# Relevance of Keynesianism in the Post-Recession Period

C RANGARAJAN, ALOK SHEEL

Tracing the rise of Keynesian policies in the post-second world war years to its decline in the 1970s and 1980s with monetary policy playing a central role in macroeconomic stabilisation, this article examines its resurrection in the years following the global financial and economic crisis of 2007-08. It points out that at the heart of the present stimulus-austerity debate is the effectiveness of Keynesian stimulus policies during episodes of growth falling below potential, and classifies growth crises into three different types for analytical clarity. Analysis shows that though the growth crisis in advanced economies has spilled over into developing ones through trade and investment channels, its nature is different. The focus in these countries should therefore be on addressing supply shocks and structural reforms, including investment in infrastructure, through a change in the fiscal mix.

C Rangarajan (*c.rangarajan@nic.in*) is the chair of the Prime Minister's Economic Advisory Council and Alok Sheel (*aloksheel@aloksheel.com)* is its secretary.

## Dominance in the Post-War Period

The dominance of Keynesian economics in the post-second world war period is largely credited to the widely held belief that it was expansionary fiscal policy that was effective in countering the Great Depression of the 1930s. First, President Franklin Roosevelt's New Deal triggered a smart recovery in the mid-1930s that saw the United States (US) recover its entire output loss by 1937.[1] Second, premature fiscal tightening on account of worsening public deficits and a public debt profile pushed the US back into a second dip recession in 1937. Third, it was ultimately the fiscal stimulus of the war economy that finally pulled the US out of the Great Depression. Even Friedman, who later sounded the death knell of fiscal policy as the preferred macroeconomic tool following the inflationary 1970s, could say that "in one sense, we are all Keynesian now" (1968: 15).

The case for Keynesian stimulus is straightforward, following directly from the national income identity (Y = C + I + net exports) and the investment-income multiplier. An expansion of government consumption and investment merely substitutes for the contraction in private demand to restore the economy to trend growth and full employment through the multiplier process. When domestic demand destruction is combined with external demand shock, and monetary policy is also ineffective, theoretically there is no alternative to fiscal expansion to restore growth over the short term.

According to Keynesian economics, governments are expected to reduce spending or raise taxes in periods of excess demand. In other words, fiscal policy is effective over the long run only if it is used in a contra-cyclical manner, or in modern terminology, by targeting the structural rather than the nominal fiscal deficit. This means, first, estimating growth potential, a hazardous exercise in the best of times, and often a shifting target as well; and second, creating fiscal space when output is above potential by running fiscal surpluses for use when it is below potential.

Fiscal policy, however, soon became a political minefield, easy to navigate while in expansionary mode, but difficult to exit following recovery. In practice, therefore, governments, fortified by the Philips curve that postulated a trade-off between inflation and growth, kept pushing the fiscal envelope to increase growth. Central banks, no longer constrained by the gold standard, were now in a position to accommodate the expansion by monetising any level of fiscal deficit. Fiscal policy therefore had an inherent inflationary bias that tended to crowd out private demand.

While some amount of financial repression may have been necessary to reduce the huge burden of the second world war debt in advanced economies, the war debt hangover was no longer a destabilising issue at the time of the oil price hikes in the 1970s. US fiscal policy under President Jimmy Carter however expanded, rather than adjusted, in the face of what was a big and permanent demand shock – a steep rise in oil prices. This led to hyperinflation even as growth remained below trend (stagflation), with the widely acclaimed Phillip's curve breaking down.

## Ascendancy of Monetary Policy

Friedman sounded what appeared at that time to be the death knell of Keynesian economics by placing monetary policy at the heart of macroeconomic stabilisation. He identified inflation as basically a monetary phenomenon. While strict monetarism was never followed, Federal Reserve Chairman Paul Volcker's dogged and aggressive monetary tightening finally tamed hyperinflation. Inflation rates have been well-anchored ever since in advanced economies. Over time, monetary policy tools were streamlined and became more rule-bound, with several central banks following variants of Taylor Rule.

Although discretionary fiscal policy fell into disrepute (Feldstein 2002), fiscal policy continued to play a role in macroeconomic stabilisation through "automatic stabilisers", such as unemployment benefits that automatically kicked in as economic activity fell below trend, and phased themselves out automatically as growth recovered (IMF 2008: 167).[2] These additional expenditures, along with the revenue decline associated with lower growth, were expected to make fiscal deficits automatically cyclical, keeping the structural balance stable. In the European Union (EU), the Maastricht ("Growth and Stabilisation") Treaty capped fiscal deficits at 3%, thereby effectively legislating away recourse to discretionary stimulus (Veld et al 2012; Dolls et al 2009).[3] As a result, debt/gross domestic product (GDP) ratios in advanced countries tended to decline over time, till such time the combination of adverse demographics and generous social welfare contracts started impairing their fiscal balance sheets (Tanzi 2012). However, till the onset of the recent global financial crisis, public debt/GDP ratios in advanced economies (with some notable exceptions such as Japan and Italy) remained significantly below those in emerging market and developing economies (EMDEs), where fiscal discipline remained by and large lax until the recent big spurt in trend growth sharply increased the size of the denominator. Till the outbreak of the recent global financial crisis, Japan stood out as the outlier in the developed world as a country that persisted with fiscal policy as a major tool for macroeconomic stabilisation. Since this stabilisation has still not occurred, its public debt to national income ratio has risen to unprecedented levels. In retrospect, the Japanese experience in several respects anticipated what was to happen in much of the developed world in the wake of the Great Recession (Miyazaki 2006).[4]

