In the 1990s, critics – some of them friendly – often said that "IMF" stood for "It's Mostly Fiscal". That was not true then, and it is not true now, but the Fund's focus on fiscal policy, both in research and in its programs, has intensified in the last few years.

There has also been a great deal of thought and action on the monetary and financial side. We, the central bankers, have revisited the liquidity trap, and now understand that reaching an interest rate of zero is not the end of expansionary monetary policy, for beyond that lies quantitative and credit easing, the modern Operation Twist, and more. Facing massive recessions, many central bankers have had to rethink inflation targeting – though that has been less of a problem for those who are flexible inflation targeters. Watching the Fed in action, we understand that the central bank is not only the Lender of Last Resort, it is also the Market Maker of Last Resort.  

In the wake of the crisis, and thanks especially to the work of Reinhart and Rogoff (2009), we have a stronger basis for emphasizing the importance of maintaining sound financial systems. Following the fall of Lehman Brothers, we have a renewed appreciation for the importance of systemic interactions within the financial system, which has led to the current emphasis on macroprudential policy and on the need for coordination among financial sector supervisors. Some of us have had to intervene in the foreign exchange market for the first time in many years. We have had to revisit the relationship between monetary and fiscal policies, both in seeking to coordinate between the main sets of macroeconomic tools, and also in recognition of the fact that any central bank action that affects its profits also has fiscal consequences – for in most countries, central bank profits accrue to the Treasury.


1 See Fischer (2011) for central bank lessons from the recent crisis.
I will take up four topics today, each briefly. First, the effectiveness of fiscal policy; second the issue of the optimal path of fiscal policy when a recession strikes – a question that turns on the interactions between the expansionary effects of budget deficits and the negative effects of the growth of government debt; third, the European growth debate; and finally, what will the Fund be saying about country policy in the future, after the Great Recession?

I. The Effectiveness of Fiscal Policy.

During the decades leading up to the Great Recession, the emphasis on fiscal policy as a stabilization tool declined – at least in the advanced economies – relative to the emphasis on monetary policy. This was in part due to the Great Moderation – the decline in and greater stability of the inflation rate during the 1990s and the first half of the last decade; in part due to the fact that fiscal policy decisions are unwieldy and typically slow. However, the pendulum has swung back following the experience of the last few years, not to the view that fiscal policy should be the dominant stabilization tool, but rather to the view that both monetary and fiscal policy should be used actively in stabilizing the economy.

Let me summarize what a visitor freshly returned from a long spell of focusing on other topics discovers in the modern literature on this topic:

1. *Countercyclical fiscal policy works.* Many articles support this conclusion.\(^2\)\(^3\) Christina Romer (2011) reviews the empirical evidence, making a powerful case that omitted variable bias has systematically led to the underestimation of the effectiveness of fiscal policy, and David Romer (2012) presents a particularly clear review of the arguments for the view that countercyclical fiscal policy works.

2. *Fiscal policy is multi-dimensional,* and there is thus no single, simple multiplier for either spending or tax measures. The effects of any particular set of fiscal policy measures depend on the precise details of what is included in the package and on the structure of the economy, as well as on expectations of future policy changes.

3. *It is not clear whether "the" tax multiplier or "the" spending multiplier (for policy changes that have the same effect on the deficit) is larger.* Romer and Romer (2010) estimate that the tax multiplier is about 2.5, after three years of implementation. It would be surprising to find expenditure multipliers larger than this. Reviewing the literature, Ramey (2011) concludes that spending multipliers lie between 0.8 and 1.5. The IMF (2010, p.113) notes that


\(^3\)However the conclusion that fiscal policy is effective is not universally shared. For instance, John Taylor (2011) concludes a recent article by saying (p.701) “… the results from the 2000s experience raise considerable doubts about the efficacy of temporary discretionary countercyclical fiscal policy in practice. In this regard, the experience with the stimulus packages of the 2000s adds more weight to the position reached more than thirty years ago by Lucas and Sargent (1978) and Gramlich (1978, 1979).”
spending-based deficit cuts, particularly those resulting from reductions in transfer payments, have smaller contractionary effects than tax-based adjustments. They suggest that this may be because central banks typically provide less monetary policy stimulus in response to indirect tax increases, which tend to have an inflationary impact. By contrast, Feldstein, speaking in January 2009, argued that "... while good tax policy can contribute to ending the recession, the heavy lifting will have to be done by increased government spending."

