped back into what is by all counts a second dip recession. The US, the UK and Euro Area have still not returned to trend growth, raising the question whether their pre-crisis trend growth has been permanently damaged.[16] While the current recession was deeper than those in the recent past, the recovery has been appreciably slower.[17]

5. Current State of the Global Economy and the Policy Dilemma

In retrospect, therefore, despite aggressive monetary and fiscal policies, international trade being kept by and large open, and seven G20 Summits to coordinate international policies to address the underlying weaknesses and fault lines in the global economy, the recovery remains tepid, uneven and fragile. Private investment and confidence—animal spirits—are still to return. Unemployment levels continue to be at crisis highs if we include new entrants into the workforce and discouraged workers who have stopped looking for employment and hence dropped out of the workforce.[18] Emerging market economies initially recovered strongly, but this recovery is weakening. How could it be otherwise, since a substantial chunk of their final output is consumed in high income advanced economies?

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[16] A plausible explanation for this is that the recovery from balance sheet recessions is longer and weaker, as pointed out by Reinhart and Rogoff. Another plausible argument is that the exceptionally high growth during the Great Moderation was based on unsustainable demand propped up by financial excesses, hyper leverage and asset price inflation rather than on rising real wages, which were in fact stagnant. However, as Barry Eichengreen has recently reminded us, there are unresolved methodological issues and therefore a high degree of uncertainty in measuring the decline in growth potential in the post-crisis phase (Barry Eichengreen, "Crisis and Growth in the Advanced Economies: What We Know, What We Don't and What We Can Learn from the 1930s", Workshop on *Restoring Inclusive Growth in Advanced Economies: A Conversation with Economists and Policy Makers from G20 Countries*, October 7–8, 2010, New York University, http://www.indiapolicyforum.org/documents/Eichengreen_paper.pdf).

[17] http://economistonline.muogao.com/2010/07/deeper-recession-slower-recovery.html.

[18] According to figures published by the Bureau of Labor Statistics of the US Department of Labor, the labour participation rate in the US has fallen sharply from 66 in 2008 to 63.6 in September 2012, a fall of 2.4 per cent in just four years. The labour participation rate in the US rose continuously during the post-war period from 58.3 in 1947 to peak at 67.1 in 2000. It has since been falling gradually, perhaps reflecting the decline in manufacturing. This process has accelerated since the onset of the Great Recession.

[19] Alok Sheel, "It's a Long Road from Keynes to Cannes", *Business Standard*, October 30, 2011, http://business-standard.com/india/news/alok-sheel-itslong-roadkeynes-to-cannes/453957/.

The recovery that has taken place has all along been based on extraordinary macroeconomic life support, and haunted by fears of a second dip recession.

The fact of the matter is that as the attention of the G20 turned from short-term macroeconomic management to long-term external demand rebalancing, structural reforms and fiscal consolidation, the rebalancing of internal demand from consumption to investment in deficit economies, and from investment to consumption in surplus economies, never took place. This rebalancing could have generated the confidence to facilitate the second rebalancing, from the public sector to the private, which alone could have made the recovery self-sustainable. The perceived need for persisting with stimulus on account of the absence of demand rebalancing has strained the balance sheets of both sovereigns and central banks in advanced countries. The continuing crisis, therefore, is not entirely attributable to the subsequent Euro Zone crisis.

In retrospect, G20 policy cooperation was effective in the early phase of the global financial crisis where the global economy seemed to be teetering on the edge of a cliff. Policy action in this phase was undifferentiated across countries, as it involved aggressive fiscal and monetary stimulus by all countries. This led to the initial recovery of 2010. This global cooperation, however, was less successful when G20 countries agreed strategies that called for differentiated policy action by country groupings (such as advanced deficit countries, emerging surplus countries, those with fiscal space, etc.), as well as differentiated exit on account of the uneven recovery and market response. Consequently, the nature of demand rebalancing was not as envisaged by the G20. Countries that needed to expand consumption, expanded investment instead. Those that needed to switch from consumption to investment and increase savings, simply switched demand from private to public. As a result, the recovery of 2010 could not be sustained.

Macroeconomic “Keynesian” policies can stimulate the economy back to sustainable growth when the decline in private demand is cyclical. The resultant increase in public debt can be brought down subsequently by the robust growth that usually follows deep recessions. However, in situations where there is a permanent loss in income[20] or demand, such policies may not be very effective. Tepid growth can of course be ensured through public expenditure, as is the case presently, but fiscal multipliers are notoriously weak and volatile,

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[20] It is estimated that between January 2009 and June 2012, median household income in the United States, adjusted for inflation, declined from US$54,983 to US$50,964, tantamount to almost one month’s salary a year (Gordon Green and John Coder, “Household Income Trends: June 2012”, *Sentier Research*, July 24, 2012, http://www.sentierresearch.com/reports/Sentier_Household_Income_Trends_Report_June2012_07_24_12.pdf).

The demand rebalancing from public to private that was necessary to sustain the recovery of 2010 has not taken place. As a result, policymakers were constrained to continue the stimulus over an extended period, leading to a negative feedback loop between the sharp increase in public debt and lower growth.

TABLE 1
General Government Balance: Per Cent of GDP

	2006	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*
Advanced							
US	–2	–2.7	–6.7	–13.3	–11.2	–10.1	–8.7
UK	–2.6	–2.7	–5.1	–10.4	–9.9	–8.5	–8.2
Japan	–3.7	–2.4	–4.1	–10.4	–9.4	–9.8	–10
Euro Area	–1.3	–0.6	–2.1	–6.4	–6.2	–4.1	–3.3
Germany	–1.6	0.2	–0.1	–3.2	–4.1	–0.8	–0.4
France	–2.4	–2.7	–3.3	–7.6	–7.1	–5.2	–4.7
Italy	–3	–1.5	–2.7	–5.4	–4.5	–3.8	–2.7
Spain	2	1.9	–4.2	–11.2	–9.4	–8.9	–7
Greece	–6	–6.8	–9.9	–15.6	–10.5	–9.1	–7.5
Portugal	4.1	–3.2	–3.7	–10.2	–9.8	–4.2	–5
Ireland	2.9	0.1	–7.3	–13.9	–30.9	–12.8	–8.3
BRICS							
Brazil	–3.5	–2.6	–1.3	–3	–2.7	–2.6	–2.1
Russia	8.3	6.8	4.9	–6.3	–3.5	1.6	0.5
India	–6.4	–4.2	–8.7	–10	–9.4	–9	–9.5
China	–0.7	0.9	–0.7	–3.1	–1.5	–1.2	–1.3
South Africa	0.8	1.5	–0.5	–5.3	–4.8	–4.6	–5

Source: IMF, *Fiscal Monitor (various issues).*

and tend to decline over time.[21] The demand rebalancing from public to private that was necessary to sustain the recovery of 2010 has not taken place. As a result, policymakers were constrained to continue the stimulus over an extended period (*Table 1*), leading to a negative

[21] Robert Barro, "Stimulus Spending Keeps Failing", *The Wall Street Journal*, May 9, 2012, http://online.wsj.com/article/SB10001424052702304451104577390482019129156.html. John F. Cogan, Tobias Cwik, John B. Taylor, Volker Wieland, "New Keynesian versus Old Keynesian Government Spending Multipliers", February 2009. The arithmetic of fiscal multipliers is very contentious, with estimates ranging between negative and +2. Even those who are sanguine regarding the efficacy of fiscal stimulus concede that multipliers are notoriously circumstances specific: lower in open economies, developing economies, small countries, those with flexible exchange rates and with high levels of public debt (Ethan Ilzetzki, Enrique G. Mendoza and Carlos A. Végh, "How Big (Small?) are Fiscal Multipliers?", IMF Working Paper WP/11/52 March 2011); higher in depressed economies with output gaps and where interest rates are constrained by the zero-bound (J. Bradford DeLong and Lawrence H. Summers, "Fiscal Policy in a Depressed Economy", March 20, 2012); and also dependent on the design of stimulus programmes (Christina Romer and Jared Bernstein, "The Job Impact of the American Recovery and Reinvestment Plan", January 10, 2010; Claudia R. Sahm, Matthew D. Shapiro and Joel Slemrod, "Check in the Mail or More in the Paycheck: Does the Effectiveness of Fiscal Stimulus Depend on How It Is Delivered?", June 14, 2011). The IMF's original advice, based on its own research on the efficacy of fiscal policy and published in its *World Economic Outlook* of October 2008, Chapter 5, was to sound a note of caution, as its countercyclical impact was on the whole weak (on average fiscal multipliers were about 0.1 to 0.2), although stronger in developed than in developing countries, and stronger for automatic stabilisers than for discretionary stimulus. Moreover, fiscal stimulus had worked mainly where it was "timely,

feedback loop between the sharp increase in public debt and lower growth as pointed out by Reinhart and Rogoff.[22]

One would have thought that policymakers had learnt the right lessons from the oil price shock of the seventies, which administered a lasting negative shock to final disposable income in oil importing countries. Several western economies tried to stimulate their way out of the problem. The result was stagflation, until the US Federal Reserve under Paul Volcker forced painful adjustment on America by raising—rather than lowering—interest rates. Since inflationary tendencies are not much in evidence in advanced countries presently, despite high levels of deficit financing, it could be argued, as economists like Joseph Stiglitz, Christina Romer and Paul Krugman have done, that the stimulus administered was too small to be effective, implying that there is scope for further stimulus. However, as we have seen, others have argued that the design of the stimulus was faulty, resulting in low or negative fiscal multipliers and because of Ricardian equivalence. Still others argue that dysfunctional financial intermediation is impairing the efficacy of stimulus measures as monetary transmission mechanisms are still clogged. In this regard it is pertinent to note that stagflationary tendencies have already reared their head in emerging markets, like India, where financial intermediation was never a problem.

Although neither private demand nor the financial system is back on its feet, unlike the crisis of 2008 which was a classic financial panic induced by a crisis of confidence in private sector balance sheets, the current crisis has been intensified by a crisis of confidence in public sector balance sheets in advanced countries, particularly in the Euro Zone periphery, which has generated fears of a cataclysmic break-up of the Euro Zone. Recent rating downgrades of the US, France and other top rated sovereigns are also a reflection of the lack of credibility in official debt stabilisation programmes, even though their current borrowing costs remain low.

Here then is the dilemma. Advanced economies have been growing significantly below trend for several quarters despite aggressive policy support. There is a pressing need to find a solution to the slow growth and high unemployment. At the sixth and seventh G20 Summits at Cannes and Los Cabos held in 2011 and 2012 respectively,

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temporary and targeted", as continued stimulus led to concerns about debt sustainability. However, as the crisis dragged on, the IMF's own assessment of fiscal multipliers shifted significantly upwards to around 0.2 to 0.5, and even higher in some cases, in the *World Economic Outlook* of October 2010 (pp. 165–166), and again in the *World Economic Outlook* of October 2012. The IMF's current view is, "If the multipliers underlying the growth forecasts were about 0.5…our results indicate that multipliers have actually been in the 0.9 to 1.7 range since the Great Recession. This finding is consistent with research suggesting that in today's environment of substantial economic slack, monetary policy constrained by the zero lower bound, and synchronized fiscal adjustment across numerous economies, multipliers may well be above 1" (Chapter 1, Box 1.1, pp. 41–43).

[22] See fn 83.

Leaders therefore put growth and jobs at the heart of the recovery in their Action Plans for the Framework for Strong, Sustainable and Balanced Growth.

The short-term answer lies in increasing government expenditure but medium-term considerations require that the fiscal deficit and debt are brought under control.[23] In fact, some will argue that even short-term considerations require reduction in the fiscal deficit as markets might penalise the government by increasing borrowing costs, and because the medium to long term is nothing but an aggregation of the short term.

This fundamental tension pitting austerity against growth is reflected in the G20's current policy guidance in the Leaders' Cannes and Los Cabos Statements. In effect, these statements exhort G20 countries to continue to stimulate if they have fiscal space, and to consolidate if they do not. It is however intriguing that while the Los Cabos Leaders Declaration identified specific countries with fiscal space that could continue with stimulus, it failed to identify specific countries with fiscal space in the Los Cabos Action Plan. This reflects the deteriorating general government debt/GDP ratios of countries committing to further discretionary measures. These have deteriorated beyond the prudential 60 per cent envisaged in the Maastricht Treaty, and also considered as the prudent upper limit by the IMF. Indeed in several advanced countries these ratios already exceed 90 per cent, beyond which Reinhart and Rogoff have found strong historical evidence for a downward pressure on growth. The borrowing costs of these countries are no doubt low currently because of the flight to quality, but market confidence can be fickle. This severance between fiscal space and stimulus allowed the US—which was not included in the group of countries with fiscal space at Cannes, and now faces a "fiscal cliff" deriving from the double whammy of automatic federal expenditure cuts and expiry of tax cuts—to commit to continuing stimulus at the Los Cabos G20 Summit.

Continued fiscal stimulus in the absence of strong growth has severely dented sovereign balance sheets. This damage is most severely manifest in peripheral Euro Zone countries that have limited means and tools for persisting with expansionary fiscal policies on account of their monetary union.

6. The Explosion in Public Debt: The Case for Austerity

Continued fiscal stimulus in the absence of strong growth has severely dented sovereign balance sheets. This damage is most severely manifest in peripheral Euro Zone countries that have limited means and tools for persisting with expansionary fiscal policies on account of their monetary union. As a result, these countries are being forced into fiscal consolidation despite a severe recession in economic activity on account of the adverse market reaction that has seen the yields on sovereign bonds rise in even bigger and stronger economies such as

[23] C. Rangarajan, The Policy Dilemma, *Business Standard*, August 22, 2011, http://www.business-standard.com/india/news/c-rangarajanpolicy-dilemma/446531/.

Italy, Spain and even France. Weaker peripheral Euro Zone countries like Greece and Portugal have lost market access altogether.