## Great Recession and Resurrection

The global financial and economic crisis of 2007-08 elicited a strong and unprecedented globally coordinated macroeconomic policy response orchestrated by the Group of Twenty (G-20) leaders. The initial response to the developing crisis was from central banks, as financial markets were destabilised much before growth rates started plummeting. From September 2007, almost as soon as the first tremors in the financial system were felt, the US Federal Reserve embarked on a rapid easing of monetary policy. By January 2008, the benchmark federal funds rate (FFR) was down to 3%, and by April to just 2%. Within three months of the collapse of Lehman Brothers, US monetary policy was zero bound. Other major central banks followed the lead of the US Federal Reserve. Unconventional monetary policies, such as quantitative and credit easing, followed soon after. Rapid deleveraging, however, soon sent monetary policy into a liquidity trap, inflating new asset bubbles instead of working through regular transmission channels to stabilise growth. This left policymakers little alternative but to lean increasingly on long-discredited discretionary fiscal policy to stimulate their economies back to growth in a situation where crowding out of collapsing private demand was not an issue.[5]

The near-term impact of these extraordinary policy measures was a spectacular recovery in global economic growth from the second half of 2009. The G-20 virtually declared victory at its third summit in Pittsburgh in September 2009, and at their next (fourth) summit in Toronto in June 2010 it charted out a timeline for fiscal exit. However, this recovery was fleeting, based as it was on monetary and fiscal life support. Private investment and consumer confidence – animal spirits – that alone can drive a sustainable recovery never returned, and unemployment levels remained near crisis-highs, if the discouraged workers who had stopped looking for employment were included. By 2011, the global economy was again on a downward path.

This has raised questions regarding the appropriateness of the policy response, and also what the appropriate policy stance should be going forward. Policymakers and economists are now divided into two major camps. Those who are of the view that there can be no fiscal consolidation in the absence of strong growth, favour continuing with macroeconomic stimulus.[6] The second camp underscores that the current downturn is not entirely cyclical, as there has been permanent loss of demand on account of household wealth destruction, deleveraging, and rising savings. As a result, stimulative monetary and fiscal policies are not leading to economic recovery but instead to lasting damage in the form of market revolt against unsustainable public debt and the build-up of inflationary expectations. They sound a note of caution on further stimulus, point to past episodes of "expansionary contraction" (Alesina and Ardagna 2009),[7] and stress that extended stimulus is only delaying the structural reforms that alone can drive a sustainable recovery.[8] The middling view holds that both continued stimulus and bold structural reforms are necessary, with the former easing the pain of the latter, without which no sustainable recovery is possible. This middling path was adopted by Chancellor Gerhard Schroeder in Germany a decade ago, and also underpins the "three arrows" of Abenomics currently being adopted by Prime Minister Shinzo Abe in Japan.

## Typology of Growth Crises

Be that as it may, Keynesian stimulus remains relevant when private demand is slack and the economy is growing below trend. In these circumstances, the pertinent issue is not crowding out of private demand,[9] but of how fiscal policy can crowd in private demand, thus laying the grounds for its eventual exit. At the heart of the current stimulus-austerity debate therefore is the effectiveness of Keynesian stimulus policies during episodes of growth falling below potential/trend. It is becoming increasingly clear that this effectiveness hinges on the factors behind growth falling below trend. While each growth crisis has its own defining features, and are often hybrid in nature, for the purpose of analytical clarity one could perhaps classify growth crises into three different types.

(A) If the decline in growth is because of demand (domestic or external, or both) slackening over the business cycle – usually associated with spare capacity and inflation falling below target – this could be termed a Type A growth crisis.

(B) If the decline in growth is because of a supply shock (including "sudden stops") – usually associated with rising inflation and falling real growth – this could be termed a Type B growth crisis.

(C) If the decline in growth is because of a collapse in demand caused by financial crises/deleveraging – usually associated with spare capacity and deflationary tendencies – this could be termed a Type C growth crisis.

In Type A crises, a small dose of fiscal stimulus over a relatively short period should ordinarily be adequate to revive growth, as the decline in private demand is cyclical.[10] Because of the inherently political nature of fiscal policy (easy entry, difficult exit), there is however danger of fiscal expansion remaining sticky, leading to build-up of inflationary pressures. The stimulus should ideally be self-funded through contra-cyclical fiscal policies. These are however politically difficult to implement. Over time, therefore, the burden of stimulus in Western economies has shifted to a mix of automatic stabilisers and monetary policy administered through independent central banks as the first line of macroeconomic defence. Be that as it may, the increase in public debt on account of the decline in revenue (on account of lower growth) and stimulus would be relatively modest, and the economy should be in a position to grow out of this subsequently.

There are, however, a few caveats to the above argument. The first caveat is that, theoretically, Keynesian stimulus may not be necessary to sustain trend growth if the decline in private demand is matched by higher net exports. In practice, however, such a rapid shift to external demand may not be feasible, and also not possible if the downturn is global. The second caveat is that the efficacy of fiscal policy could be impaired by Ricardian equivalence if the stimulus is in the form of tax cuts or direct transfers, which could be saved rather than spent. The policy mix is therefore critical for maximising fiscal multipliers. The third caveat is that in an open economy, part of the fiscal and monetary stimulus could leak overseas, thereby reducing the size of the multiplier.