Given the need for large fiscal measures, it is likely that any package of substantial size will in practice include both tax and expenditure measures.

4. Fiscal contractions by small countries in a monetary union are not likely to be expansionary. In their well-known 1990 article, Giavazzi and Pagano showed that fiscal contractions in Denmark and Ireland in the 1980s had been expansionary. Perotti (2011) reexamines these two cases (Denmark, 1982-86 and Ireland 1987-90) as well as those of Finland (1992-98) and Sweden (1993-98). In each case the government cut spending. In each case a large decline in interest rates played a major role in generating an expansion in output, as did an exchange rate depreciation. Neither of these routes is likely to be available for a small country in a monetary union.4

5. Fiscal retrenchment in countries that face a higher perceived sovereign default risk tends to be less contractionary. This happens because the interest rate channel for such a country is active, even for a small country in a monetary union – thus restoring one of the channels for an expansionary contraction. The Fund (2010) states that even for such countries, an expansionary contraction is unlikely. However this statement is not obvious: a country on the brink of default, with very high domestic interest rates, is likely to gain in terms of GDP from setting its fiscal house in order, in other words to experience an expansionary contraction, relative to the level of income that would have obtained had no action been taken.

6. Fiscal multipliers are likely to be larger in the liquidity trap – for then there is no offsetting interest rate effect of the fiscal action. This point is made in a theoretical model presented by Christiano, Eichenbaum and Rebelo (2009); Auerbach and Gorodnichenko (2011) argue more generally that fiscal multipliers are likely to be larger in recessions than in expansions.

7. Sustained large fiscal deficits, leading to large public debt ratios, are bad, likely to have a negative effect on growth, and also on the capacity to use active short-run fiscal stabilization. The work of Reinhart and Rogoff (2009) and of Reinart and Sbrancia (2011) bears eloquent testimony to the problems of excessive debt, and there are many country cases and IMF programs to buttress that view. Broide and Flug (2011) present a case study – that of Israel. In 2003, in a deep recession, with a debt/GDP ratio of close to 100%, and a budget deficit of nearly six percent of GDP, Israel had great difficulty borrowing. It was fortunate to obtain US Government guarantees for its

4 However, see the final sentence in paragraph 5 immediately below.
borrowing, and immediately implemented a deep reform program, which *inter alia* limited the growth of real government spending to one percent per annum. By the end of 2007, with the assistance of aggregate growth averaging close to five percent since the start of the reform program, the debt/GDP ratio had declined to below 80 percent, and the budget was essentially balanced. In the ensuing global crisis, the budget deficit increased to five percent of GDP through the operation of automatic stabilizers, but the government had no difficulty in borrowing from the markets.

8. *The effectiveness of fiscal policy depends also on the response of monetary policy.*

Virtually none of these conclusions is surprising for those familiar with the pre-Great Recession literature. Indeed, reading the recent literature, one is reminded that the Keynesian view of fiscal policy was born in the Great Depression, that in 1971 Richard Nixon proclaimed "We are all Keynesians now", and that there are no atheists in foxholes.5

II. How Much Fiscal Expansion; or the Dog that Hasn't Barked.

Assuming that fiscal expansions are expansionary, and that high debt/GDP ratios are a problem, the key question in a recession is how much fiscal expansion to undertake, and for how long.

