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A Strategy for Renormalizing Fiscal and Monetary Policies in Advanced Economies

Carlo Cottarelli and Jose Viñals

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Prepared by Carlo Cottarelli and Jose Viñals

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Authors' E-mail Address: ccottarelli@imf.org; jvinals@imf.org

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I. INTRODUCTION

In response to the worst economic crisis since the 1930s, government budgets and central banks have provided substantial support for aggregate demand and for the financial sector. In the process, fiscal balances have deteriorated, government liabilities and central bank balance sheets have been expanded, and risks of future losses for the public sector have increased.

It is too soon to exit from crisis-response policies—prospects remain highly uncertain—and, indeed, further stimulus may be needed. But it is not too soon to clarify the strategy that governments and central banks intend to adopt to return their budgetary and monetary positions to normalcy when the moment comes. Failure to do so would destabilize expectations and weaken the effect of the fiscal and monetary support now being provided.

This note explores the magnitude of the problem and presents elements of a strategy to bring back fiscal and monetary policy to normalcy. It will show that the fiscal challenge is daunting for advanced economies: on average, bringing government debt-to-GDP ratios below 60 percent within the next two decades will require steadily improving the cyclically adjusted primary balance from a deficit of 3½ percent of GDP in 2010 to a surplus of 4½ percent points in 2020—an 8 percentage point adjustment—and keeping it at that level for the next 10 years, in spite of rising pressures on health and pension spending. Addressing the fiscal problem will require clarity of intent and firm political resolve: health and pension entitlement reforms, cuts in the ratio between other spending and GDP, and tax increases will be necessary.

The adjustment is, in principle, considerably more tractable on the monetary side, but should not be underestimated. During the crisis, central banks have cut interest rates to very low levels and have undertaken unconventional operations, including some of a quasi-fiscal nature, that expose them to potential losses, mainly in advanced economies. Thus the key issues are two: when and at what pace to start tightening monetary conditions; and how to unwind large central bank balance sheets. On the first, central banks have the adequate instruments to start tightening even when their balance sheets remain larger than usual. Care should be taken to do so in a manner that is fully consistent with anchoring inflation expectations, in line with the final objectives of monetary policy. To do so, it is essential to clearly communicate changes in the policy stance, which may become more complex given the multiple fronts on which monetary policy is still operating as a result of the unconventional measures taken. On the second issue, the risk of losses resulting from some of the unconventional measures may in extreme cases pose challenges to the financial independence of central banks. Moreover, it cannot be excluded that the substantial increases in public debt may give rise to pressures on some central banks to provide easier lending terms, which would nonetheless be self-defeating and ultimately lead to inflation.

Consequently, as economies recover from the crisis, it is essential that the capacity of central banks to control inflation be fully preserved.

Finally, policies will need to foster strong and sustainable growth. Among other things, this will require that the public sector withdraws from the control of financial and nonfinancial entities acquired during the crisis, thereby allowing for increased competition and its associated advantages for productivity growth.

II. SCALE OF THE PROBLEM

The Fiscal Challenge Is Daunting

The crisis has resulted in a major increase in fiscal deficits and public debts: assuming no further fiscal action, the general government gross debt-to-GDP ratio (henceforth “debt ratio”) of advanced economies is projected to rise from 75 to 115 percent during 2008–14, with most of the increase up front.² By 2014 debt ratios will be close to or exceed 90 percent in all G-7 economies, except Canada. The fiscal outlook is significantly stronger for emerging economies (Horton, Kumar, and Mauro, 2009), but these would unlikely be shielded from a loss of confidence in public sector solvency in advanced economies: as the recent crisis has amply demonstrated, confidence crises easily spill across borders.

The fiscal challenge facing advanced economies is daunting:

- The scale of the problem is unprecedented, at least in peacetime. Major public debt increases occurred in the 1930s, but started from lower levels (e.g., U.S. federal government debt was 16 percent of GDP in the late 1920s).
- The debt surge is only partially offset by increases in assets related to financial support operations (whose value is, at present, unlikely to exceed 5 percent of GDP in advanced economies). Rather, this surge mostly reflects revenue losses as economic activity plunged, and, to a lesser extent, fiscal stimulus packages. Thus, the fiscal problem cannot be resolved simply by “unwinding” financial support operations.
- The problem is not cyclical: the cyclically adjusted deficit will be large in 2010 (3½ percent of GDP).³ Allowing the stimulus packages to expire will only reduce this by

² This assumes that the stimulus measures introduced in 2009–10 are not renewed, so some tightening is already included in this baseline.

³ The cyclical adjustment here reflects not only the traditional effect of income fluctuations on the deficit, but also an estimate of the temporary loss of tax revenues arising during the current recession from the

(continued...)

about 1½ percentage points of GDP. In the meantime, the accumulated “debt overhang” will have to be serviced at yields most likely higher than currently.⁴

- While demographic trends were favorable in the 1930s, they are unfavorable now: the demographic shock will begin hitting advanced economies in earnest in about 5 years.