Even where borrowing costs have not risen, and paradoxically even fallen on account of a flight to safety, public debt as a proportion of national income has risen to levels unprecedented in peace time. With debt-GDP ratios soaring to such high levels, it appears imprudent to continue with an expansionary fiscal policy as market confidence can be fickle.[24] If and when markets revolt and borrowing costs rise, existing levels of debt would look unsustainable.[25] These analysts point to the serious problems faced by Greece, Portugal, Ireland, Iceland and certain other European countries, including Spain, Italy and France. In the United States, too, the recent rating downgrade itself points to the need to bring down fiscal deficit and debt to GDP ratio to more reasonable levels.

Kenneth Rogoff and Carmen Reinhart in their seminal work on global economic history, spanning several centuries, have found that debt/GDP ratios in excess of 90 per cent are destabilising and have adversely impacted economic growth.[26] Most advanced countries have already reached this threshold (*Table 2*). The Maastricht Treaty and the IMF use an even tighter threshold of debt sustainability at 60 per cent of GDP.[27] Another common measure of sovereign debt sustainability is the Domar Debt Sustainability Equation, which calibrates debt sustainability to expected rates of interest payable on government debt and revenue/economic growth. Once the unusually low borrowing costs, and therefore interest payments, in major advanced countries rise, their debt equations will look increasingly unsustainable at current trends of growth. By all these measures current levels of debt in advanced economies look unsustainable. This has led to calls for fiscal tightening in some places, and has also constrained central banks to keep monetary policy unusually accommodative *inter alia* to keep sovereign borrowing costs low. Sustained use of what are essentially short-term macroeconomic policy tools has induced second round policy distortions such as volatile commodity prices and capital flows,

With debt-GDP ratios soaring to such high levels, it appears imprudent to continue with an expansionary fiscal policy as market confidence can be fickle. If and when markets revolt and borrowing costs rise, existing levels of debt would look unsustainable.

[24] Government debt can accumulate massively for long periods without being checked by markets "… when *bang*!—confidence collapses, lenders disappear, and a crisis hits" (Carmen M. Reinhart and Kenneth S. Rogoff, *This Time is Different: Eight Centuries of Financial Folly*, Princeton University Press, 2009. See especially pp. xxxiii and xxxix).

[25] Although the US Treasury has tried to use the low interest rate environment to lengthen the maturity profile of its debt, such as through "operation twist", about 40 per cent continues to be of maturities up to 2 years. The share of US government debt of 7 years maturity and over has actually fallen from 24.8 per cent in 2007 to 22.6 per cent in 2011 (US Treasury Office of Debt Management, *Fiscal Year 2012 Q1 Report*, p. 21, http://www.treasury.gov/resource-center/data-chart-center/quarterly-refunding/Documents/TBAC%20Discussion%20Charts%20Feb%202012.pdf).

[26] See fn 83.

[27] IMF, *Fiscal Monitor*, April 2012, p. 24.

TABLE 2
General Government Balance and Gross Debt

Percentage of GDP	*2006*		*2012*	
	Balance	*Debt*	*Balance*	*Debt*
Advanced				
France	–2.4	64.1	–4.7	90
Germany	–1.6	67.9	–0.4	83
Greece	–6	107.3	–7.5	170.7
Iceland	6.3	30.1	–2.8	94.2
Ireland	2.9	24.8	–8.3	117.7
Italy	–3	106.1	–2.7	126.3
Japan	–3.7	186	–10	236.6
Portugal	4.1	63.7	–5	119.1
Spain	2	39.7	–7	90.7
United Kingdom	–2.6	43	–8.2	88.7
United States	–2	66.6	–8.7	107.2
EMEs (BRICS)				
Brazil	–3.5	66.7	–2.1	64.1
Russia	8.3	9	0.5	11
India	–6.4	78.5	–9.5	67.6
China	–0.7	16.2	–1.3	22.2
South Africa	0.8	32.6	–5	41.2

Source: IMF, *Fiscal Monitor*, October 2012.

The crisis in confidence in Spain, for instance, derives not so much from current levels of public debt, but because of the market expectation that the Spanish government would be ultimately compelled to bail out the stressed banking system.

unusually low returns on savings, and also fuelled inflationary expectations.[28]

These debt ratios do not include contingent liabilities, such as those explicitly undertaken by the US government for losses of federally owned financial institutions such as Fannie Mae, Freddie Mac and Ginnie Mae,[29] or in the case of Europe, those potentially arising from the need to bail out the financial system as it appears unlikely that these losses could be covered by raising fresh capital from the market at the current juncture. The crisis in confidence in Spain, for instance, derives not so much from current levels of public debt, which, though high, are far lower than those of other stressed countries like Greece, Portugal, Ireland and Italy, but because of the market expectation that the Spanish government would be ultimately compelled to bail out the stressed banking system which is in serious trouble, having accumulated large non-performing loans as a result of a collapsed asset

[28] Bank for International Settlements, *82nd Annual Report*, 2011–12, June 2012, p. 45.

[29] With the US government takeover of these Government Sponsored Enterprises (GSEs) in September 2008, the Federal government has in effect taken on its balance sheet their liabilities which stood at US$6.9 trillion in the third quarter of 2012, equivalent to about 44 per cent of US GDP. These agencies account for about 98 per cent of all fresh housing mortgages issued since 2008, and 85 per cent of all mortgages outstanding (http://www.sifma.org/research/statistics.aspx).

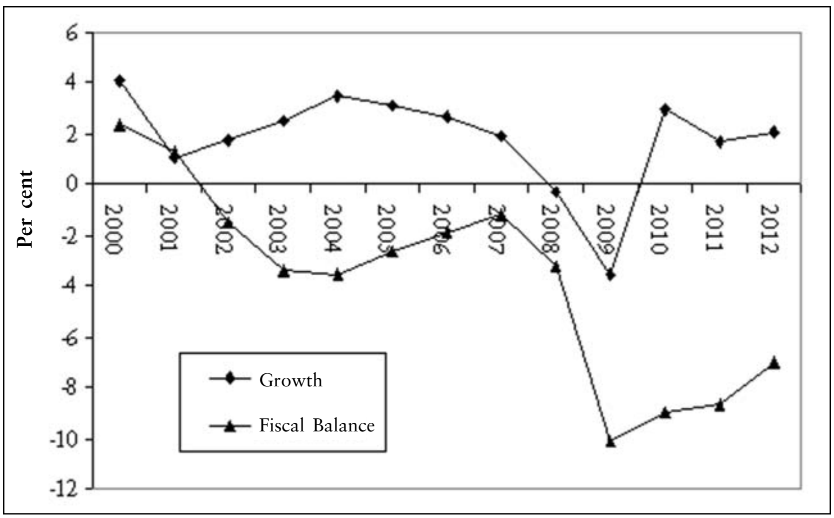
boom. This is precisely what happened in Ireland and Iceland, whose steep rise in public debt arose on account of such bailouts. Financial sector assets in Europe, which have large cross-border operations and holdings, are potentially very large compared to the size of individual sovereign balance sheets,[30] raising the question as to who would bail out such large countries.

The expansion in public sector balance sheets is not simply on account of low growth and the need to provide macroeconomic stimulus. There is also, firstly, the transfer of private sector debt, especially those of the financial sector, to the public sector. As a result, the overall deleveraging has been limited.[31]

Secondly, fiscal policy in many advanced countries was pro-cyclical in the period leading up to the financial crisis, sharply reducing the fiscal space to deal with a protracted and deep recession. *Chart 1* based on data from the US Bureau of Economic Analysis indicates that between 2001 and 2007, US budget deficits as a proportion of the National Income increased during periods of rising growth, and declined during periods of falling growth. There was an

Financial sector assets in Europe, which have large cross-border operations and holdings, are potentially very large compared to the size of individual sovereign balance sheets, raising the question as to who would bail out such large countries.

CHART 1
US Growth and Fiscal Balances



Source: US Bureau of Economic Analysis.

[30] It was for this reason that the recent European Summit of June 28–29 took a decision to support the banking system directly from the European Stability Mechanism, rather than saddle the sovereign concerned, in this case Spain, with additional debt. This has however failed to convince markets who still feel that losses incurred by the ESM on the banking system instead of being mutualised would eventually be passed on to the sovereign concerned.

[31] McKinsey Global Institute, "Debt and Deleveraging: Uneven Progress on the Path to Growth", January 2012, http://www.mckinsey.com/Insights/MGI/Research/Financial_Markets/Uneven_progress_on_the_path_to_growth.

attempt to arrest the fiscal slide after 2004, but this unfortunately coincided with a period of falling growth.

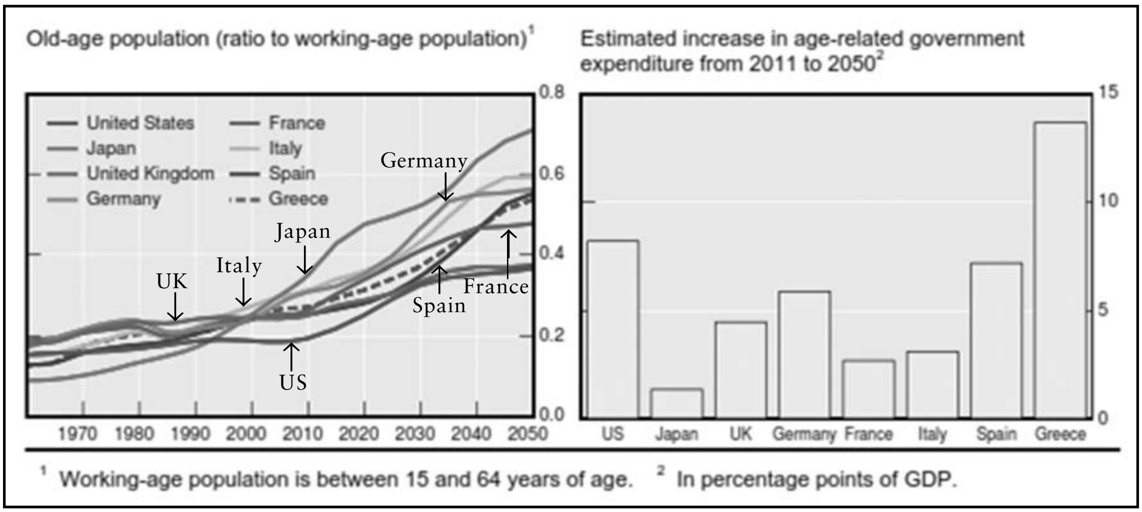
Thirdly, current levels of debt do not capture the contingent liabilities that lie ahead on account of demographic shifts in advanced countries. Indeed, the fiscal framework in several advanced countries was coming under increasing pressure on account of rising welfare expenditures, particularly on account of the ageing of these societies.[32] In the US deep tax cuts and rising defence spending were increasing fiscal deficits in the period preceding the crisis, even as social welfare benefits became more generous. Government social spending as a share of National Income which stood at 7 per cent in 1970 rose gradually to exceed 12 per cent on the eve of the Global Financial Crisis (2007), and has since ballooned to 15.6 per cent (2010).[33]

Current levels of debt do not capture the contingent liabilities that lie ahead on account of demographic shifts in advanced countries.

Demographic shifts associated with the ageing of societies accelerated fairly sharply in major advanced countries since the mid-nineties, and in the United States, which remains an immigrant society, after 2010. As a result, age-related social welfare expenditure has also been rising, and is projected to increase sharply going forward unless major reforms are put in place (*Chart 2*).

It is therefore not surprising that debt/GDP ratios were increasing sharply in major advanced countries even prior to the

CHART 2
Projected Population Structure and Age-related Spending



Sources: IMF, *World Economic Outlook*, April 2007; UN Secretariat; European Commission; Congressional Budget Office; authors' calculations.

[32] Vito Tanzi, "The Return to Fiscal Rectitude After the Recent Escapade", paper presented at the DG ECFIN's Annual Research Conference, Brussels, November 22–23, 2010, *Rivista di Politica Economica*, luglio/settembre 2010–2011.
[33] US Department of Commerce, Bureau of Economic Analysis, http://www.bea.gov/iTable/index_nipa.cfm.

Global Financial Crisis, which accelerated, rather than caused, the fiscal slide.

Despite these pressures, as *Table 3* indicates, fiscal parameters in most Euro Zone countries, except Germany and France, improved significantly between 1991 and 2007. The Maastricht Treaty fiscal deficit (3 per cent) and debt (60 per cent) norms introduced a measure of fiscal discipline in member countries on the one hand, and reduced borrowing costs on the other. The Maastricht Treaty was not explicitly contra-cyclical. Automatic fiscal stabilisers were nevertheless expected to make fiscal policy counter-cyclical in practice, although this would tantamount to breaching the pro-cyclical treaty targets, as they did in France and Germany. The bigger problem, however, was that the fiscal framework in advanced European economies was under increasing pressure from below replacement birth rates and lower growth on the one hand, and escalating age-related expenditures deriving from generous social welfare schemes on the other. This was increasing structural deficits and reducing cyclical fiscal space, making it difficult to adhere to the Maastricht fiscal deficit limit norm of 3 per cent even prior to the recent crisis. The experience of advanced western economies, particularly those in Europe, indicates that generous social welfare schemes are affordable when the population is young and trend growth high, but these become unsustainable as society ages and trend growth declines since it is politically difficult to renegotiate social compacts.[34]

TABLE 3
Gross Government Debt/GDP

Country	*1991*	*2001*	*2007*	*2012*
United States	68.3	54.7	67.2	106.6
United Kingdom	31.3	37.7	43.9	88.4
Japan	66.5	153.6	183.0	235.8
Germany	39.5	59.1	65.2	78.9
France	36.0	56.9	64.2	89.0
Italy	97.5	108.2	103.1	123.4
Spain	43.0	55.6	36.3	79.0
Greece	74.8	103.7	105.4	153.2
Portugal	60.7	51.1	68.3	112.4
Ireland	94.6	35.2	24.8	113.1
Iceland	38.4	45.9	29.1	97.3

Source: IMF.

The experience of advanced western economies indicates that generous social welfare schemes are affordable when the population is young and trend growth high, but these become unsustainable as society ages and trend growth declines since it is politically difficult to renegotiate social compacts.