A simple answer at the end of 2008 was to calculate the fiscal expansion needed to offset the decline in aggregate demand expected for 2009 relative to full employment output, and to continue with an expansionary fiscal policy6 each year until full employment was restored. Most calculations suggest that the required fiscal expansion in the United States for 2009 would have been well above one trillion dollars – a number that was regarded as politically infeasible. In addition, such a fiscal path would have raised the national debt to its highest ever peacetime level, except for the period immediately after World War II.

One argument of those opposed to a massive fiscal expansion was that a very large peacetime increase in the debt/GDP ratio would reduce the credibility of the government's overall economic policies, raising longer term real interest rates, and thus damaging growth. It could also have been argued that the increase in the national debt in future years would have required a substantial fiscal effort to return the debt ratio to a more reasonable level, and that this would have been contractionary when implemented. Many critics argued that a large fiscal expansion would be inflationary. Further, with a very high debt/GDP ratio, the government's fiscal space would be reduced – meaning that its capacity to deal with any future negative demand shocks would have been impaired.

5 On checking the source of this aphorism via Google, I discovered that it has already been used in the context of the Great Recession by both Jeffrey Frankel and Paul Krugman. I discovered further that there is a Military Association of Atheists and Freethinkers, and that another group, the Freedom from Religion Foundation, has erected a monument to Atheists in Foxholes in Alabama.

6 By this I mean a large deficit, not an ever-growing deficit.
Reinhart and Rogoff (2009) and Reinhart and Sbrancia (2011) emphasize that governments have in the past worked off excessive debt ratios in part through financial repression, including by relatively (to interest rates) high inflation, and through a variety of regulatory measures designed to increase the demand for government debt.

There is a related monetary policy controversy, that of whether a prolonged period of extremely low interest rates stores up inflationary trouble and/or asset bubbles for the future. The difference between the fiscal and monetary policy issues is that there is little disagreement that high debt/GDP ratios are a problem, whereas it is not generally accepted that low interest rates over a prolonged period are a problem so long as inflation and asset bubbles do not raise their heads. The answer to the monetary policy issue is also simpler: the central bank can relatively easily reverse the monetary expansion by selling the assets it has acquired in the process of the expansion. Reversing a high debt/GDP ratio is a more challenging and socially costly task.

To return now to the question of the optimal fiscal policy: the answer must depend on how deep the recession is, on how large are the initial budget deficit and the initial debt stock, on the overall credibility of the government’s economic policies, on interest rates, on the flexibility of wages and prices, on the exchange rate regime, and on other economic variables. Given an empirical model, which includes both the positive effects of fiscal expansion and the negative effects of the rising stock of debt, the expected (utility) value of alternative fiscal policy paths can be calculated.

This approach is easier said than done in a credible fashion. The Fund's GIMF (Global Integrated Monetary and Fiscal) Model can possibly be used to provide a first approximation, but the absence of involuntary unemployment in the GIMF limits the reliability of the calculation. The 2010 WEO contains a few hints at the elements of an answer: it says (p.112) that "for a consolidation based on cuts to government consumption and transfers, GDP is lower than baseline for three years before rising above the baseline forever. The break-even point, at which the sum of the annual GDP losses in the early years is just offset by the sum of the gains later on, occurs five years from the start date."

However, these are only hints. For there remains the question of whether a larger fiscal expansion earlier would have returned the economy to its previous output level sooner. In practice this question has been answered on a political economy basis. In the United States, the package that was implemented in 2009 appears to have been as large as was politically possible. This was a sufficient answer at the time, but it is still important to come closer to knowing what would have been the optimal policy – important because it is important in the policy debate to provide well-based quantitative answers to quantitative questions.