In Type B crises, Keynesian fiscal stimulus will only aggravate the crisis – such as stagflation in the 1970s – as trend growth may shift downward permanently if the supply shock is permanent. Since there is no decline in private demand, fiscal stimulus is not warranted. If the supply shock cannot be neutralised through administrative actions, a combination of adjusting to the decline in growth over the short-term and structural reforms over the medium term to raise growth potential (including addressing specific supply shocks) is possibly the optimal strategy. Such a strategy is however politically challenging, as there would be pressure for fiscal and/or monetary expansion to counteract the decline in growth.

In Type C crises, the need for Keynesian stimulus is manifest on account of the decline in private demand, and fiscal policy is likely to be hobbled not just by Ricardian equivalence, but also by deleveraging. Tax cuts and direct transfers are likely to be used to pay down debt rather than consumed. Since monetary policy transmission channels could be impaired by deleveraging, and constrained by zero-bound interest rates, the burden of stimulus is nevertheless likely to fall disproportionately on fiscal policy. Fiscal multipliers in such circumstances are potentially higher than usual, and even more so if the collapse in demand is global. The optimum fiscal strategy would be to, first, accelerate the deleveraging, and second, design a fiscal mix that minimises Ricardian equivalence. Even so, past experience indicates that fiscal stimulus could be required in large amounts over an extended period, as a result of which the public debt could rise dramatically. Financing deficits should not be a problem in such extreme circumstances however, provided these are in local currency and external deficits are contained,[11] on account of the flight to quality and central bank purchase of long-term treasury debt (quantitative easing, or QE).

There are, once again, some caveats to the stylised argument above. The first caveat is that if the underlying crisis is national or regional, the recovery could be accelerated by external demand. This is what happened in the aftermath of the east Asian crisis. However, if the financial crisis is global, such as the present one, a period of extended fiscal stimulus may be necessary till such time as private demand returns. The second caveat is that if trend growth is permanently impaired, there is a danger of "overstimulation". Hence inflation, rather than the growth rate, should be the signal for policymakers to withdraw stimulus. The implication is that, in such circumstances, till such time that the growth potential is raised again through structural reforms, the economy may have to live with higher levels of unemployment than in the past. The third caveat is that the dramatic increase in debt would need to be addressed separately, ideally through subsequent growth; if this is inadequate, it may need to be at least partly inflated away through financial repression.

## Fiscal Stimulus in the Current Growth Crisis

Although the current crisis in advanced economies is very clearly a Type C crisis, there are also some long-term structural demographic changes at work that need to be factored in while putting economies back on the path of self-sustaining growth.

In Type C crises, fiscal multipliers are potentially high (IMF 2012: 33-39; Summers and DeLong 2012).[12] Countries with aggressive fiscal policies (US, China and Japan) have experienced relatively higher growth, while those that have chosen (Germany and later the UK) or been forced into (peripheral eurozone) austerity have seen growth collapse.[13] The US is now headed for fairly sharp fiscal tightening, but the full impact of falling off the fiscal cliff would only be known in coming quarters.[14]

Tables 1-3 (p 34, 35) provide cross-country data on fiscal balance and real GDP growth respectively. The last two

**Table 1: Nominal General Government Balance**

| | General Government Balance: Per Cent of GDP | | | | | | | | Expansion | Tightening |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2008-10 | 2011-13 |
| Advanced | | -1.1 | -3.5 | -9 | -7.8 | -6.6 | -5.9 | -4.7 | -6.2 | 2.7 |
| US | -2 | -2.7 | -6.7 | -13.3 | -11.1 | -10 | -8.5 | -6.5 | -8.0 | 3.9 |
| UK | -2.6 | -2.7 | -5.1 | -11.4 | -10.1 | -7.9 | -8.3 | -7 | -6.2 | 3.0 |
| Japan | -3.7 | -2.4 | -4.1 | -10.4 | -9.3 | -9.9 | -10.2 | -9.8 | -4.9 | -0.1 |
| Euro area | -1.3 | -0.6 | -2.1 | -6.4 | -6.2 | -4.1 | -3.6 | -2.9 | -4.0 | 2.8 |
| Germany | -1.6 | 0.2 | -0.1 | -3.1 | -4.1 | -0.8 | 0.2 | -0.3 | -1.7 | 3.3 |
| France | -2.4 | -2.7 | -3.3 | -7.6 | -7.1 | -5.2 | -4.6 | -3.7 | -3.5 | 2.9 |
| Italy | -3 | -1.5 | -2.7 | -5.4 | -4.3 | -3.7 | -3 | -2.6 | -1.9 | 1.8 |
| Spain | 2 | 1.9 | -4.5 | -11.2 | -9.7 | -9.4 | -10.3 | -6.6 | -10.4 | 1.7 |
| Greece | -6 | -6.8 | -9.9 | -15.6 | -10.7 | -9.4 | -6.4 | -4.6 | -5.7 | 6.4 |
| Portugal | 4.1 | -3.2 | -4.5 | -10.2 | -9.8 | -4.4 | -4.9 | -5.5 | -8.6 | 5.1 |
| Ireland | 2.9 | 0.1 | -7.4 | -13.9 | -30.9 | -13.4 | -7.7 | -7.5 | -18.9 | 12.9 |
| BRICS | -0.3 | 0.48 | -1.24 | -5.62 | -4.28 | -2.94 | -3.54 | -3.34 | -3.8 | 1.7 |
| Brazil | -3.5 | -2.6 | -1.4 | -3.1 | -2.7 | -2.5 | -2.8 | -1.2 | 0.6 | 0.7 |
| Russia | 8.3 | 6.8 | 4.9 | -6.3 | -3.4 | 1.5 | 0.4 | -0.3 | -9.2 | 5.4 |
| India | -6.4 | -4.2 | -8.6 | -10.1 | -8.7 | -8.4 | -8.3 | -8.3 | -3.8 | 1.1 |
| China | -0.7 | 0.9 | -0.7 | -3.1 | -1.5 | -1.3 | -2.2 | -2.1 | -1.9 | 0.4 |
| South Africa | 0.8 | 1.5 | -0.4 | -5.5 | -5.1 | -4 | -4.8 | -4.8 | -4.8 | 0.8 |