[34] Most of the fiscal impact, and consequential adjustments, of age-related expenditures actually lie ahead (William Buiter, "Sovereign Debt Problems in Advanced Industrial Countries", Citigroup Global Markets, Global Economics View, April 26, 2010. Stephen G. Cecchetti, M.S. Mohanty and Fabrizio Zampolli, "The future of public debt: prospects and implications", BIS Working Papers # 300, March 2010.)

The strongest case for austerity is that, given high levels of debt and the fact that the elevated growth rates of the Great Moderation may have been unsustainable, it would be prudent to focus on repairing overstretched balance sheets, both private and public, and settle for the more sustainable pre-Great Moderation growth rates. Since global growth currently seems to be settling at these lower rates, it could be argued that the case for further stimulus is weak.

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7. The Weak Recovery: The Case for Continued Fiscal Stimulus

More than the recent credit rating downgrades in a number of advanced economies, what is relevant is the slow pace of economic recovery in the US and Europe, which has put policymakers, analysts and theorists in a dilemma. When the world was enveloped in the crisis of 2008, there was near unanimity on what the course of action should be. Almost everyone advocated expansionary monetary and fiscal policies along Keynesian lines. Three years down the line, the recovery is unusually shallow, while the initial conditions have changed. The fiscal deficit in the US touched 10 per cent of GDP and is declining only gradually.[35] US General Government debt has risen from about 67 per cent of GDP in 2006 to 107 per cent of GDP in 2012. Expansionary fiscal policies played a critical role in averting a deeper US recession. But these policies have also resulted in public debt rising sharply. This pattern has been repeated in major advanced countries.

Despite the sharp rise in the public debt-GDP ratio, there is a school of thought which urges for a continued expansionary fiscal policy. This group includes the distinguished Noble Laureate, Paul Krugman,[36] and Lawrence Summers. The argument put forward is that, firstly, despite heavy borrowing, the interest rate remains low and that makes many projects worthwhile. Secondly, it is argued that with consumers,[37] investors and export markets in retreat, the only way to grow is through continued stimulus. Recent research by the IMF indicates that

[35] The US Congressional Budget Office projects a sharp decline in US fiscal deficits from 2013. This is, however, based on an overly optimistic GDP growth rate of 4.1 per cent from 2013–17, and dramatic budget cuts between 2012 and 2013 as mandated under current laws. In an alternative scenario (which disallows the "fiscal cliff" but retains the optimistic growth forecast), the CBO projects US fiscal deficits to stay well above 5 per cent through 2022, and debt ratios continue to rise without stabilising (*The Budget and Economic Outlook: Fiscal Years 2012–2022*, Congressional Budget Office, January 2012; *Economic Effects of Reducing the Fiscal Restraint that is Scheduled to Occur in 2013*, Congressional Budget Office, May 2012).

[36] Paul Krugman, "How to End this Depression", *New York Review of Books*, May 24, 2012. Paul Krugman and John Layard, "A Manifesto for Economic Sense", *Financial Times*, June 27, 2012. Lawrence H. Summers and J. Bradford DeLong, "Fiscal Policy in a Depressed Economy", March 20, 2012, http://www.brookings.edu/~/media/Files/Programs/ES/BPEA/2012_spring_bpea_papers/2012_spring_BPEA_delongsummers.pdf.

[37] US personal savings have risen, and expenditures declined, significantly

fiscal multipliers in the current economic environment, characterised by substantial economic slack, liquidity trap and synchronised fiscal adjustment across a slew of countries, may be higher than what historical data might indicate.[38] Thirdly, it is not possible to have fiscal consolidation in the absence of growth as the decline in revenue on account of lower growth usually exceeds the savings on account of lower public expenditure which is notoriously sticky.[39] Thus, in substance, these economists argue that increasing indebtedness now will pave the way for reducing the long-term national debt.

There have, of course, been several episodes where fiscal consolidation has been accompanied by growth.[40] While this strategy might work where there is a crisis in one part of the global economy, the argument that this may not be possible during the current episode is rooted in what Keynes described as the "paradox of thrift". A protracted synchronised downturn in advanced countries has, as we have seen, stressed public sector balance sheets, which is in turn leading to synchronised fiscal consolidation. However, a reduction in both private and public demand must be offset by an increase in external demand, which is unlikely in a synchronised downturn and the associated synchronised effort to expand export markets as a counter to weak domestic demand.

Recent research by the IMF indicates that fiscal multipliers in the current economic environment, characterised by substantial economic slack, liquidity trap and synchronised fiscal adjustment across a slew of countries, may be higher than what historical data might indicate.

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since the onset of the global financial crisis. The following figures are from the US Bureau of Economic Analysis.

US Private Savings and Consumption as a Proportion of Domestic Personal Income							
	2005	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*
Personal Savings	1.5	2.6	2.4	5.4	4.7	5.1	4.2
Personal Consumption Expenditure	94.9	93.8	93.8	91	91.8	91.8	92.9

http://bea.gov/national/index.htm

[38] According to the IMF, fiscal multipliers since the onset of the Financial Crisis were in the range of 0.9 to 1.7 compared to an average of 0.5 in the three decades prior to 2009 (IMF, *World Economic Outlook*, October 2012, p. 43). This puts in clearer perspective the magnitude of the likely impact of the impending US fiscal cliff—a toxic combination of hitting the debt ceiling, expiring tax cuts and mandatory expenditure cuts amounting to a potential sharp fiscal contraction of over 4 per cent of GDP in 2013. This could push the US economy into a deep recession even if we were to apply the lower range of IMF fiscal multipliers.

[39] Past experience indicates that most of the fiscal deterioration in a downturn is through declines in revenue rather than through increase in automatic stabilisers or discretionary stimulus. It is difficult to compress expenditure commensurate with the compression in revenue, especially since the former has to partly substitute for the steep contraction in private consumption and investment. According to IMF estimates, the shares of revenue loss and expenditure increase in the deterioration of fiscal balances in advanced G20 countries during the current financial crisis were about the same (IMF, *Fiscal Monitor,* May 14, 2010, p. 14). The higher share of expenditure was probably on account of the need to bail out the financial sector.

[40] BCA Research, "Europe: A Historical View of Fiscal Reform", *Daily Insight*, May 4, 2010, http://www.bcaresearch.com/public/story.asp?pre=PRE-20100504.GIF. Attention is also drawn to the strong growth in the United States following the Reagan spending cuts of 1981 and the Clinton cuts in the 1990s.

Fiscal policy is not, of course, the only tool to stimulate the economy back to growth. Indeed, over the last few decades, and especially in the wake of the stagflationary seventies, the mantle of countering business downturns had largely shifted to monetary policy conducted by independent central banks that are more insulated from political pressures. Ordinarily, easy monetary policy expands credit by making lending more profitable for lenders and lowering the cost of borrowing for investors and consumers. However, risk aversion and deleveraging have clogged these monetary policy transmission channels. *Table 4* shows that deleveraging by households and financial institutions has still some way to go before balance sheets shrink to pre-boom levels.

Ordinarily, easy monetary policy expands credit by making lending more profitable for lenders and lowering the cost of borrowing for investors and consumers. However, risk aversion and deleveraging have clogged these monetary policy transmission channels.

In an environment of continued deleveraging neither zero bound interest rates, nor the supplemental quantitative and credit easing, has been able to stimulate investment in the real economy. Monetary expansion has found its way back to the US Federal Reserve through a vast increase in the holdings of depository institutions, far above mandated levels,[41] with the excess liquidity spilling over into

TABLE 4

	Household Gross Debt to Disposable Income Ratio			*Financial Corporations Gross Debt to GDP Ratio*		
	Pre-Boom 2000	*Pre-Crisis 2007*	*Current 2011 Q3*	*Pre-Boom 2000*	*Pre-Crisis 2007*	*Current 2011 Q3*
USA	100.7	137.6	118.3	277.4	333.9	308.1
UK	117.1	183.4	160.7	569.2	810.1	853.7
Canada	112.6	137.3	183.7	238	298.7	327.4
Germany	116.4	103	94.3	290.1	322.1	319.3
France	70.4	92.9	101.1	185.3	275.4	335
Italy	44.7	71.1	80.1	124.7	178.7	207
Japan	143.6	136.7	124.5	566.6	519.1	555.9
Portugal	111.7	154.4	154.1	202.4	257.6	304.1
Ireland		228.2	228.7		1101.5	1404.3
Greece	28.6	74.7	97.8	109.4	154.4	219.2
Spain	85.6	147.4	140.5	154.9	232.7	239.5
Euro Area	85.3	105.6	107.9	269.1	365.4	381.7

Source: OECD Economic Outlook, Volume 2012/1, Box 1.1 p. 23.

[41] As of December 12, 2012, depository banks had parked US$1,575 billion with the Federal Reserve, against US$112 billion required (US Federal Reserve, http://www.federalreserve.gov/releases/h3/current/h3.htm). This sequence of events is almost exactly on the lines described by Irving Fisher, a keen contemporary observer and analyst of the Great Depression (Irving Fisher, "The Debt Deflation Theory of Great Depressions", *Econometrica*, 1(4), 1933. pp. 337–357). Unconventional monetary policy during the Great Recession has been able to prevent deflation, but has not succeeded in expanding the monetary base because of the decline in the money multiplier.

financial asset and commodity price inflation.[42] Therefore, after having tried stimulating economies back to growth through aggressive and unconventional monetary policy, the burden seems to have fallen back on fiscal policy,[43] thereby generating a lively debate on the trade-offs involved between austerity and growth. While ordinarily fiscal consolidation against a backdrop of mounting fiscal deficits and public debt is desirable, the current debate on the likely negative impact of the US fiscal cliff—the double whammy of lapsing tax cuts and enforced government expenditure cuts—is to be seen in the light of the likely impact on growth at a time private demand continues to be weak.

If there are cautionary lessons to be learnt from Greece, which has recently been penalised by the market for lack of fiscal credibility, there are also lessons to be learnt from Japan in the 1990s, and the US in 1937, where premature fiscal tightening resulted in both a deflationary spiral and explosion of public debt. An undeniable virtue in normal times, fiscal chastity is of arguable value in deep and synchronised recessions. While acknowledging the need for fiscal chastity, echoing the famous ancient Christian theologian and philosopher St. Augustine, this school of thought argues that the time for this is not yet.[44]

While ordinarily fiscal consolidation against a backdrop of mounting fiscal deficits and public debt is desirable, the current debate on the likely negative impact of the US fiscal cliff is to be seen in the light of the likely impact on growth at a time private demand continues to be weak.

[42] Asset, including equity, markets now seem to be responding more to moves, and likely responses, by the US Federal Reserve than to monthly job and growth reports. There is now an expectation that bad economic data will result in more liquidity creation (QE), and this drives markets upwards. The new *"Bernanke Put"* is similar to the *"Greenspan Put"*, with one crucial difference: whereas in the latter case liquidity was created endogenously by markets through shadow banks consequent on rate reductions, liquidity is now being injected exogenously by central banks through quantitative easing. The outcomes are however strikingly similar (Mohamed El-Erian, "Beware Opportunities that Rely on the Central Bank Put", *Financial Times*, January 8, 2013, http://www.ft.com/intl/cms/s/0/bb66425c-54cf-11e2-89e0-00144feab49a.html#axzz2HfNsbcEN; John Plender, "Central Banks Continue to Call the Shots", *Financial Times,* January 15, 2013, http://www.ft.com/intl/cms/s/0/9304a1b4-5f1f-11e2-9f18-00144feab49a.html#axzz2I2I6nUsH;"Jobs and Money", *The Wall Street Journal*, January 5, 2013. p.A14, http://online.wsj.com/article/SB10001424127887324374004578221894085517704.html?mod=googlenews_wsj).

[43] The US Federal Reserve has recently announced a third round of virtually open ended quantitative easing till such time that unemployment rates come down to acceptable levels. The ECB has also signalled that it would buy potentially unlimited amount of stressed Euro Zone sovereign debt. The Bank of Japan has also embarked on another round of quantitative easing, and it is widely expected that the Bank of England would follow suit. Interest rates and liquidity, however, are not the issue in the current circumstances. It is therefore arguable whether the results of the current round would be very different from the earlier rounds. In a recent Duke University survey of CFOs of 887 large companies in the US, 91 per cent of the firms indicated that a 1 per cent drop in interest rates would have no impact on their business plans, and 84 per cent were indifferent to an even 2 per cent drop (Gillian Tett, Beware the Costs and Psychology of QE3, *Financial Times*, September 20, 2012,http://www.ft.com/intl/cms/s/0/fc517d2e-033d-11e2-bad2-00144feabdc0.html#axzz27S7RbMrW).

[44] St. Augustine of Hippo (AD 354–430) entreated God in his famous autobiographical work (written in A.D. 397–98) to "Grant me chastity and continence, only not yet". (*Confessions*, 8.7.17)

If national income is the sum of private consumption, government consumption, investment and net exports, it goes without saying that a sharp contraction in domestic and overseas private demand can be offset by an increase in government demand. Keynesian economics do not however offer a direct solution to the current situation as Keynes himself was not very clear as to how the increase in government expenditure was to be financed. So long as the initial fiscal deficit and debt GDP ratio were low, the Keynesian prescription of expanding the government expenditure seemed appropriate and worked well. But what happens if the debt burden is large to begin with, or, as appears to be the case presently in several advanced economies, where fiscal stimulus is used for such protracted periods that debt levels become unsustainable, and even more importantly, are seen as unsustainable by financial markets?

8. Crisis Generated Fiscal Space

The world in which Keynes developed his economic thinking was relatively closed, and dominated by the gold standard and fixed exchange rates. This world fundamentally changed with the breakdown of the Bretton Woods system, as major advanced countries floated their currencies. Over time, the US dollar, the UK pound sterling, the Japanese yen and the euro acquired the status of global reserve and safe haven currencies.

In normal times, domestic sovereign borrowing costs respond to domestic macroeconomic fundamentals. However, during severe crises these are "over-determined" by the large safe haven flows that they attract.