In addition, there is a question as to whether it would have been better to set out at the beginning a credible exit policy from the fiscal expansion. When the global crisis

---

Evans, Kotlikoff and Phillips (2012) examine a related issue (when does the debt become unsustainable, in the sense that current policies have to be changed to prevent default) in a calibrated stochastic overlapping generations model. Their answer is that the average policy regime lasts a century, but that there is a 35 percent probability of reaching the fiscal limit in about 30 years.
began, and expansionary fiscal policies were implemented in most countries, there was a general fear or belief among many economists – I among them – that maintaining an expansionary fiscal policy without being able credibly to commit to an exit strategy, would at some point raise long-term real interest rates and cut off the recovery.

However that has not happened to any significant extent in the United States, where the debate has been most vigorous. At this point, the winners of that debate are those who said the U.S. could run massive budget deficits for several years without adverse consequences for long-term interest rates and for inflation. Similar statements about long-term interest rates and inflation can be made for the United Kingdom and Japan.

Why did those two dogs – long-term interest rates and inflation – not bark? With regard to interest rates, it cannot be that markets do not look ahead, for the fact is that there are risk premia in market interest rates all over the world, and they move – as can be seen in CDS spreads, including for countries in the liquidity trap and for those in the eurozone. I believe that the main reason that long-term rates have not risen much despite four years of essentially zero interest rates in the United States is that monetary policy has been targeted on longer-term interest rates as well as on the central bank rate. The same is true in the U.K. where the Bank of England has bought significant shares of the total new issues of government bonds, including at longer-term maturities. In addition, the dollar remains the preeminent reserve currency; and it has no clear superior as a store of value even in the volatile world in which we now know that we live.

With regard to inflation: serious inflation is not likely to return until aggregate demand strengthens and unemployment rates come down.

But before we take too much comfort from the current situation, we should not forget that market opinions about the credibility of policy frameworks can change rapidly, and hence so can the growth prospects of an economy.

III. Eurozone Growth

We have all taken part in discussions and read editorials and op-eds on the stabilization programs for eurozone countries. It is fashionable in such discussions to be worried – and that is entirely appropriate. As part of the worry, in almost every such discussion or article, someone will at some point announce "But the real problem is they don't have a growth strategy." "They" in this complaint is usually the country, the Fund, or the EU, or any combination of the three.

The tone in which the growth problem is announced suggests that there is a file called "growth solutions" stored in the computer of every Fund economist – and that the solution is simple. Sometimes it is clear that the critic believes that the growth solution consists of a much easier fiscal policy than that the country is scheduled to pursue. In other cases the critic is explicitly or implicitly arguing that the country should leave the eurozone and devalue its way back to growth.
The real problem is not that the Fund does not have a growth solution, but that for countries deep in a fiscal hole, neither the Fund nor anyone else has a sustainable and fast growth solution. To say this is not to underestimate the pain and human and social tensions caused by the extremely difficult economic situations in the European countries in distress. Nor is it to say all solutions are equally painful. Rather it is to say that we have to find the best solutions we can, and keep searching for better ones.

What is the growth strategy for European countries in distress? Typically it consists of

- Fiscal tightening, with the goal of restoring market access and eventual fiscal sustainability over a period of years. Since a country in a deep crisis of this type is unlikely to have either market credibility or market access, it will need large loans at the beginning of its programs, and will probably have to start fiscal tightening relatively soon – a year or two – after the program starts – but the tightening should be gradual.

- Structural reforms, whose focus will differ from country to country, but all of which are designed to contribute to raising longer-term growth, among them:
  
  1. Labor market reforms, which may include reducing costs of hiring and of labor separations; reducing the level and duration of unemployment benefits; reducing payroll taxes and other costs of employing labor; and measures to encourage greater labor force participation;
  
  2. Product market reforms, typically focusing on deregulation and the strengthening of competition, both internally and in opening to trade and import competition;
  
  3. Financial sector reforms, including measures to strengthen bank balance sheets, moving to the implementation of Basel III, and at the same time trying to reduce the negative impacts of bank deleveraging.
  
  4. Improving the business environment – one useful guide in this area is the World Bank’s annual Doing Business report, another is the World Economic Forum’s Global Competitiveness Report.