Source: IMF, *Fiscal Monitor*, April 2013, etc.

**Table 2: Cyclically Adjusted General Government Balance**

| | Cyclically Adjusted General Government Balance: Per Cent of GDP | | | | | | | | Stimulus | Tightening |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2008-10 | 2011-13 |
| G-7 | -2.7 | -2.7 | -4.1 | -6.6 | -7.1 | -6.2 | -5.4 | -4.2 | -3.2 | 1.8 |
| US | -2.3 | -2.8 | -5.1 | -8.1 | -8.5 | -7.7 | -6.4 | -4.6 | -4.7 | 2.3 |
| UK | -4.7 | -5.2 | -7.3 | -9.7 | -8.6 | -6.5 | -5.4 | -4.3 | -3.6 | 3.2 |
| Japan | -3.6 | -2.2 | -3.5 | -7.5 | -7.9 | -8.5 | -9.3 | -9.5 | -3.4 | -1.2 |
| Euro area | -2.1 | -2.1 | -3.1 | -4.6 | -4.8 | -3.4 | -2.4 | -1.3 | -2.1 | 2.4 |
| Germany | -2.2 | -1.2 | -1.3 | -1.2 | -3.5 | -1 | 0.1 | 0 | -0.3 | 3.2 |
| France | -2.4 | -3.1 | -3.1 | -5.1 | -5.1 | -3.9 | -3.1 | -1.9 | -1.7 | 2.1 |
| Italy | -4.7 | -3.3 | -3.6 | -3.4 | -3.4 | -2.8 | -1.2 | -0.2 | 0.5 | 2.0 |
| Spain | 1.1 | 0.3 | -5.6 | -10.2 | -8.3 | -7.6 | -5.1 | -4.2 | -8.7 | 2.7 |
| Greece | -8.7 | -10.9 | -14.2 | -19.1 | -12.2 | -8.2 | -2.7 | 0.2 | -5.4 | 8.6 |
| Portugal | -3.8 | -4 | -4.3 | -9.4 | -9.7 | -3.6 | -3 | -3 | -3.9 | 6.5 |
| Ireland | -4 | -8.6 | -11.9 | -10.3 | -8.7 | -7 | -6 | -5.5 | -4.0 | 2.5 |
| BRICS | -0.2 | -0.52 | -2.26 | -4.78 | -4.06 | -2.88 | -3.3 | -3.16 | -3.3 | 0.9 |
| Brazil | -3.3 | -3 | -2.1 | -2.3 | -3.3 | -3 | -2.7 | -1.2 | 0.6 | 1.0 |
| Russia | 8.2 | 6.1 | 3.9 | -3.2 | -1.8 | 2 | 0.5 | -0.4 | -7.5 | 2.5 |
| India | -6.2 | -6.5 | -10.4 | -10.5 | -9.5 | -9.2 | -8.8 | -8.8 | -3.8 | 0.6 |
| China | 0 | 1 | -0.5 | -2.6 | -0.9 | -0.2 | -0.9 | -0.9 | -1.8 | 0.2 |
| South Africa | 0.3 | -0.2 | -2.2 | -5.3 | -4.8 | -4 | -4.6 | -4.5 | -4.2 | 0.4 |

Source: IMF, *Fiscal Monitor*, April 2013, etc.

columns in Table 1 show, first, the average annual fiscal expansion in 2008, 2009 and 2010, with the average deficit/surplus of 2006-07 as the baseline, and second, the average annual tightening in 2011, 2012 and 2013, with the fiscal deficit in 2010 as the baseline.

What comes across very clearly from Table 1 is the dramatic increase in fiscal deficits across the board, particularly in the years 2008-10, in advanced economies. While much of this was on account of stimulus policies coordinated by G-20 leaders, the fiscal balance data needs to be interpreted with some caution. The entire rise in the fiscal deficit may not reflect a rise in public expenditure. In a growth crisis, fiscal deficits rise both on account of lower revenues and higher expenditures. The sharper the fall in growth, the steeper is the fall in revenue. Therefore, if growth declines, even in the absence of fiscal stimulus, ceteris paribus, the fiscal deficit would increase. If the fiscal deficit falls despite a decline in growth, one can by and large conclude that the improvement is on account of reduced public expenditure.[15] This is clearly what appears to have happened in the peripheral eurozone, where deficits have not shrunk commensurate with the extent of fiscal tightening.