In normal times, domestic sovereign borrowing costs respond to domestic macroeconomic fundamentals. However, during severe crises these are "over-determined" by the large safe haven flows that they attract. This is particularly so during balance sheet recessions caused by large scale deleveraging and flight of capital out of risk assets to seemingly risk free treasury assets.

Thus, while expansionary fiscal policy amidst high levels of fiscal deficits and debt can be expected to push up interest rates and borrowing costs, the yields on long-term treasury bonds in major developed economies have in fact been falling, and have even moved into negative territory in real terms in some cases. This is despite the fact that household sector saving in the US is low, although it has risen slightly over the last few years as households try to repair their damaged balance sheets. Unusually low interest rates set by the US Federal Reserve moreover constitute an implicit tax on, and are consequently a disincentive for, saving.[45] Domestic savings are therefore unlikely to be adequate to absorb the large amount of debt floated by the Federal government. It has to also depend on other countries to subscribe to US treasuries.

[45] The negative returns on savings in a sense means a return to financial repression in which sovereign debt is inflated away. This is the way most episodes of high debt have been resolved in both developed and developing countries. See fn 82.

It so happens that the dollar continues to remain the world's premier reserve currency and at the present moment, there is no alternative currency to replace the US dollar. There is therefore a large external demand for dollars. This demand has only increased in tandem with the increase in global imbalances, and more recently on account of safe haven flows. An increasing proportion of the US deficits has consequently been financed on account of this external demand. Thus the share of foreign holding of US treasuries has risen sharply, from 28 per cent in 1996 to 48 per cent in the second quarter of 2012.[46]

This is the case not only in the US, but also in the other reserve currency issuing countries, such as the UK, where too sovereign bond yields seem to be declining as deficits and debt have risen.[47] The story is repeated in the Euro Zone, where there is a flight to German bunds in particular, but with one deadly twist. The deleveraging and flight out of risk assets in peripheral economies, such as Greece, Portugal,

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TABLE 5
US Treasury Bonds in US$ billion

Year	*Total*	*% US Fed*	*% Foreign*	*% Rest*
1996	**3,667**	10.7%	28.4%	61.0%
1997	**3,660**	11.8%	31.5%	56.7%
1998	**3,543**	12.8%	32.9%	54.3%
1999	**3,530**	13.5%	30.0%	56.5%
2000	**3,210**	15.9%	31.8%	52.2%
2001	**3,197**	17.3%	34.3%	48.5%
2002	**3,469**	18.1%	37.1%	44.8%
2003	**3,968**	16.8%	38.1%	45.1%
2004	**4,407**	16.3%	41.1%	42.6%
2005	**4,679**	15.9%	42.4%	41.7%
2006	**4,862**	16.0%	43.7%	40.2%
2007	**5,099**	14.5%	46.6%	38.9%
2008	**6,338**	7.5%	51.3%	41.2%
2009	**7,782**	10.0%	47.2%	42.9%
2010	**9,311**	11.0%	47.4%	41.6%
Q1 2011	**9,620**	13.9%	47.6%	38.5%
Q2 2011	**9,714**	16.7%	48.0%	35.3%
Q3 2011	**10,203**	16.3%	48.2%	35.5%
Q4 2011	**10,426**	16.0%	48.7%	35.4%
Q1 2012	**10,828**	15.3%	48.0%	36.6%
Q2 2012	**11,026**	15.1%	48.0%	36.9%

Source: http://www.sifma.org/

[46] Securities Industry and Financial Markets Association (SIFMA), http://www.sifma.org/uploadedFiles/Research/Statistics/StatisticsFiles/TA-US-Treasury-Holders-SIFMA.xls.

[47] Martin Wolf, "The Journey Towards Becoming Japan", *Financial Times*, May 12, 2012, http://blogs.ft.com/martin-wolf-exchange/2012/05/12/the-journey-towards-becoming-japan/#axzz1uuYXhP5l.

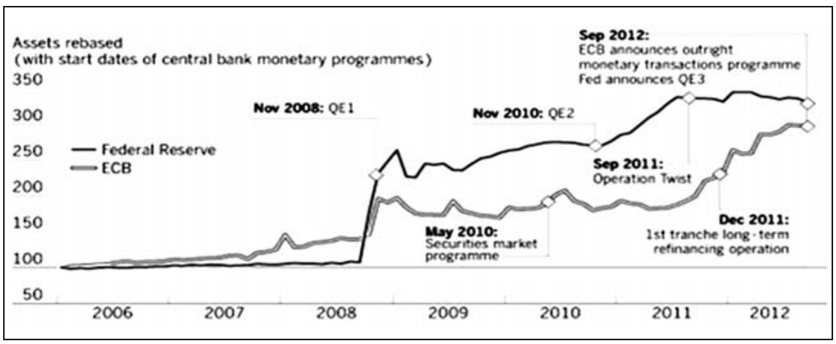
There is the risk that high current account and fiscal deficits, and a ballooning national debt, could sooner or later cause market concerns in developed countries, especially since declining Chinese external surpluses can be expected to reduce the demand for reserve currencies, particularly the US dollar.

Spain and Italy, have not lowered the yields on domestic treasuries because this capital has gone overseas into the treasury bonds of safe haven northern European countries, and into Swiss francs. This has had the effect of raising, rather than lowering, the yields on peripheral treasury bonds.[48]

There is nevertheless the risk that high current account and fiscal deficits, and a ballooning national debt, could sooner or later cause market concerns in developed countries, especially since declining Chinese external surpluses can be expected to reduce the demand for reserve currencies, particularly the US dollar.[49] In this regard it is pertinent to note that the share of foreign holding of US treasuries has declined from 2008, when the figure stood at 51.3 per cent, to 48 per cent at present. During this period, China's current account surplus also shrank from 9.1 per cent of GDP to 2.3 per cent.

Safe haven flows have been supplemented by non-conventional monetary policies to keep borrowing costs of reserve currencies low. While the aggressive and unconventional (QE) monetary easing by central banks[50] was originally to inject liquidity into frozen financial markets, and is now ostensibly to stimulate investment and growth, this purchase of government debt by central banks, and in the Euro Area by banks funded by the European Central Bank through the Long Term

CHART 3
Central Banks' Balance Sheets



Source: Thomson Reuters Datastream.

[48] Richard Koo, "Is Greek Exit from Eurozone Really Necessary?", *Nomura Equity Research*, August 28, 2012.

[49] The inherent strength of the US dollar arising out of its indisputable status as the primary global reserve and safe haven currency should not, however, be underestimated. It is pertinent to note in this regard that the IMF had sounded a warning prior to the current crisis that the financial system was at risk from a disorderly unwinding of global imbalances on account of rising internal and external deficits of the US (Alok Sheel, "Challenges in IMS Reforms: A Global and Emerging Markets Perspective", ICRIER Policy Series # 11, December 2011).

[50] *Chart 3* has been reproduced from Robin Harding and James Politi, "Fed Risks Political Fallout from QE3", *Financial Times*, September 14, 2012, http://www.ft.com/intl/cms/s/0/b7de9070-fe77-11e1-8028-00144feabdc0.html#axzz26de3TLda.

Refinancing Operations (LTRO), is also a major reason why yields on their treasury bonds remain low (except for peripheral European countries, although their spreads would have been even higher but for such interventions) despite mounting deficits. In the absence of such massive monetary easing it is possible that US interest rates would have risen, making the current levels of debt unsustainable as is happening in the Euro Zone periphery in the absence of unfettered ECB support for peripheral sovereign bonds.

The US Federal Reserve's share in US treasuries has risen sharply from 7.5 per cent in 2008 to 15.1 per cent in the second quarter of 2012, as the Federal Reserve's balance sheet expanded. However, yields on sovereign paper have continued to drop even during periods central banks desisted from quantitative and credit easing;[51] so other factors have been at work as well. First, while global balances may have declined in the aggregate, the decline in Chinese and Japanese current account surpluses has been partly countervailed by the resurgence in the current account surpluses of oil exporting countries, mainly OPEC, Russia and Norway.[52] The demand for reserve assets to park these surpluses therefore continues to be robust.

Secondly, it needs to be recognised that this is a balance-sheet recession characterised by continuing deleveraging, with banks hoarding liquidity to repair their damaged balance sheets and less willing to lend, and parking huge amounts with central banks. Thus any increase in M1 and M2 has been countervailed by increase in the funds parked by depository institutions with the US Federal Reserve, leading to a sharp increase in the monetary base and resultant drop in the money multiplier.[53] The Federal Reserve has, in turn, used these funds for its sovereign bond purchases.

A number of influential economists have argued that notwithstanding high levels of deficits and debt, this fiscal space could and should be utilised to stimulate growth, in the absence of which fiscal consolidation is not possible.

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9. The Peculiar Problem of the Euro Zone

As we have seen, the crisis has contracted, rather than expanded, fiscal space in the Euro Zone periphery on account of flight

[51] Quantitative easing is here defined as purchase of long-term bonds by the central bank, while credit easing in defined as purchase of private securities.

[52] "Petrodollar Infusion", *The Economist*, April 28, 2012, http://www.economist.com/node/21553424.

[53] Between March 2007 and March 2012, M1 and M2 increased by about 50 per cent, from US$8.5 trillion to 12 trillion. Meanwhile, the monetary base more than trebled, from US$800 billion to US$2.65 trillion, sharply lowering the money multiplier from 10.5 to 4.5 (United States Federal Reserve, http://www.federalreserve.gov/econresdata/statisticsdata.htm). These occurrences are exactly on the lines postulated by Irving Fisher that during "Great Depressions" risk aversion leads to a sharp rise in the price of risk assets and a sharp decline in the price of safe assets (Fisher, *op.cit.*).

of capital. The austerity versus growth debate has consequently acquired an altogether different dimension in the Euro Zone. The strain on the fiscal framework in these countries was exacerbated during the run-up to the crisis by the inherently unstable combination of monetary and exchange rate union on the one hand, and effective fiscal independence on the other. The Maastricht fiscal compact was never a hard budget constraint, with several countries breaching the targeted deficits with apparent impunity. Since the immediate financial impact of the European Monetary Union was a convergence of sovereign borrowing costs, countries could always go to the market and borrow and breach the agreed fiscal ceilings. Indeed, this is what happened, as monetary union enabled countries with lower productivity and weak finances in southern Europe to borrow relatively cheaply as markets failed to differentiate between sovereign borrowings since they were denominated in the same currency, the euro. The market apparently assumed that such liabilities were eventually backstopped by the stronger economies of northern Europe, notably Germany and France, although the Euro Zone treaties had no provision for sovereign bailouts.

Nevertheless, most Euro Zone countries, with the notable exception of Greece and Italy (for public debt) were more or less within or around the agreed deficit and debt limits imposed by the Maastricht Treaty. There were however two problems with these targets. First, although the Euro Area grew at 3.3 per cent and 3 per cent respectively in 2006 and 2007, this was at the height of the unsustainable Great Moderation boom. Considering that the Euro Area grew at just 2.2 per cent between 1994 and 2003, 2.2 per cent in 2004 and 1.7 per cent in 2005, were the Maastricht deficit targets too optimistic? Second, there was no control over the private leverage that financed the asset boom during the Great Moderation. When the financial system goes bust, these contingent liabilities all too often devolve on the sovereign.

As sovereign balance sheets deteriorated during the course of the financial crisis, markets started differentiating between different Euro Zone countries, penalising countries with weak finances and strained banking systems.

As sovereign balance sheets deteriorated during the course of the financial crisis, markets started differentiating between different Euro Zone countries, penalising countries with weak finances and strained banking systems. As a result, the crisis related fiscal space increased in the stronger, largely northern European economies (particularly Germany) on account of a flight to quality, even as it shrunk in the crisis-ridden peripheral economies which saw a sharp increase in their borrowing spreads relative to the northern economies. Ironically, as their borrowing costs soared, the entire burden of adjustment in these countries now fell on fiscal policy because monetary policy was not within their purview.

When sovereign balance sheets come under pressure from markets, they can be bailed out by central banks by accommodative monetary policies through which high levels of debt are partly inflated away. This option is not open to Euro Zone countries, since the European Central Bank, which prints the euro, is not the central bank of these countries. Since their central banks cannot print money, their entire fiscal liabilities are effectively external liabilities and cannot be inflated away. Ordinarily when external liabilities become unsustainable, external balance is restored through a combination of exchange rate depreciation, debt restructuring and default. Since the exchange rate option is not open to these countries, the only way to achieve external balance is through sharp wage cuts. The only way to move towards internal balance and avoid restructuring of, or default on, public debt is sharp fiscal adjustment.

While adjustments are already being forced by markets in these economies on account of flight of capital and deflation,[54] wage and fiscal adjustments on the scale required however risk political and social instability on the one hand,[55] and are eventually ineffectual on the other because the consequential sharp decline in growth on account of heightened austerity makes it almost impossible to stabilise the public debt. Since peripheral countries have lost market access, and cannot print their way out of deficits, the compulsions of avoiding default on peripheral sovereign bonds, defending the euro and the currency union, and providing the funds to stimulate the crisis-ridden peripheral economies have shifted the burden of adjustment on countries with sound finances and higher productivity, and partly on the IMF which finds itself lending to Euro Zone countries for fiscal, rather than balance of payments support as envisaged in its Articles of Agreement.

Since the peripheral European deficits were funded through the banking system, sovereign defaults threaten the European banking system which holds large amounts of peripheral sovereign debt, making sovereign balance sheets, which would have to absorb these losses, appear even more fragile to markets. One of the major decisions at the EU Summit of June 28–29, 2012, was to try and break the negative feedback loop between sovereigns and banks by taking the burden of regulation and bailout off sovereign balance sheets. This is particularly important in the case of Europe where banking assets are large relative to the GDP of individual countries.

While a one-off bailout of a relatively small country like Greece could be organised, should market contagion spread to some of the larger European countries, and if their borrowing costs were to rise substantially, and remain elevated, as is occurring presently, existing

Wage and fiscal adjustments on the scale required however risk political and social instability on the one hand, and are eventually ineffectual on the other because the consequential sharp decline in growth on account of heightened austerity makes it almost impossible to stabilise the public debt.