- For eurozone countries, the central bank nominal interest rate is low. This is a major benefit of belonging to the monetary union, though high risk premia for countries in distress reduce the relevance of the central bank interest rate. Extraordinary measures by the ECB, such as the LTRO, have provided significant assistance to banks and indirectly to the government's borrowing in the countries in distress.

At some point the central bank, or other EU institutions, might have to step in to provide more support to government bond markets in some countries. It is frequently objected that this is not the traditional lender of last resort role of the central bank, and that is correct. Nor should it ever become a normal activity of central banks. But in every great crisis, central banks have
undertaken extraordinary measures as they have tried to exercise their responsibility for maintaining macroeconomic and financial stability.

- **Internal devaluation**: For countries in a crisis, with a fixed exchange rate, including those in EMU, costs of production are typically too high. In other words, the country suffers from the same disease as would be caused by an overvaluation of the currency. In these circumstances, a real devaluation would certainly help reduce the social cost of stabilization. Steps can be taken in that direction by reducing VAT and substituting direct taxes; by reducing payroll taxes; and wherever possible, by reducing prices and wages directly. In heterodox stabilization programs in the 1980s and 1990s, the exchange rate was generally used as a nominal anchor and various forms of wage and price controls – e.g. a temporary wage and/or a price freeze – were instituted. Such measures are messy and require excessive intervention in wage- and price-setting, but they may be worth instituting on a temporary basis to speed the adjustment process – and policy makers in a crisis should never say never.

There is another important question: are there any growth strategies for the eurozone as a whole in its current institutional configuration? Conceptually, there is a strategy in which those countries with the most fiscal space run more expansionary fiscal policies, thus increasing demand within the zone, and providing some impetus to growth for the countries in distress. While that is a theoretical possibility, the magnitude of such effects would have to be estimated using an econometric model, in which the structure of intra-eurozone trade would have to be embedded. The issue should be investigated, though it may well turn out that the strategy would have very limited benefits and/or would not be acceptable to the countries with fiscal space.

What would happen if the present approach to stabilization fails in some countries? There could be a change in government, perhaps to a government more willing to implement the program, and with a stronger mandate to do so. We have seen recent examples of such changes in Italy and Spain. But sometimes the government or the public may in effect decide that it cannot continue implementing the difficult policies needed to stabilize within the current economic framework. This happened in Argentina in 2001. The process of exit in Argentina was extremely difficult, and there were very high social costs to doing so. It would be even more difficult to leave the eurozone: the benefits of membership are far more extensive than merely having a fixed exchange rate, as was the case in Argentina; the financial systems of the members of the eurozone are closely integrated; and the probability of an extremely costly exit would be very high.

**IV. Concluding Comments**

Coming from a central bank in the city in which it was announced 2500 years ago that there is nothing new under the sun, I should conclude by saying that we long ago understood everything I have said today about fiscal policy.

But that is not true. In the last few years we have learned a great deal about the way fiscal policy works, and about how to use it to better advantage.
In the future in its country programs and in its country surveillance, the Fund will pay more attention to the use of fiscal policy as a stabilizer in normal times. It will pursue coordination between monetary and fiscal policy – for it is clear that the low interest rate policies across the term structure of major central banks continue to play a central role in the stabilization process.

The Fund will consider the possible usefulness of fiscal councils. It will translate its former emphasis on the need for tight fiscal policy in normal times into a recommendation that countries build and preserve their fiscal space during such times. It will emphasize the need to deploy the full range of policies – fiscal, monetary, and structural, with an emphasis on the need for a robust, healthy and efficient financial system.

And when better times return, it will have to continue to warn us that complacency must be avoided, and it will have to preserve its ability to innovate to deal with new problems, some of which are developing as we speak, and of whose identity we are not yet aware.
Bibliography


International Monetary Fund (2010). World Economic Outlook (October), Chapter 3.