The true extent of fiscal stimulus and fiscal tightening is therefore better reflected in the structural (cyclically adjusted) general government balance, rather than the nominal deficit, that is shown in Table 2, which makes adjustments for revenue declines associated with lower growth. The average annual fiscal stimulus over the three-year period, 2008-10, has been calculated by treating the deficit in excess of the average deficit of 2006 and 2007 as fiscal stimulus. Likewise, the average annual tightening over the three-year period, 2011-13, has been calculated with the deficit in 2010 as the benchmark.

While Table 2 does not alter the big picture, the lower stimulus in this table reflects the extent of deterioration in the fiscal deficit arising out of lower revenues, in turn, deriving from lower growth. Table 2 also indicates that the fiscal stimulus in Germany was much lower, and the fiscal tightening in peripheral Europe was much larger than what the nominal deficit figures in Table 1 might suggest.

The initial fiscal stimulus in some advanced countries, especially in the US, UK and Japan, was very large. These countries also experienced the sharpest uptick in growth in 2010 among major advanced economies. The euro area, where the stimulus was much smaller, also had a more modest recovery in comparison. In the case of Germany, the correlation between fiscal stimulus and growth was weak. This can perhaps be explained in terms of its greater reliance on external demand. Since much of this external demand emanated from peripheral Europe, as growth rates plummeted in the latter, German growth also declined sharply.

Since Brazil, Russia, India, China and South Africa (BRICS) continued to grow during the crisis, albeit at a slightly lower rate, their cyclically adjusted deficits did not deviate significantly from their nominal deficits. What is striking, however, is that on a cyclically adjusted basis the fiscal stimulus in BRICS was not very different from that in Group of Seven (G-7) countries. Fiscal consolidation, on the other hand, was more staggered in comparison, perhaps because there was less bond market pressure as their public debt/GDP ratios did not rise significantly on account of higher nominal GDP growth. It is therefore not surprising that their growth outcomes were far superior to those of their advanced country peers.

Table 3 contains data on annual real GDP growth, with the last column aggregating the annual growth rates between 2008 and 2013 (IMF projections). This indicates that while real output in the US is higher by 4.9% in real terms over 2007, in the UK real output has shrunk by 1.4% and in the eurozone as a whole by 1.5%. The decline in peripheral eurozone countries has been very sharp indeed.

**Table 3: Real GDP Growth**

| | Real GDP: Annual Per cent Change | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Av 1995-2004 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2008-13 |
| Advanced | 2.8 | 3 | 2.8 | 0.1 | -3.5 | 3 | 1.6 | 1.2 | 1.3 | 3.7 |
| US | 3.3 | 2.7 | 1.9 | -0.3 | -3.1 | 2.4 | 1.8 | 2.2 | 1.9 | 4.9 |
| UK | 3.3 | 2.6 | 3.6 | -1 | -4 | 1.8 | 0.9 | 0.2 | 0.7 | -1.4 |
| Japan | 1.1 | 1.7 | 2.2 | -1 | -5.5 | 4.7 | -0.6 | 2 | 1.6 | 1.2 |
| Euro area | 2.2 | 3.2 | 3 | 0.4 | -4.4 | 2 | 1.4 | -0.6 | -0.3 | -1.5 |
| Germany | 1.3 | 3.9 | 3.4 | 0.8 | -5.1 | 4 | 3.1 | 0.9 | 0.6 | 4.3 |
| France | 2.2 | 2.5 | 2.3 | -0.1 | -3.1 | 1.7 | 1.7 | 0 | -0.1 | 0.1 |
| Italy | 1.6 | 2.2 | 1.7 | -1.2 | -5.5 | 1.7 | 0.4 | -2.4 | -1.5 | -8.5 |
| Spain | 3.7 | 4.1 | 3.5 | 0.9 | -3.7 | -0.3 | 0.4 | -1.4 | -1.6 | -5.7 |
| Greece | 3.7 | 5.5 | 3.5 | -0.2 | -3.1 | -4.9 | -7.1 | -6.4 | -4.2 | -25.9 |
| Portugal | 2.7 | 1.4 | 2.4 | 0 | -2.9 | 1.9 | -1.6 | -3.2 | -2.3 | -8.1 |
| Ireland | 8 | 5.4 | 5.4 | -2.1 | -5.5 | -0.8 | 1.4 | 0.9 | 1.1 | -5 |
| BRICS | 4.7 | 8.0 | 8.9 | 6.0 | 0.9 | 7.3 | 5.5 | 3.7 | 4.6 | 28.0 |
| Brazil | 2.5 | 4 | 6.1 | 5.2 | -0.3 | 7.5 | 2.7 | 0.9 | 3 | 19 |
| Russia | 2.8 | 8.2 | 8.5 | 5.2 | -7.8 | 4.5 | 4.3 | 3.4 | 3.4 | 13 |
| India | 6.1 | 9.4 | 10.1 | 6.2 | 5 | 11.2 | 7.7 | 4 | 5.7 | 39.8 |
| China | 9.2 | 12.7 | 14.2 | 9.6 | 9.2 | 10.4 | 9.3 | 7.8 | 8 | 54.3 |
| South Africa | 3.1 | 5.6 | 5.5 | 3.6 | -1.5 | 3.1 | 3.5 | 2.5 | 2.8 | 14 |

Source: IMF, *World Economic Outlook*, April 2013.