[54] OECD (2012), *Economic Policy Reforms 2012: Going for Growth*, Part 1. Richard Koo (*op. cit.*) according to whose estimates unit labour costs in Greece have already fallen by 10 per cent from the 2010 peak.

[55] This is indeed what is happening. Forcing austerity without growth risks social upheaval and can only end in unilateral abrogation of such liabilities which are not repayable. This is what happened in Germany in the 1930s where the combination of the onerous burden of war reparations and a collapse of growth during the Great Depression facilitated the rise of Nazism and Hitler who abrogated the war debt.

levels of debt could become unsustainable.[56] These large European countries, whose liabilities are several multiples of the European Stability Mechanism (ESM) firewall set up by the Euro Zone, and supplemented by the IMF, to contain the crisis, are both too big to be allowed to fail or to be bailed out. Unless the underlying structural flaw in the design of the European Union is addressed to the satisfaction of markets, the latter can be expected to penalise the weaker links in Euro Zone countries making a return to sustainable growth practically impossible.

It is unlikely that the electorates of the northern European countries would be willing to assume the very large liabilities of these large southern European countries without a full fiscal integration of the Euro Zone, with pan Euro level control of fiscal policies, thereby creating a sustainable fiscal and monetary, and implicitly political, union. In the absence of this, these countries might have to exit the European Union to create the fiscal space to make a sustainable recovery.[57]

Unless the underlying structural flaw in the design of the European Union is addressed to the satisfaction of markets, the latter can be expected to penalise the weaker links in Euro Zone countries making a return to sustainable growth practically impossible.

In most advanced countries there is a policy dilemma as to whether one should settle for austerity and lower (pre-Great Moderation) growth on the one hand, or continue to stimulate to try to shift to the higher (Great Moderation) growth trajectory, on the other. These are choices that policymakers must pick from, and they also have the instruments to do so. In the case of peripheral Euro Zone economies there is no such dilemma because they do not have the tools to stimulate their economies as they have lost market access. They are almost entirely dependent on outside life support for both meeting their current liabilities, and for any growth related fiscal measures that may be adopted. The EU Summit of June 28–29 carved out funds from the European Stability Mechanism to be used for supporting economic growth that peripheral countries cannot afford on account of loss of market access. Ironically, having entered a deep recession, the case for fiscal stimulus in peripheral economies could not be stronger.

On paper, it is fairly clear what Euro Zone governments need to do to resolve the worsening crisis and prevent a break-up. Firstly, the ECB would need to become a conventional central bank for the entire Euro Zone, intervening when necessary to protect sovereign bond markets from market revolt. Secondly, to obviate the moral hazard of free-riders increasing their deficits rather than adjusting, a road map for centralising tax and spend policies within the European monetary

[56] Spanish 10-year bond yields in mid-2012 were hovering above 7 per cent, and Italian bonds above 6 per cent, significantly higher than the growth rates in nominal GDP.

[57] The experience of Iceland, one of the first casualties of the global financial crisis, shows how independent monetary policy can create fiscal space for reviving growth, and how the ability to devalue can quickly correct external imbalances (Charles Forelle, "In European Crisis, Iceland Emerges as an Island of Recovery", *The Wall Street Journal*, May 21, 2012, http://online.wsj.com/article/SB10001424052702304203604577396171007652042.html).

union would need to be agreed. In a recessionary environment, such actions would create the fiscal space for centrally determined regional stimulus packages to support growth in peripheral economies. Thirdly, over the medium to long run, arbitrage through private capital flows and investment within the monetary union would tend to equalise productivity adjusted wages. ECB interventions would give these countries the time and breathing space to adjust. Fourthly, given the size of individual European banks relative to sovereigns, a centralised funding mechanism is required to break the negative feedback loop between bank and sovereign bankruptcy.

Is the paper solution politically feasible? The sharp differences between Germany and other northern European countries on the one hand, and major countries like France, Spain and Italy on the other, on the growth-austerity mix are no secret. While both sets of countries are agreed on further EU and Euro Zone integration, the northern countries want the rest of Europe to first balance their budgets through austerity as the first step towards integration. The crisis-ridden countries, and including France, want economic stimulus alongside structural reform measures as a means to balance public finances.

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How this fundamental tension will play out is not clear at this stage, as bold announcements have so far not been backed by commensurate action. Nevertheless, since markets have discovered a fatal flaw in the design of the Euro Zone, it is unlikely that the latter can return to sustainable growth without a fiscal-cum-banking union to supplement the monetary union. Market forces are already pushing Euro Zone countries in the desired direction. By recently empowering it to buy short-term sovereign bonds without limit, Euro Zone leaders have pushed the ECB one step closer to becoming a conventional central bank for the entire Euro Zone. Although its original response to the financial crisis was more orthodox compared to the Federal Reserve, the ECB's monetary response is now almost indistinguishable from that of the Federal Reserve as it has moved to combine the lower zero bound with open ended sovereign bond purchases. These purchases will be contingent on fiscal discipline and structural reforms that would make it easier for the Euro Zone to move towards a closer fiscal union. Likewise, support to stressed banks from the ESM would be contingent on regulatory and supervisory convergence, pushing the European Union towards a fuller banking union. A break-up of the Euro Zone would not only be catastrophic for the Euro Zone, but also result in a global crisis of epic proportions. It is unlikely that European leaders would allow this to happen.

10. Obstacles to Recovery: Limitations of Macroeconomic Policies

If private investment is slack on account of uncertainties surrounding domestic and external demand, and there is a large output gap, the case for a Keynesian type stimulus is self-evident as this can be expected to boost demand and hence growth. Such a stimulus aimed at supporting private consumption and investment has indeed been forthcoming. Indeed, the global economy in general, and advanced economies in particular, have been on macroeconomic life support ever since the onset of the global financial crisis in 2008. Central banks in advanced countries, led by the US Federal Reserve, as we have seen, have kept monetary policy unusually and unconventionally easy for an extended period. US federal outlays rose sharply from 19.6 per cent of GDP in 2007 to 24.7 per cent in 2009, and were at 24.1 per cent even in 2011, which are post-war highs.[58] Other advanced countries have followed suit. The question we need to ask is why fiscal multipliers have been so low, monetary policy so ineffective, and private consumption and investment are not responding in the expected manner.

There are three possible explanations for low and/or declining fiscal multipliers and ineffectual monetary policy that are not having a commensurate or desired effect on private consumption and investment: firstly, Ricardian equivalence; secondly, the clogging of transmission channels through which macroeconomic policy works on account of globalisation and the need to repair balance sheets (deleveraging) and the impact of financial regulatory reform; and thirdly, the nature of the demand rebalancing that has occurred. These obstacles would need to be addressed to improve the effectiveness of macroeconomic policy tools.

It is argued by some that the reason why fiscal stimulus has very low multipliers, may derive from the structure of stimulus packages, in particular the rational expectation that the sharp increase in public debt to finance the stimulus would ultimately need to be paid back through tax increases down the line.

Ricardian Equivalence

It is argued by some that the reason why fiscal stimulus has very low multipliers, may derive from the structure of stimulus packages, in particular the rational expectation that the sharp increase in public debt to finance the stimulus would ultimately need to be paid back through tax increases down the line. This Ricardian equivalence, the rational expectation that tax cuts and/or increase in public expenditure today would be offset by equivalent tax increases tomorrow may be undermining the efficacy of fiscal policy.[59] There needs to be some reassurance that the increase in income is not temporary but permanent to stimulate consumption and investment. Fiscal policy may

[58] US Bureau of Economic Analysis, http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1.

[59] *Testimony* of Veronique de Rugy, Senior Research Fellow, Mercatus Center at George Mason University, Before the House Budget Committee, *The American Recovery and Reinvestment Act of 2009: An Update,* Wednesday, July 14, 2010. Christina D. Romer and David H. Romer, "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks", working paper, University of California–Berkeley, March 2007, http://www.econ.berkeley.edu/~cromer/RomerDraft307.pdf. Martin Feldstein, "The US Economy Is Worse Than You Think", *The Wall Street Journal Asia*, June 9, 2011, http://online.wsj.com/article/SB10001424052702303657404576363984173620692.html#articleTabs%3Darticle.

therefore need to be restructured to reduce the operation of Ricardian equivalence and improve fiscal multipliers.

Rational expectations would indicate that increase in transfer payments (read lowering taxes) that seek to boost consumption and investment may be rolled back to reduce the consequential increase in public debt. There is little confidence that the increase in income is permanent. An investment fuelled expansionary fiscal policy that directly creates jobs and income streams, on the other hand, is more likely to give consumers the confidence to spend, as this involves an increase in permanent income. This confidence could also fire animal spirits to invest and crowd in private investment.

Weak Macroeconomic Policy Transmission Channels

Another plausible explanation of why the protracted stimulus has failed to revive consumption and animal spirits is that the extra income generated by fiscal and monetary expansion is simply accelerating the private deleveraging under way in the financial system instead of boosting consumption and investment. In a globalised world, moreover, it is easy for the demand generated by fiscal policy to leak abroad through trading channels.

We need to understand that prior to the crisis the US—the overwhelming global consumer of last resort—had seen a sharp increase in inequality,[60] with returns to capital rising much faster than the incomes of labour.[61] This should have depressed both consumer demand and ultimately investment and growth. There was, instead, a consumption boom, facilitated by financial innovation that allowed households to pile up high levels of debt against future appreciation in asset prices, especially in the housing sector. Demand raced far ahead of the sustainable current income necessary to support it. This consumption boom in the US economy, which accounted for just 4.6 per cent of the global population, but nearly 30 per cent of global demand (at market exchange rates, or 22.8 per cent at purchasing power parity) in 2003, lay at the heart of the Great Moderation of record global growth.

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This boom ended with the financial crisis and the Great Recession. Highly indebted households are now paying down this debt, which still has a long way to go,[62] even as household income has

[60] The share of the top quintile in household income rose from 43.3 per cent in 1977 to 49.7 per cent in 2007 and to 50.3 per cent in 2011 (US Census Bureau, http://www.census.gov/hhes/www/income/data/inequality/index.html).

[61] A good reason for this is that while capital was mobile, labour was not, leading to a flight of investment to emerging markets, especially China, where productivity was rising fast.

[62] US household debt has fallen from the pre-crisis peak of 134 per cent of disposal personal income in 2007 to 113 per cent in mid-2012. This is however still far higher than the 1970–1999 norm of around 75 per cent (Stephen Roach, "Macro Malpractice", Yale University, Jackson Institute for Global Affairs, October 2, 2012).

Over the last 18 quarters, annualised growth in real consumer demand has averaged a mere 0.7% compared with 3.6% in the decade before the crisis erupted. Never before has the American consumer been this weak for this long.

shifted further in the direction of the top quintile, and unemployment remains persistently high. As a result, the once almighty American consumer is but a shadow of its former self since 2008. Over the last 18 quarters, annualised growth in real consumer demand has averaged a mere 0.7 per cent compared with 3.6 per cent in the decade before the crisis erupted. Never before has the American consumer been this weak for this long.[63] Financial institutions are also deleveraging as they race to keep up with new stringent norms, including the new Basel III capital norms, deriving from a comprehensive regulatory overhaul of the financial system. The lack of business confidence has also led to a sharp decline in investment. The combined impact has been that liquidity injections by central banks and lower zero bound interest rates have led to a decline in the money multiplier rather than to the expected surge in credit and demand.

Low interest rates and easy liquidity on account of extraordinary monetary policies make saving less attractive on the one hand, and also stimulate consumption through the "wealth effect" of rising asset prices on the other. There is evidence, however, that both these impulses are weaker than usual. Easy monetary policy is accompanied by a tightening in credit conditions on account of regulatory changes, including the new Basel III norms that mandate banks to set aside more and better capital to discourage runaway balance sheet expansion and imprudent lending. The shadow banking system—which lay at the heart of the recent financial crisis—that provided much of the liquidity in the financial system, including consumer credit, during the Great Moderation, is yet to recover on the one hand, and is constrained by a great degree of regulatory uncertainty on the other.[64] Thus highly indebted households, who are most in need of credit, are finding it difficult to obtain it on account of low credit scores. Low interest rates are mostly boosting the incomes of relatively better off and less indebted households, who have a higher propensity to save, and to pay down or refinance costly debt.

On the investment side, abnormally low interest rates and easy liquidity make projects with lower returns profitable, and should

[63] Stephen Roach, "America's Other 30%", Jackson Institute for Foreign Affairs, Yale University. July 30, 2012.

[64] There are two separate issues. Firstly, there is an element of regulatory uncertainty as the Financial Stability Board is working on a regulatory framework for shadow banking under the aegis of the G20. Secondly, the reliance on shadow banking has been replaced by the easy and cheap liquidity available from central banks. Thus, asset backed security issuance in the US in 2011 was just US$125 billion, compared to the peak of about US$750 billion each in 2005 and 2006. Global CDO issuance in 2011 was just US$31 billion compared to the peak of US$481 billion in 2007. Mortgage related securities issuance in the US is now entirely dependent on federal agencies such as Fannie Mae and Freddie Mac, which accounted for 98.5 per cent of all issuance in 2011, compared to less than 60 per cent in 2005 and 2006. US money market instruments outstanding have also been declining continuously from their peak of US$4.2 trillion in 2007 to US$2.6 trillion in 2011 (SIFMA, http://www.sifma.org/research/statistics.aspx).

ordinarily induce private investment and fire animal spirits. However, despite extraordinarily low interest rates and repeated quantitative and credit easing for an extended period, neither private consumption nor private investment seems to be picking up.

The experience of past recessions in the United States is that the recovery in employment is led by small and medium enterprises. Supply side constraints however currently constrain SMEs because they are dependent on bank funding that has become more risk averse. Bank funding does not constrain larger corporates who have direct access to capital markets. However, large corporates are sitting on large amounts of cash and are also unwilling to use this for investment.[65] The problem in their case at least therefore seems to lie more on the demand than on the supply side. Policy uncertainties arising from regulatory, fiscal and central bank actions may also be accentuating depressed consumption and investment.[66]

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The Nature of Demand Rebalancing

It appears rational to expect that the ongoing deleveraging in developed markets combined with financial regulatory reform would not permit the return of leveraged consumption. The resultant downward shift in consumer demand, and hence growth, may therefore be permanent. In these circumstances it is only the expectation of a major rebalancing of the global economy that can fire the "animal spirits" of private investors. China's current account surplus has shrunk sharply since the crisis began, but this has been offset not by a rise in domestic consumption but by a sharp rise in investment.[67] India's current account deficit, on the other hand, is becoming increasingly

[65] While there was no increase in net corporate bonds outstanding, unlike money market and asset backed bonds, there was no deleveraging in corporate bonds. As a result, US corporate debt as a proportion of total bond market debt has actually increased from 19 per cent in 2007 to 21 per cent in 2011 (SIFMA). Sales of long-dated corporate bonds have indeed been booming, as corporates rush to refinance costlier debt and lock into low interest rates for an extended period. New bond issuance declined slightly from US$1.1 trillion each in 2006 and 2007 to US$700 billion in 2008 and US$900 billion in 2009, but quickly recovered to US$1.1 trillion in 2010. New issuance in 2012 is the highest in recent history. This uptick in corporate bond sales has not, however, led to a revival in investment (http://www.sifma.org/uploadedFiles/Research/Statistics/StatisticsFiles/CM-US-Bond-Market-Outstanding-SIFMA.xls; US BEA, http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1).

[66] The contribution of policy uncertainties to continuing depressed demand has been underscored by five influential US economists and former policymakers, namely, George P. Shultz, Michael J. Boskin, John F. Cogan, Allan H. Meltzer and John B. Taylor in *The Wall Street Journal*, September 18, 2012," The Magnitude of the Mess the US Is In".

[67] China's net exports have fallen sharply from 8.8 per cent of GDP in 2007 to around 1 per cent in 2011. However, consumption as a share of national income has increased only marginally, from 49.5 per cent to 50.4 per cent, while investment has increased sharply from 41.7 per cent to 48.6 per cent (IMF, *WEO*, October 2012 Database, http://www.imf.org/external/pubs/ft/weo/2012/02/weodata/index.aspx; World Bank Database).

What should have happened is an increase in domestic consumption in China, and an increase in investment in the United States. This would have reduced structural external imbalances in both countries over the medium term. The structure of their fiscal programmes, however, has been quite the reverse.

unsustainable as it is consumption rather than investment led. Moreover, new imbalances have arisen on account of a sharp and sustained increase in oil prices. The correction of "intra-European external imbalances" necessary for the peripheral countries to chart a sustainable recovery path also remains to be addressed.

The global rebalancing that has taken place so far is also not conducive to making global growth more sustainable in future. What should have happened is an increase in domestic consumption in China, and an increase in investment in the United States. This would have reduced structural external imbalances in both countries over the medium term. The structure of their fiscal programmes, however, has been quite the reverse.[68] Be that as it may, even with some degree of global demand rebalancing, per capita incomes in China and other big emerging market economies are still too small for them to shoulder the full or even substantial burden of the sharp increase in savings in the United States and other advanced economies that still account for about two-thirds of global demand at market exchange rates. Europe and Japan are major nodes of potential demand, but have structural impediments to demand expansion that are more severe than those currently afflicting the United States. It is therefore easy to see why private confidence and animal spirits are still not firing. The drivers of future growth that can push the global economy back into the growth trajectory of the Great Moderation are unclear.

11. Revisiting G20's Crisis Response Strategy

In view of the structural obstacles in the way of monetary and fiscal policies at the current juncture, it is perhaps time both the IMF and the G20 introspect and revisit their crisis response and growth revival strategy to see if some elements need to be fine-tuned or even fixed, especially since the downturn in growth may not be just a short-term or cyclical problem. Markets need credible assurances that structural problems in the way of a sustainable recovery will be, and are being, fixed.

The G20 crisis response strategy has evolved over time. It began with globally coordinated aggressive monetary and fiscal policies to support private consumption and investment. As the market response turned negative on account of rapidly mounting public deficits and debt in advanced countries it was recognised at the fourth summit in Toronto that fiscal consolidation was also necessary in some cases. The weak response of the economy to the aggressive stimulus should have been anticipated because this was a balance-sheet rather than cyclical recession. In retrospect the crisis response should have had elements of both short-term stimulus and medium-term adjustment.

[68] The focus of rebalancing in the US so far has been domestic, from private to public to counter the impact of falling private demand. In China, the focus has been on rebalancing from exports to domestic investment to counter the decline in external demand.

There has been overwhelming consensus in the last few meetings of the G20, and particularly at the sixth and seventh Summits at Cannes and Los Cabos respectively, that high levels of deficits and debt notwithstanding, there needs to be a continued focus on growth and jobs. Although the strategy for growth is not clearly articulated, it appears to rest on three pillars.[69] First, countries with fiscal space should continue with stimulus policies, until growth returns or they are penalised by markets at which point there should be greater emphasis on fiscal consolidation. Second, monetary policy in advanced countries should remain accommodative since there are no inflationary pressures there.[70] Third, there should be continued reliance on supporting private consumption and investment over the short term, and on structural reforms to boost competitiveness and growth potential over the long term. This strategy, however, does not appear to be working as it does not adequately address the three structural obstacles rendering macroeconomic policies impotent.

There has been overwhelming consensus in the last few meetings of the G20 that high levels of deficits and debt notwithstanding, there needs to be a continued focus on growth and jobs.

12. The Role of Public Investment, Particularly in Infrastructure

Since short-term policies are not working because of problems on the demand side it could be argued that while the G20 has by and large avoided several of the policy mistakes of the Great Depression, it has perhaps overlooked the role that public investment, particularly in infrastructure, and including public works on a large scale (which were undertaken during the Great Depression), can play in the global recovery. The latter can substitute for the lack of private investment. When consumers, investors and export markets are in retreat, arguably the only way to sustain growth is through an expansion in government demand.[71]

Governments can stimulate the economy either through tax cuts, or by directly increasing their own expenditure. Tax cuts have the advantage of being easier to roll back, unlike public expenditure which tends to be sticky. By reducing taxes, government leaves additional funds in private hands for consumption and expenditure. However, where private balance sheets are impaired, these additional funds might be used to draw down debt rather than in higher consumption or investment. Even in the absence of deleveraging, if tax cuts are

[69] See the Cannes Action Plan, http://www.g20.utoronto.ca/2011/2011-cannes-action-111104-en.html, and the Los Cabos Action Plan, http://www.g20.utoronto.ca/2012/2012-0619-loscabos-actionplan.html.

[70] There is, however, an inconclusive debate on whether the liquidity created by aggressive monetary policies is spilling over into commodity prices and developing countries and causing inflation there.

[71] This was, of course, the thrust of Lord Keynes' argument while making the case for public works during the Great Depression (Robert Skidelsky, "One More Chance for Osborne to Change Course", *Financial Times*, December 3, 2012, http://www.ft.com/intl/cms/s/0/1d16c738-325c-11e2-916a-00144feabdc0.html#axzz2E4CSUx5G).

perceived to be temporary, rational expectations may come in the way of translating these into spending on account of Ricardian equivalence. In a recession induced by a financial crisis, therefore, tax cuts may be less effective than an increase in direct government expenditure as a tool for stimulating the economy. Likewise, by relying on direct public spending to stimulate the economy, the role of macroeconomic policy transmission channels becomes of secondary importance.

Public investment also has the potential to lay the foundations of medium-term growth if the investment is in infrastructure,[72] since this has the effect of raising the growth potential and also crowds in private investment, unlike other kinds of government expenditure which may actually crowd out private investment. Infrastructure investment therefore has both supply side and demand side features. Capital expenditure also typically has higher fiscal multipliers. A recent study by UNCTAD has also found a strong correlation between investment in fixed capital and job creation in developed countries.[73]

It could be argued that running high fiscal deficits at a time when public debt levels are already high would be counterproductive as it would further undermine market confidence and growth. As we have seen, however, austerity in the absence of growth is perhaps even more counterproductive, as it may neither put the economy back on the growth trajectory nor control rising deficits and debt. We have also seen that sovereign borrowing costs have actually been driven down despite mounting deficits and debt, except in the case of peripheral Euro Zone countries, which is a peculiar phenomenon induced by monetary union.

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It may be recalled that the underlying instability in the global economy prior to the recent crisis was caused by a glut of savings relative to investment that drove down interest rates, encouraged risk taking and led to an artificial leveraged consumer boom in developed countries. The investment and infrastructure requirements in developed countries are likely to be quite different from that in developing countries as the "traditional infrastructure" is already largely in place. The investment is likely to be in rebuilding and upgrading existing infrastructure, much of which was put in place long before the more modern infrastructure in EMEs, who have in a sense reaped the

[72] See also Justin Yifu Lin & Doerte Doemeland, "Beyond Keynesianism: Global Infrastructure Investments in Times of Crisis", The World Bank, Policy Research Working Paper # 5940, January 2012.

[73] The IMF's findings are that capital expenditure multipliers range between 0.5 and 1.8, compared to 0.3 to 0.6 for revenue expenditure (Antonio Spilimbergo, Steve Symansky, and Martin Schindler, "Fiscal Multipliers", IMF Staff Position Note SPN/09/11, May 20, 2009). United Nations Conference on Trade and Development, "Background Note: Macroeconomic Policies to Promote Growth and Job Creation", UNCTAD Contribution to the Special High-level Meeting of the Economic and Social Council with the Bretton Woods institutions, the World Trade Organization, and the United Nations Conference on Trade and Development, http://www.un.org/esa/ffd/ecosoc/springmeetings/2012/Unctad_BGNote.pdf, p. 3.

advantage of late development.[74] There is also a latent demand for smart grids and green infrastructure in advanced countries. Infrastructure centred on natural gas, particularly shale, also presents a huge public investment opportunity. There is also need for putting in place a new infrastructure that creates high-end skills, as it is likely that future job creation in advanced countries would be in high-end manufacturing and services, rather than in labour intensive or medium skill areas in which emerging markets are more competitive. While such public investment would stimulate growth and job creation directly, it would also crowd in private investment and job creation indirectly by generating a large demand for capital goods and appropriately re-skilling the labour force.

It is sometimes argued that there may not be "shovel ready" infrastructure projects on the scale required to drive the global recovery in advanced economies, as these have a relatively long preparation period. The large gaps in the provision of traditional infrastructure, especially in developing countries, are well known.[75] Indeed, it is these countries that have shovel-ready infrastructure projects. If this huge investment demand can also be leveraged through globally coordinated initiatives to boost funding for infrastructure,[76] the demand created for

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[74] In 2009, the American Society of Engineers pointed to the poor quality of America's ageing infrastructure and estimated that US$2.2 trillion was required over five years to "revitalize the foundation of our national economy" (http://www.asce.org/PressRelease.aspx?id=23622321922&css=print). In July 2010, a US Government Accountability Office Report concluded that one in four of the over 600,000 roadway bridges needed to be upgraded (http://www.gao.gov/assets/130/125023.pdf). See also Edward Luce, "Washington Must Stop the Creeping Rust", *Financial Times*, November 25, 2012, http://www.ft.com/intl/cms/s/0/bc6f228e-34c9-11e2-99df-00144feabdc0.html#axzz2DJttkHms. On President Obama's plan for a national infrastructure bank to boost job creation and upgrade physical infrastructure, see Brad Plumer, "How Obama's Plan for Infrastructure Bank would Work", *The Washington Post*, September 20, 2011, http://www.washingtonpost.com/business/economy/how-obamas-plan-for-infrastructure-bank-would-work/2011/09/19/gIQAfDgUgK_story.html. The new socialist government in France under President Hollande, and the new Liberal Democratic Party government in Japan under Prime Minister Shinzo Abe, are also committed to boosting infrastructure and public spending to drive the economic recovery.

[75] Fay, M., Toman, M., Benitez, D. and Csordas, S., "Infrastructure and Sustainable Development", in Fardoust, Shahrokh, Yongbeom Kim, and Claudia Paz Sepulveda (eds), *Post Crisis Growth and Development: A Development Agenda for the G-20*, World Bank, Washington D.C. (2011) Chapter 8, pp. 329–382. A recent estimate puts global infrastructure needs at US$57 trillion over the next 18 years (till 2030), or 60 per cent more than what was spent over the last 18 years, just to keep pace with projected GDP growth. If the backlog of maintenance, development goals in emerging markets and climate change were considered, the needs could be even higher (McKinsey Global Institute, *Infrastructure Productivity: How to Save $1 Trillion a Year",* January 2013, http://www.mckinsey.com/insights/mgi/research/urbanization/infrastructure_productivity).

[76] In this regard it is pertinent to note that so far the efforts of the G20 have been directed more towards expanding global firewalls by quintupling the resources of the IMF. The resources of multilateral development banks, which could have accelerated "shovel ready" infrastructure projects in emerging markets on a large scale, have been increased only by a very modest amount.

capital goods would also spill over to advanced economies. This would be a win-win situation, as it would also accelerate the demand rebalancing required for the global economy to get back to a sustainable higher growth trajectory.[77] It needs to be recognised that in cases where there is little room to alter agreed fiscal adjustment paths greater attention would need to be given to restructuring existing stimulus programmes than to expanding their size.

It also needs to be recognised that greater funding and investment in infrastructure may not be an optimal solution in all countries that may need to focus more on rebalancing demand towards domestic consumption. It also goes without saying that the focus on investment should not detract from the imperative for structural reforms necessary to encourage private sector job creation. The dangers of creating "white elephants" and "pork barrel politics" would also need to be mitigated. Regardless of these caveats, taking EMDEs as a whole (and perhaps some advanced economies as well) there is an argument that long-term funding and investment in infrastructure may assist the objectives of furthering development, rebalancing, reviving growth and creating jobs.