Tables 2 and 3 show that the growth rate in all the countries has fallen from the levels reached in 2010 and that the period since 2010 also shows relative fiscal tightening, even though the levels of fiscal deficit, both nominal and fiscally adjusted, remained high. In countries that tightened fiscal policies strongly, such as those in the euro as also the UK, the decline in growth has been sharper. The decline in growth rates in some of these countries cannot be attributed solely to fiscal tightening. Some of these economies had basic structural problems.

Beyond the initial recovery of 2010, however, fiscal multipliers have remained low (Barro 2012; Cogan et al 2009),[16] even though such multipliers are potentially higher in Type C crises.[17] To understand why this is the case, one needs to analyse the impact of the stimulus on, and the response to the stimulus of, private and corporate behaviour.

First, if the size of the public sector is big, as in Europe, the impact of austerity on output can be expected to be greater. On the other hand, if the size of the public sector is smaller, as in the US, the size of the stimulus as a proportion of national income may need to be larger to achieve the same increase in output.[18]

Second, to the extent that fiscal stimulus puts additional income in private hands, the latter's decision on how this additional income is used is critical. If it is used for drawing down debt or increasing savings, the fiscal multiplier would be smaller. In such circumstances, fiscal stimulus would gain greater traction if it is used also for accelerating the deleveraging through debt waivers. If monetary policy keeps deposit rates unusually low, as it has tended to do during the current growth crisis, it could partly work at cross purposes with fiscal policy by protracting the deleveraging process in an environment where financial regulatory reform tightens the credit market. Likewise, if corporates choose to not to invest, or to invest overseas, the multiplier would be weaker to that extent.[19]

Growth driven by stimulative policies is not sustainable without rotation of demand back from the public sector to the private, as fiscally driven growth is likely to wilt once the stimulus is withdrawn and/or fiscal multipliers weaken through protracted use. This is why the recovery of 2010 was not sustainable, and why a question mark still hangs over the sustainability of the Japanese recovery. In the US, housing prices have recovered, and household deleveraging may have run its course, setting the conditions for the revival of consumer demand. However, both the labour participation rate and the share of labour in the national income have fallen sharply. The US housing recovery is overly dependent on supply of credit by state-owned enterprises, such as Fannie Mae and Freddie Mac, who in turn are dependent on the Federal Reserve that is buying $40 billion of mortgage-backed securities currently, for funding (Tett 2013).[20] There is therefore a permanent fall in private demand and supply. Unless this is supplemented by external demand (that is, global demand rebalancing),[21] and structural reforms to restore competitiveness, growth potential is unlikely to be restored to former levels. While the same argument is applicable to advanced economies in general running current account deficits, it is particularly relevant in the case of peripheral Europe that does not have access to the exchange rate instrument for restoring external balance. Stabilisation in the eurozone would involve additional bold steps towards fiscal and banking union. Even countries undergoing ageing-related demographic transition may have to live with lower growth than in the past. Inflation rates need to be carefully watched to avoid dangers of overstimulating economies.

## Improving Fiscal Multipliers

Advanced economies, on average, are growing at less than half the rate at which they were growing prior to the onset of the global financial crisis. Nominal GDP in the euro area, and the UK, which have turned towards austerity, is still below what it was in 2007 in real terms. The immediate need during a sharp fall in growth is for fiscal expansion to target consumption through tax cuts and direct transfers that are easier to roll out and roll back, including ramping up provision for automatic stabilisers where these exist, as these can yield results quickly. This strategy can however be hobbled by Ricardian equivalence, and during a Type C crisis additionally by deleveraging as additional income is used to pay down debt rather than for consumption. This is the fiscal counterpart of the liquidity trap.[22] A number of studies have consequently found that direct government spending, which is a way out of the fiscal liquidity trap, yields higher fiscal multipliers (IMF 2012: Appendix 1). Moreover, in the kind of protracted downturn associated with financial crises there is a manifest need for a better balance between consumption and investment-oriented fiscal expansion (Baldacci et al 2009). Although Keynes made no distinction between the consumption and investment constituents of the fiscal stimulus, it has since become clearer that spending on investment provides the added benefit of increasing medium-run growth prospects, which consumption does not.

Direct government investment in infrastructure in a Type C crisis can be an effective tool for stimulating the economy as this has both demand- and supply-side features. First, there is a strong correlation between investment in fixed capital and job creation. Second, capital expenditure typically has higher fiscal multipliers. Third, investment has the potential to increase medium-term growth potential if the investment is in infrastructure (UNCTAD 2012: 3; Lin and Doemeland 2012).[23] Fourth, public investment also crowds in private investment, unlike other kinds of government expenditure which may actually crowd out private investment. Fifth, reliance on direct public spending to stimulate the economy makes the role of macroeconomic policy transmission channels less relevant.

The investment and infrastructure requirements in developed countries are very different from those of developing countries, as "traditional infrastructure" is already 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 emerging market economies (EMEs), who have in a sense reaped the advantage of late development.[24] There is 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 reskilling the labour force. This would pave the way for rotating demand from the public sector to the private, and therefore for eventual fiscal exit.[25]

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 traditional infrastructure needs of, and large gaps in, developing countries on the other hand are not only largely known (Fay et al 2011: 329-82), but these countries also have "shovel-ready" infrastructure projects. As growing protests in a number of developing countries have shown, there is a huge, unfulfilled demand for urban infrastructure services. If this huge investment demand can also be leveraged through globally coordinated initiatives to boost funding for infrastructure,[26] the demand created for capital goods would spillover to advanced economies.[27] 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 (Sheel 2010). It however 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.