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There are a number of ways in which investment and infrastructure could be dovetailed into the G20 finance work-streams, especially through the Working Groups on the International Financial Architecture (raising resources), the Framework on Strong, Sustainable and Balanced Growth (inducing G20 countries to make commitments on investment), and through the regulatory reform agenda (such as asymmetric capital requirements for investment in the real economy and in financial assets).[78]

A major thrust in public investment in infrastructure is likely to push up growth rates even over the short term, create jobs and increase growth potential. But will it be self-sustaining? Japan is a cautionary tale in this regard. It has been trying to stimulate its economy back to growth over the last two decades through public investment, but private growth and investment are still to materialise, while its public debt has ballooned. Another big dose of public investment in the post-Tsunami period has again boosted its growth, but nobody expects this to be permanent. For the growth to be self-sustaining, there would also need to be a back-loaded demand rebalancing from public to private. While this could partly be done through transfer of public works to private hands, where appropriate, this would ultimately come with the revival of household demand. It may be recalled that the high growth rates during the Great Moderation were facilitated by excesses of the

[77] Alok Sheel, "Infrastructure Finance and Global Rebalancing", G24 Policy Brief No. 61, 02/12/2010, http://www.g24.org/Publications/PolicyBriefs/pbn61.html.

[78] Indian Prime Minister's speech at the plenary session of the seventh G20 Summit, Los Cabos, Mexico, June 18, 2012, http://pmindia.nic.in/speech-details.php?nodeid=1184.

financial system that enabled consumers in advanced countries, particularly in the US, to go on a consumption spree far in excess of their income generating ability. Return to these former levels of consumption is both unsustainable and unlikely without new growth drivers. Infrastructure investment can be one such growth lever. Increase in final consumer demand in surplus countries can be another. For deficit countries to exploit these opportunities, they need to become more competitive by implementing ambitious product and labour market reforms.

13. Unwinding Expansionary Policies

It is of course by no means certain that a huge push in public investment would revive the global economy on a self-sustaining basis which would involve a rebalancing of demand from deficit to surplus countries, and from public to private. There is certainly a good case for trying, for at least four reasons. Firstly, other options, both monetary and fiscal, have been tried and do not seem to be working. Secondly, theoretically it makes eminent sense, and although arguable this seems to have made a difference during the Great Depression. Thirdly, sovereign borrowing costs in major advanced countries remain low, making low return investments profitable. Fourthly, we may otherwise need to reconcile to reverting to lower trend growth in developed countries compared to even the pre-boom period.

The question is whether the world can, or should, live with this lower growth, especially since it is not appreciably lower than the pre-boom average. Since EMDEs are still growing, on average, above the pre-boom rate, the case for continuing stimulus is not very sound, especially where public debt, deficit and inflation levels are high. These countries could overheat at growth rates they had got used to in the recent past, and some of them have already done so.

Since EMDEs are still growing, on average, above the pre-boom rate, the case for continuing stimulus is not very sound, especially where public debt, deficit and inflation levels are high. These countries could overheat at growth rates they had got used to in the recent past, and some of them have already done so.

Growth rates in advanced countries, on the other hand, are still roughly half of what they were in the pre-boom period. In these countries, therefore, there is a strong case for continued fiscal expansion and easy monetary policy at this juncture.

Public investment in the current juncture is not, of course, an argument for governments to take over the commanding heights of the economy or crowd out private enterprise, but for public investment to take the space vacated by private enterprise due to an absence of animal spirits. Once confidence returns, it would be time for exit from such policies. At this point central banks would need to unwind their expansive monetary and fiscal policies as they would have served their purpose. Current levels of public debt would appear increasingly unsustainable on account of rising interest rates. Public investments could be privatised where appropriate to enable sovereigns to draw down high levels of public debt (as was done in the case of the financial sector in the US).

Policymakers would need to know when to start exiting. They

Operationally, macroeconomic policies may need to pass through four broad stages to balance conflicting short-term and long-term objectives. The first stage—the present—would consist of continued fiscal stimulus, with a focus on investment as indicated earlier, accompanied by continued easy monetary policies.

need to be open to the possibility that a return to the Great Moderation growth rates may not occur on account of a permanent loss in global demand. Therefore, policymakers should not be looking to growth rates to begin exiting, but to rising treasury yields and inflation. This point has already been reached in several EMDEs, but not in advanced economies. Inflation and rising yields on sovereign bonds in advanced countries would be like canaries in the goldmine signalling the revival of animal spirits and closing of the output gap. At that point monetary policy would need to take over the mantle of macroeconomic stabilisation from fiscal policy, finely balancing the need to anchor inflationary expectations on the one hand by gradually normalising interest rates and unwinding unconventional monetary measures, while gradually inflating away high levels of public debt through some degree of financial repression on the other.[79] The return to higher growth in advanced economies would also enable EMDEs to shift to a higher growth trajectory since, over the short term at least, they would continue to be dependent on final consumer demand in the former countries to a considerable extent.

Operationally, macroeconomic policies may need to pass through four broad stages to balance conflicting short-term and long-term objectives. The first stage—the present—would consist of continued fiscal stimulus, with a focus on investment as indicated earlier, accompanied by continued easy monetary policies, till such time as yields on sovereign bonds and/or inflation start rising, signalling the return of private demand and animal spirits.

In the second stage the withdrawal of fiscal stimulus should be calibrated and gradual, so as not to choke off the incipient recovery. The mantle of stimulus would also be increasingly borne by monetary policy, which would remain easy although unconventional methods such as quantitative and credit easing, which suppress market signals relating to government borrowing costs, would need to be phased out.

In the third stage, when the recovery turns robust, fiscal consolidation would need to be accorded top priority. During this phase central banks may need to keep interest rates low not simply to support the recovery but also to assist in fiscal consolidation. Given the combination of high levels of public debt and low trend growth, there may be little option but to inflate part of this away by keeping real

[79] See fn 82. The post-war experience up to the 1980s where high levels of war debt were brought down through a combination of growth and inflation (savings taxed through negative real interest rates). However, the financial sector has been liberalised since. The fine tuning will be difficult, as raising rates prematurely would choke the green shoots of recovery, while raising them too slowly risks runaway inflation as the huge amounts parked by depository institutions with central banks could lead to a huge expansion of broad money (M2) (Martin Feldstein, "The Return of Inflation to the West?", *Business Standard*, September 3, 2012, http://www.business-standard.com/india/news/martin-feldstein-the-returninflation-towest/485158/).

interest rates negative to stabilise debt dynamics. This might involve an extended phase of the lower zero bound.

The fourth stage would be when policymakers have the confidence that debt dynamics have stabilised. This would mark normalisation of interest rates and return to rule bound monetary policies, such as the Taylor Rule.

The rollback of central bank balance sheets would have to be deftly managed. Unconventional monetary policies adopted by central banks have led to a sharp increase in the monetary base. This was at least in part to counteract the decline in liquidity on account of private deleveraging and the consequential fall in the money multiplier. As private demand picks up, large amounts parked by depository banks with the Federal Reserve in the United States would go back in circulation as the money multiplier returns to more normal levels. This could be inflationary, unless the central bank shrinks its balance sheet and soaks up the excess money in circulation. The rollback of the balance sheet could be measured and calibrated in the third phase to keep real interest rates slightly negative, while anchoring inflationary expectations. Be that as it may, in view of the huge expansion in their balance sheets at a time of rock bottom interest rates, unless deftly managed, central banks may be constrained to book huge capital losses in the process. This burden would ultimately need to be passed on to the taxpayer through the budget.

There are important takeaways for developing countries like India from the experience of, and the evolving debate in, advanced economies on the policy dilemma pitching austerity imperatives against those of growth. These lessons relate to monetary policy, fiscal multipliers, fiscal dynamics, fiscal space, and finally debt dynamics.

14. Lessons for Developing Countries

The austerity-growth policy equation in developing countries is quite different. Not only are they growing at a rate higher than the 1994–2003 averages, but inflation is also higher, pointing to supply constraints and a narrowing of the output gap rather than to problems on the demand side. On the one hand, this is constraining the space for monetary policy. On the other hand, the imperative for fiscal consolidation is greater and immediate. This is not on account of possible market revolt—despite high deficits their debt/GDP ratios have actually declined—but to avoid crowding out of private demand. There are nevertheless important takeaways for developing countries like India from the experience of, and the evolving debate in, advanced economies on the policy dilemma pitching austerity imperatives against those of growth. These lessons relate to monetary policy, fiscal multipliers, fiscal dynamics, fiscal space, and finally debt dynamics.

Monetary Policy

The first lesson to be derived from the policy response to the current crisis in advanced economies is that while monetary policy is a powerful macroeconomic tool for stabilising business cycles, it cannot revive growth by sweeping structural problems under the carpet. Following the fiscal excesses of the seventies, over time rule bound monetary policy run by independent central banks became the first line of defence during downturns of the business cycle. During the current crisis as well, the US Federal Reserve was quickly off the blocks, battling deflation even before the inflationary cycle had fully played out. It succeeded in fending off deflation through massive liquidity injections to counter the declining money multiplier effects of deleveraging. However, it could neither prevent recession, nor nurse the economy back to sustainable growth. India too is finding that monetary policy is no magical tool to revive growth in an economy beset with structural market rigidities, high fiscal deficits and inflationary expectations. In these circumstances monetary policy can only play a limited role.

India too is finding that monetary policy is no magical tool to revive growth in an economy beset with structural market rigidities, high fiscal deficits and inflationary expectations. In these circumstances monetary policy can only play a limited role.

Another monetary policy lesson for developing countries, as they set about the task of strengthening the institution of the central bank to put in place a modern, market based system of macroeconomic management, is the much vaunted "independence" of the central bank often seen by Treasuries as frustrating their single minded focus on growth. Yet right through the protracted crisis in advanced economies these independent central banks have stood solidly behind the Treasury, even appearing shoulder to shoulder and talking the same language in public. Indeed, monetary policy seems to have acted as an extension of fiscal policy, even goading it on to be more proactive. It is only when inflation is an issue that central banks and Treasuries clash.

Fiscal Multipliers

The second lesson relates to fiscal multipliers. The sharp, albeit brief, recovery of 2010, following an aggressive and coordinated global stimulus, and the subsequent "double dip", seem to point to two conclusions. First, a stimulus driven recovery in growth is not a sustainable recovery unless there is also a rebalancing of demand from the public sector to the private. Second, it underscores the IMF's original scepticism regarding fiscal multipliers should the stimulus be protracted. Extended stimulus has only added to market concerns regarding the debt overhang, without getting growth back on track.

India too found that the first round stimulus seemed to get growth back on track, but a protracted stimulus does not seem to be getting the bang for the buck. Its inflationary impact has moreover taken the wind out of monetary policy. Monetary policy is as ineffective in stimulating growth in an inflationary environment as it is in a deleveraging environment. Negative real interest rates depress financial savings available for investment, inflation reduces the purchasing power of domestic consumers, and domestic monetary policy can do nothing about concerns over external demand.

Fiscal Dynamics

Third, the crisis response and the austerity-growth debate in advanced economies have underscored the widely held view that it is difficult to reduce fiscal deficits and prevent a runaway increase in public debt in an environment of negative or tepid growth. Serial revenue shocks consequent on falling growth, and the need to provide stimulus to provide cover for the decline in private demand and stabilise growth, have made fiscal consolidation difficult for all major advanced countries, and several developing countries like India. India's recent experience is that fiscal consolidation record was impressive in the years preceding the crisis which coincided with a phase of high growth. It is now finding fiscal consolidation to be difficult in a period of low growth.

The current crisis has by no means settled the debate on "contractionary expansion", as there have clearly been historical episodes where this has occurred. This crisis has however made it clear that contractionary expansion will not work in an environment of weak private demand and confidence and a synchronised downturn, and also when monetary policy is ineffectual. As the IMF has pointed out, in such circumstances, fiscal multipliers may be higher than usual.

So can and should developing countries continue with an extended period of stimulus if the decline in growth is persistent as is being argued in advanced countries? Where fiscal space is clearly available, and inflation is in control, such as in China, there may be no dilemma. Where the space is constrained, at best fiscal consolidation can be staggered along with a change in the fiscal mix. Several developing countries are operating close to full capacity, and further stimulus could lead to macroeconomic imbalances without appreciable gains in the form of growth.[80] For instance, India may need to cool consumption and clear supply side bottlenecks by switching public expenditure from subsidies to investment. This would help raise the growth potential and lower inflation over the medium term. Recent steps taken by the Indian government, such as increasing administered fuel prices, further liberalising the regime for foreign direct investment and setting up a National Investment Board, are steps in this direction. A clear road map of fiscal consolidation is imperative for India.

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Fiscal Space

This takes us to the fourth lesson, relating to fiscal space, as large budget deficits over an extended period are challenging to fund on the one hand, and can be destabilising on the other. The received wisdom is that countries should follow a contra-cyclical fiscal policy so as to have adequate fiscal space during downturns. This typically means taking a medium- to long-term view on the sustainable level of fiscal deficit—the structural fiscal balance—and running deficits below this level when growth is above trend and *vice versa*. However, there was a long-term trend towards rising structural deficits in several advanced countries prior to the crisis on account of a combination of

[80] World Bank, *Global Economic Prospects*, January 2013, p.3, http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1322593305595/8287139-1358278153255/GEP13AFinalFullReport_.pdf.

rising welfare and age related expenditures on the one hand, and falling trend growth on the other. No serious attempt was made to stem the rise in structural deficits by renegotiating social compacts that had become unsustainable. As a result these countries quickly ran out of fiscal space and their fiscal deficit and debt quickly worsened.

India's fiscal policy in the run-up to the crisis was also not contra-cyclical, with the fiscal improvement mostly on account of the positive revenue shock induced by above trend growth than by expenditure reform through reducing subsidies.[81] As a result it also quickly ran out of fiscal space as growth declined. But quite apart from following a contra-cyclical fiscal policy, another object lesson from advanced countries is that generous social compacts are difficult to renegotiate. It is therefore imprudent to put in place generous compacts that are affordable when societies are young and trend growth is high, but become unaffordable as society ages and growth moderates.

Another object lesson from advanced countries is that generous social compacts are difficult to renegotiate. It is therefore imprudent to put in place generous compacts that are affordable when societies are young and trend growth is high, but become unaffordable as society ages and growth moderates.