## Concluding Comments

In the wake of the international financial crisis, all the affected countries adopted expansionary fiscal and monetary policies in line with Keynesian prescriptions. Six years down the line, and with uninspiring growth, several questions arise, including its sustainability. The original Keynesian framework was largely silent on how to finance the increased government expenditure. The resurgence of Keynesian stimulus policies has resulted in a dramatic increase in fiscal deficits and public debt. Despite this, and contrary to what one may have expected, government borrowing costs in a number of major advanced economies such as the US, UK, Japan and Germany have declined rather than increased. This is partly because of accommodative policies pursued by central banks. But in the case of reserve currency countries, there was an additional factor. A "flight to safety" resulted in increased flow of funds into these countries. The subscription to sovereign bonds of reserve currency countries, and more particularly the US, increased. Thus, in many of these countries, the market has so far been able to digest large amounts of new sovereign debt without pushing up government borrowing costs. The dramatic fiscal expansion has been matched by an equally dramatic monetary expansion consisting of zero-bound nominal interest rates and unconventional monetary policies. Monetary expansion on this scale would ordinarily be inflationary, but this has not happened because so far growth has been modest. Large monetary expansion also worked to keep deflation at bay.

However, in the EU, weak peripheral economies that ran up both large fiscal deficits and debt, and also had large current account deficits, witnessed a revolt in their sovereign debt markets. Borrowing costs rose sharply once markets realised that sovereign bonds did not have the central bank backstop.[28] This effectively priced them out of the market, forcing them into austerity. But austerity is not acceptable to people. This is, in fact, a "people's revolt" as against a "market revolt". This needs to be resolved. The solution lies in giving credible assurances to the market that expansionary fiscal policy in the short run will be accompanied by medium-term control over the fiscal deficit. Even in the case of reserve currency economies, the unconventional policies pursued to achieve monetary expansion will need a relook at some point since this will pose a "balance sheet problem" for central banks, as interest rates start rising (normalising?). This could involve additional fiscal burden.

The growth crisis in advanced economies has spilled over into EMDEs through trade (negative shock) and investment (positive shock) channels, leading to a Type A crisis, and in some cases a Type B crisis. Macroeconomic policies in these economies should therefore be very different from those in advanced economies. The focus in these countries should be on addressing supply shocks and structural reforms, including investment in infrastructure, through a change in the fiscal mix. Those EMDEs overly dependent on external demand for growth, such as China, may need to adjust by rebalancing demand from external sources to domestic.

## NOTES

1 The relative role of monetary and fiscal policy during the Great Depression is however a matter of continuing debate. See Rangarajan and Sheel (2013: 47).

2 International Monetary Fund (IMF) numbers for G-7 economies over the past four decades indicate that discretionary fiscal stimulus has been used in about 23% of all downturn quarters – less than half as frequently as interest-rate easing – whereas automatic stabilisers are observed in well over 95% of downturns.

3 Following the recent crisis, which saw a rapid deterioration in fiscal deficits, the growth and stabilisation pact has been further tightened, capping structural (cyclically adjusted) deficits at 0.5% of GDP. Automatic stabilisers provided a greater cushion against both declines in income and employment in the EU than in the US and within the EU in northern and central Europe than in eastern and southern Europe. This subsequently led to nuanced differences in G-20 summits over fiscal policy during the current crisis.

4 From 1994, the Japanese government implemented major tax cuts aimed at stimulating an economy where growth was collapsing as a result of a financial crisis caused by the bursting of a real estate bubble. After shrinking by 1% in FY 1993, real GDP recovered to grow by 2.3% in FY 1994, 2.5% in FY 1995, and 3.6% in FY 1996. Fiscal consolidation from 1997 by the new Ryutaro Hashimoto government however tipped the Japanese economy into a double dip recession.

5 In his 2002 paper, Feldstein categorically stated, "There is now widespread agreement in the economics profession that deliberate 'countercyclical' discretionary fiscal policy has not contributed to economic stability and may have actually been destabilising at particular times in the past. Most economists agree that monetary policy is the superior tool for macroeconomic stabilisation. Despite this general presumption against discretionary fiscal policy as a tool of stabilisation (which I support), I believe that there is one important condition when discretionary fiscal policy can play a constructive role: in a sustained downturn when aggregate demand and interest rates are low and when prices are falling or may soon be falling. This situation is of more than theoretical interest since it describes Japan's current condition and some analysts believe may also be relevant to the US and to Germany. ...Monetary policy is therefore generally regarded as the policy of choice when it comes to reducing aggregate demand or stimulating a weak economy." IMF 2008, issued immediately following the credit freeze consequent on the collapse of Lehman Brothers, while endorsing its prudential preference for automatic stabilisers nevertheless acknowledged the relevance of discretionary stabilisers during the current crisis in Chapter 5, "Fiscal Policy as a Countercyclical Tool", pp 159-96.

6 Nobel laureate Paul Krugman has from the very beginning been a consistent votary of this point of view, arguing that fiscal stimulus in the US was ineffective because it was too small. Krugman has written prolifically on the subject over the years. The main arguments are summarised in Krugman (2013). Lawrence Summers, former US Treasury Secretary, is of a similar view (2013). Martin Wolf, chief economics commentator of the *Financial Times* is another high-profile protagonist of the stimulus and growth camp (2013). It would appear that the IMF itself holds this view. See Cottarelli and Jaramillo (2012); Eyraud and Weber (2013); IMF (2013c).