A contra-cyclical fiscal policy might address the needs of a cyclical downturn, but fiscal space could be exhausted during a protracted crisis like the present one. If, as in the case of Japan, the private sector runs large surpluses, it is possible to sustain high levels of deficits and debt without an adverse impact on borrowing costs over an extended period. If the private sector is in deficit, a country can nevertheless run large and sustained fiscal deficits if there is a large external demand for its public debt. Countries whose domestic currencies are also international reserve currencies, such as the US, the UK and those in the Euro Area have this inherent advantage. This advantage is magnified during crises where there is risk aversion and a flight to safety. However, if the deficits are unusually large, the reserve currency advantage may need to be supplemented by unconventional accommodative monetary policies. The latter is possible only when there are no inflationary pressures, i.e. when the economy is operating well below potential. A combination of high inflation and falling growth may be indicative of a decline in growth potential, in which event loose monetary policy would only compound inflationary pressures. It would be imprudent for countries that do not have the reserve currency advantage to use their deficits and debt as benchmarks.

Nevertheless, keeping these caveats in mind, it could be argued, based on the current experience in developed countries, that it is possible to sustain fiscal stimulus by leveraging the fiscal space created by the contraction in private demand and consequential safe haven flows that lower government borrowing costs. The experience of the peripheral European Area (EA) countries, such as Greece, Portugal, Spain and Italy, however indicates how fickle market confidence can be. If borrowing costs rise sharply, debt dynamics may turn

[81] Since Indian public accounts do not make a distinction between structural and cyclical balance, no official data is available on cyclically adjusted fiscal balances.

unsustainable even at existing levels of debt. The US, UK, Japanese and northern EA experience therefore needs to be kept alongside that of peripheral EA countries such as Spain and Italy, whose domestic currency is a global reserve currency and whose deficits and debt/GDP ratios are not very much higher than those of the US, but are not favoured with accommodative monetary policy on the part of the European Central Bank to counteract the reduction and reversal in external demand for sovereign bonds.

Even if it is possible for governments to borrow large amounts at low cost, i.e. without adverse macroeconomic effects upfront, there would be back loaded costs to consider when private demand returns and interest rates rise. The problem is compounded in cases where governments lower their debt maturity profile to take advantage of lower interest rates. Central bank balance sheets would also need to be rolled back in tandem with increase in the money multiplier to prevent inflationary outcomes. This unwinding could come at a large fiscal cost, compounding the sovereign debt overhang as debt dynamics could quickly worsen.

From the above it is apparent that the appetite for the country's sovereign bonds that can keep borrowing costs low despite sustained high deficits depends, *ceteris paribus*, on, first, domestic private demand, in turn dependent on the extent of private savings and whether the economy is booming (private demand for sovereign bonds likely to be lower) or in a downturn (private demand for sovereign bonds likely to be higher on account of risk aversion); and second, external demand for sovereign bonds, which in turn depends on the nature of the currency and the business cycle, as safe haven flows during downturns tend to reduce the demand for all sovereign bonds other than those denominated in reserve currencies.

Debt Dynamics

Fifth and finally, there are important lessons to be drawn from the current crisis regarding public debt dynamics. The lessons relate to sustainability, defaults and impact on growth. It has long been known that excessive public debt can destabilise the economy. Till the recent crisis, however, except for Japan and Italy, excessive debt was mostly a developing-world concern. Even in the case of Japan and Italy there were special circumstances that enabled them to stabilise debt at high levels. Public debt dynamics have however worsened dramatically in practically all major advanced countries in just five years since the crisis broke out, and on the whole their public debt situation is now worse than those of emerging market economies.

Till the Latin American debt crisis of the eighties the widely held view, famously articulated by Walter Wriston, Head of Citibank during the Latin American debt crisis, was that although sovereigns could, and did, wilfully default on their debt, they could not go bankrupt, as they had access to the printing press through their central

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banks. They could always inflate away—in other words, insidiously tax their way out of—their debt. Several governments, including advanced countries, have indeed done so right through history.

Widespread public debt defaults during the Latin American debt crisis put paid to this belief, as these defaults were hardly wilful. Latin American governments did not have the capacity to repay all the debt not denominated in their own currencies. Governments, indeed whole countries, could and did go bankrupt insofar as external debt was concerned, because their printing presses could not print the reserve currencies in which this debt was denominated.

The Latin American debt crisis however merely qualified the general belief regarding the "non-bankruptibility" of governments by excluding the external debt component from the conventional wisdom. This gave rise to a whole new industry in development economics, focusing on external debt management. Following the current sovereign debt crisis in the Euro Zone, this belief has been further belied, since some peripheral countries are bankrupt as they are not in a position to repay the debt denominated in their own domestic currency, the euro.

The insolvency of some peripheral Euro Zone countries despite the liabilities being denominated in their own currency raises some public debt sustainability issues of special relevance to federal systems such as the United States and India, where both the Centre and States have separate fiscal powers.

The insolvency of some peripheral Euro Zone countries despite the liabilities being denominated in their own currency raises some public debt sustainability issues arising out of the Mundell-Fleming "impossible trinity"[82] of special relevance to federal systems such as the United States and India, where both the Centre and States have separate fiscal powers. A monetary union is in several respects similar to that of a federation in the sense that both the "national" and "sub-national" levels are subject to different combinations of the impossible trinity. While at the national level there is monetary independence, freedom to move capital across national borders and a floating exchange rate, sub-national entities enjoy a fixed exchange rate and free movement of capital at the cost of monetary independence. Since the central bank backstop is not available to sub-national governments, they can become insolvent and therefore hostage to the market. Successful federations have therefore imposed hard budget constraints on sub-national entities (thus American States are constitutionally barred from running budget deficits, while Article 293 of the Indian Constitution severely restricts the borrowing powers of sub-national entities) and put in place a system of fiscal transfers to meet their essential needs and to prevent them from becoming insolvent. This hard budget constraint and bailout mechanism enables sub-national governments to borrow at rates similar to those of the federal government, with the market largely overlooking differences in sub-national balance sheets and productivity levels, as

[82] A country can have only two of the three, a fixed exchange rate, monetary independence and free capital flows. The US, the UK, Euro Zone and Japan, the four reserve currency areas, have chosen monetary independence and freedom of capital flows and a floating exchange rate. India's regime of a managed float closely resembles these countries. China has chosen a fixed exchange rate, monetary policy and capital controls.

sub-national debt is seen as virtually guaranteed by the federal government. This is exactly what happened in the Euro Zone following the monetary union. The market started treating the Euro Zone like a federation, despite the fact that there was only a fiscal compact (the Maastricht Treaty) and not a hard budget constraint, and no fiscal mechanism for bailouts. As a result peripheral countries with weak finances and low productivity levels were able to borrow at rates similar to countries with far stronger economies and public finances. The global financial crisis laid bare this fatal flaw in the design of the Euro Zone. Peripheral Euro Zone countries have now become hostage to market forces, with their borrowing spreads diverging sharply, and are likely to remain so till the flaw is fixed to their satisfaction. Debt stressed Indian and American States, such as Kerala and California, on the other hand, are still able to borrow at more or less the same rates as the federal government and other States with much better balance sheets. The Euro Zone experience has underscored the dangers of giving sub-national entities the freedom to borrow without limit on the one hand, and the absence of a bailout mechanism on the other. European governments are now taking action to put in place a system of fiscal transfers and also impose hard budget constraints on the lines of the US and India. Alternatively, markets must have the confidence that the ECB would intervene to keep the sovereign borrowing costs of individual countries within certain limits. If and when these conditions are fulfilled, their sovereign bond yields may be expected to narrow.

Public debt sustainability is of course not just about default, but also about macroeconomic consequences, in particular those relating to growth and inflation. It is now becoming increasingly clear that it is not the currency in which sovereign debt is denominated that matters, but the circumstances under which public sector deficits, and their lagged derivative, sovereign debt, can be sustainably funded, balancing domestic savings, private investment and external demand. It is also becoming clearer that there can be no universal or symmetric benchmarks in this regard.

The IMF's *Fiscal Monitor* has asymmetric public debt thresholds for developed (60 per cent of GDP) and emerging market economies (40 per cent of GDP). Debt thresholds have also been the subject of recent studies by Reinhart and Rogoff in their seminal book *This Time is Different* and associated papers on the subject. A close reading of their work[83] reveals that:

(a) Public debt sustainability threshold is the same for developed

It is now becoming increasingly clear that it is not the currency in which sovereign debt is denominated that matters, but the circumstances under which public sector deficits, and their lagged derivative, sovereign debt, can be sustainably funded, balancing domestic savings, private investment and external demand.

[83] Carmen M. Reinhart and Kenneth Rogoff, "Growth in a Time of Debt", *American Economic Review*, Papers and Proceedings 2010, 100: 2,1–9; Carmen M. Reinhart, Vincent R. Reinhart and Kenneth S. Rogoff, "Debt Overhangs: Past and Present", NBER Working Paper # 18015, April 2012; Carmen M. Reinhart and Kenneth S.Rogoff, *This Time is Different: Eight Centuries of Financial Folly*, Princeton University Press, 2009.

and developing countries at 90 per cent, beyond which growth is negatively impacted, although the decline in growth is more in the case of developing countries with external debt of above 60 per cent.

(b) In advanced countries debt/GDP ratios exceeding 90 per cent have historically resulted in a median growth decline of 1.2 per cent. (This is significant, because this decline exceeds current growth in most developed countries.)

(c) External debt sustainability is at 90 per cent for developed countries and 60 per cent for developing countries. External debt includes private debt, because international financial markets do not distinguish between private and public external debt default in the case of developing countries.

(d) Inflation is significantly higher in developing countries with external debt of over 90 per cent.

It is arguable whether the current weak growth in advanced economies is purely cyclical or has embedded structural factors at play of a protracted nature. If the latter is the case, the debt sustainability threshold of advanced countries may well be lower now than what the historical data suggests.

Rogoff and Reinhart treat public debt asymmetrically only in respect of external debt (public and private) as growth was found to decline more in EMEs when total external debt reaches 60 per cent of GDP. The funding of external debt servicing is also an issue, as is clear from the Latin American debt crisis. It is unclear where the *Fiscal Monitor*'s 60:40 numbers come from. It would appear that 60 per cent for developed countries comes from the EU Maastricht Treaty. The rationale for a lower 40 per cent debt/GDP threshold for developing countries is however not clear. The analysis of Rogoff and Reinhart is based on historical data spanning centuries. In the current economic scenario there is little economic rationale to warrant asymmetric treatment for advanced and emerging market economies on this count since growth and debt dynamics have reversed over the past two centuries.

Growth and debt dynamics are captured in the IMF's Debt Sustainability Assessment as part of a country's Article IV evaluation. It is arguable whether the current weak growth in advanced economies is purely cyclical or has embedded structural factors at play of a protracted nature. If the latter is the case, the debt sustainability threshold of advanced countries may well be lower now than what the historical data suggests. Likewise, growth in EMEs has increased sharply in recent decades, and also become more sustainable and less volatile. Their debt sustainability thresholds should therefore have increased, provided external debt is kept within prudent limits for reasons spelt out above. It is pertinent to note that while fiscal deficits widened sharply in both advanced economies and emerging market economies during the crisis, debt/GDP ratios did not increase significantly in the latter because their trend growth is now significantly higher than that of the former.

The bottom-line is that there is considerable uncertainty surrounding the robustness of fixing debt thresholds based on historical data as attempted by Rogoff and Reinhart. While fiscal consolidation is necessary for both advanced and emerging economies, given the steep increase in debt/GDP ratios in advanced countries over the last few years, and the decline in growth, the imperative of fiscal consolidation is arguably more critical for advanced countries over the medium to long run at this juncture. At any rate, there seems to be little justification for using lower debt sustainability thresholds for emerging market economies, unless these relate to external debt. Despite the reserve currency advantage of advanced countries in funding deficits, if debt dynamics worsen when interest rates rise they may have little option but to inflate away at least part of this debt through financial repression to stabilise their debt, something that developed countries did with their post-war debt, and what developing countries have been doing in the more recent past.[84] Developing countries, on the other hand, need to be mindful that their external debt is kept within prudent limits as this component cannot be inflated away.[85] Thus while India's external debt at 20 per cent of GDP is currently well below R&R's prudent limit of 60 per cent, recent trends are nevertheless troubling as it doubled in the last five years ending March 2012, with the most volatile (short-term) component trebling.[86]

Despite the reserve currency advantage of advanced countries in funding deficits, if debt dynamics worsen when interest rates rise they may have little option but to inflate away at least part of this debt through financial repression to stabilise their debt.

15. Concluding Remarks

The tepid global recovery from the global financial crisis, and the dramatic increase in public debt in advanced economies, have created a policy dilemma pitting the imperatives of growth against austerity. The dilemma is compounded by the limited impact of monetary policy tools in the current juncture on the one hand, and the market reaction to deteriorating sovereign balance sheets in countries that do not have the benefit of a central bank backstop on the other. While recessionary conditions have opened up fiscal space for governments, this needs to be deftly used by balancing short-term needs against long-term requirements, with a clearly demarcated, stage-wise roadmap of moving seamlessly from the former to the latter. Fiscal policy is no magic wand that can drive the recovery, as structural adjustments are also necessary in both developed and developing countries to get global growth back on track in a sustainable manner. Even though growth in developing countries has also been adversely affected, they do not face the same dilemma in such a stark manner. However, there is much that they can learn from the recent experience of developed countries for their own macroeconomic management and institutional development.

[84] Carmen M. Reinhart and M. Belen Sbrancia, "The Liquidation of Government Debt", NBER Working Paper # 16893, March 2011.

[85] C. Rangarajan, "Lessons from the Greek Episode", *Business Standard,* June 3, 2010, http://www.business-standard.com/india/news/c-rangarajan-lessons-fromgreek-episode/396824/.

[86] *India's External Debt: A Status Report 2011–12*, Government of India, Ministry of Finance, August 2012.

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