7 Past episodes of "expansionary contraction" however were not characterised by a combination of deleveraging and a synchronised global downturn, and mostly predated the European Monetary Union. Reinhart and Rogoff (2013) have also been classified in the "austerity" school, although they have recently clarified that by drawing attention to the correlation between high levels of debt and falling growth they never implied that (a) the line of causation leads from high debt to lower growth, (b) that austerity is the only way to reduce debt, and (c) that fiscal stimulus should be withdrawn quickly. See Rangarajan and Sheel 2013 for a fuller discussion on this theme.

8 This is the view of the Bank of International Settlements, which differs significantly from that of the IMF, which is clearly on the side of extended stimulus.

9 This was the pertinent issue in the earlier debate surrounding the Phillips curve which involved a trade-off between growth and inflation.

10 The IMF's advice on fiscal policy at the beginning of the current crisis, underscoring the temporary nature of fiscal stimulus ("temporary, timely and targeted"), appears to have been based on a Type A crisis, although it was clear at the time this was a Type C crisis (IMF 2008: 159-96).

11 In the eurozone some peripheral countries with high levels of debt have struggled to finance deficits in their own currency despite the steep fall in private demand. But this is because these countries are dependent on external funding through large current account deficits (Gros 2013).

12 According to the IMF's findings, a reduction in government spending reduces real GDP much less when the output gap is positive than when it is negative, since the crowding out of private economic activity is less applicable in the latter case.

13 It is important to draw a distinction between austerity as a result of conscious civil society choice, as in the case of Germany, and latterly the UK and now the US, and austerity forced on civil society through market revolt, as in the peripheral eurozone. The civil society consensus in peripheral Europe is for continuing with the stimulus, as a result of which the market revolt against fiscal expansion is paralleled by civil society revolt against austerity.

14 According to the IMF, "Growth is expected to slow to 1.9% this year (i e, 2013) owing to an excessively rapid pace of fiscal deficit reduction ...baseline projections assume that the general government deficit will decline by over 2.5%, subtracting between 1.25-1.75 percentage points from growth in 2013" (2013b).

15 This correlation may not hold when the economy is expanding, when it is possible to reduce the fiscal deficit as a proportion to the GDP despite rising public expenditure. This is exactly what happened in India. See Sheel (2013: 12-15).

16 The arithmetic of fiscal multipliers is however very contentious, with estimates ranging between negative and +2.

17 See Note 15.

18 This may have prompted Krugman to argue that the size of the US stimulus programme was too small.

19 "Fiscal policy can be much less effective in an open economy, depending on the degree of capital mobility and the exchange rate regime, because fiscal stimulus might simply 'leak out'" (IMF 2008: 163); "Between the recession's turnaround in mid-2009 and the end of 2012, outward-bound US private direct investment rose steadily to $1.73 trillion annually from $1.05 trillion. This outward-bound investment currently exceeds (by $500 billion) the outward flow preceding the recession in 2007" (Wolf C 2013).

20 It is sobering to ponder that the extraordinary expansion of the US housing sector prior to the global financial crisis was driven by the extraordinary liquidity creation through the shadow banking system. Its revival is now driven by extraordinary liquidity creation by the Federal Reserve. Once the Federal Reserve rolls back its bond purchases, housing mortgages are likely to become costlier.

21 China's current account surplus has declined sharply over the last few years, but this has been accompanied by higher investment and not so far by higher consumption, which alone would make the rebalancing structural rather than cyclical on account of lower external demand.

22 "Liquidity trap" is usually applied to monetary policy, since the additional liquidity created by the central bank comes back to it as bank reserves. Likewise, the fiscal stimulus that is

saved leads to a corresponding increase in bank repayments/deposits that also end up as central bank reserves.

23 The IMF's findings are that capital expenditure multipliers range between 0.5 and 1.8, compared to 0.3 and 0.6 for revenue expenditure (Spilimbergo et al 2009).

24 In 2009, the American Society of Engineers pointed to the poor quality of the US' ageing infrastructure and estimated that $2.2 trillion was required over five years to "revitalise the foundation of our national economy" (American Society of Civil Engineers 2012). In July 2010, a US Government Accountability Office Report concluded that one in four of the over 6,00,000 roadway bridges needed to be upgraded. See Luce (2012). On President Barack Obama's plan for a national infrastructure bank to boost job creation and upgrade physical infrastructure, see Plumer (2011). The new socialist government in France under President François 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. In its latest Article IV consultations, the IMF has also advised the UK to focus on infrastructure investment to drive the recovery (IMF 2013a).

25 The complexities and nuances of exit from expansionary policies (fiscal exit), including a possible road map with markers for policymakers, are discussed in detail in Rangarajan and Sheel (2013: 81-83).

26 In this regard it is pertinent to note that so far the efforts of the G-20 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.

27 According to one estimate, a $1 increase in investment in developing countries is likely to increase $0.35 increase in capital goods exports from high-income countries (Lin 2013).

28 It was the announcement of the European Central Bank to conduct "Outright Monetary Transactions" through purchases of sovereign bonds without limit, subject to certain conditions, which finally brought down borrowing spreads. The danger of these spreads going up again in the event of the conditions not being fulfilled however remains.

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