In sum, the crisis has weakened in a major way the fiscal accounts of advanced economies, at a time when they were targeted to improve to prepare for the demographic shock. What are the risks, if no adjustment takes place? At best, assuming that market confidence in fiscal solvency is not shaken, this will cause higher real interest rates and crowding out (as the economy recovers). At worst, this could lead to concerns that the debt will be “inflated away” or that default is inevitable. If so, debt maturities would shorten, risk premia rise and, ultimately, refinancing crises could emerge. Thus, while the current crisis is rooted in the private sector, the next could be fiscal and, arguably, more severe as no entity would be available to bail out the public sector.⁵

True, default has not occurred in advanced economies since the 1930s. But the fiscal challenge is unprecedented. And while inflation expectations and interest rates on government paper remain low at the moment, recent experience has shown that markets often react late and suddenly to persistent disequilibria.

There Are also Implications for Monetary Policy

Decisive central bank action to provide liquidity and other financial support helped to prevent financial sector collapse and damaging deflation. Central banks substantially lowered policy rates, lengthened lending maturities, and widened the range of collateral and the group of counterparties to ensure a smooth flow of liquidity into the system.

Central banks also engaged in various asset-driven and often unconventional operations, both to deal with short-term interest rates that were close to zero in some cases and to combat market disruptions. Notably, *quantitative easing* in this crisis has consisted of purchases of government securities to reduce longer-term interest rates; while *credit easing* has involved

extraordinary decline in asset prices and financial sector profits. If the revenue loss were less temporary than estimated, the cyclically adjusted primary balance position would be correspondingly weaker.

⁴ By 2014, the interest payment burden will rise by almost 2 percentage points of GDP over precrisis levels.

⁵ It is sometimes argued that the risk of a fiscal crisis in advanced economies should not be taken too seriously because investors do not have many alternatives on how to store their wealth (other than, say, gold). However, a flight out of advanced economies into emerging markets with better fundamentals is not inconceivable. In any event, shifts in investments across advanced economies (say, between euro and dollar assets) could disrupt financial markets and exacerbate the refinancing problems of advanced economies experiencing a depreciation.

purchases of private sector assets to counter the widening of credit spreads in specific markets (becoming the buyer of last resort in a moribund commercial paper market, for example).

In some countries, the combined impact of quantitative and credit easing on central bank balance sheets has been very large: from September 2008 to early 2009, it amounted to an increase in balance sheet totals of 5 to 10 percent of GDP in several advanced economies.⁶ Some of the assets taken on by central banks during the crisis are risky and subject to losses.

The aftermath of these actions leaves central banks facing two main challenges.

First, in the shorter term, central banks will need to face the question of when and how to tighten policy. Inflation will likely become an issue only once economies are well on the road to recovery, so monetary tightening is not an immediate concern in the advanced economies. This said, it cannot be ruled out that inflation could reemerge while the economy is still weak and the financial system still fragile, which would require difficult decisions. Matters will be complicated further by the complex technical and operational problems posed by the vast expansion of central bank balance sheets, which will need to be unwound, and which has made monetary policy actions more difficult to explain and interpret. The situation is more varied across emerging markets, but the moment for starting to revoke monetary accommodation is likely to materialize sooner than in advanced economies, particularly in those areas where demand pressures are more intense.

Second, in the medium term, there is a tail risk that the enormous and ongoing increase in public debt—sketched above—may give rise to pressures on central banks to provide easier lending terms, ultimately leading to higher inflation. Moreover, unconventional central bank operations during the crisis and the associated balance sheet expansions could lead to central bank losses, which might provide further ammunition to those seeking to curtail central bank independence. Independence—financial, operational, and political—may thus be challenged just when it is needed most to maintain price stability in the face of growing fiscal problems. For all of these reasons, it is fundamental that central bank independence be fully preserved.

Beyond this, while price stability should remain the primary goal of monetary policy, there is a vital debate about the proper role of the central bank in ensuring financial stability. In this field, too, central banks may be challenged.

⁶ By January 2009, the balance sheet of the Fed had more than doubled compared with precrisis levels, to US\$2.2 trillion, and that of the Bank of England had more than trebled, to £250 billion. In both cases, balance sheets subsequently shrank by some 10 percent.

III. RETURNING TO NORMALCY

Returning to Fiscal Normalcy: What Does It Mean and How Can It Be Done?

What should be the goal of a fiscal strategy aimed at ensuring that markets remain confident in the solvency of the fiscal accounts? Three approaches are possible.

The first would be to stabilize public debt ratios at whatever level has been reached as a result of the crisis. Is living with high debt an option? In principle, yes. Countries such as Italy and Japan, with debt ratios in excess of 100 percent for many years, have so far not experienced a full-blown debt crisis. But they have also grown slowly over the past two decades. While we do not know for sure whether their weak growth was caused in part by high debt, their experience, as well as the case of emerging economies where an extensive literature has found evidence of “debt overhang” effects, suggests that this may be the case. Two other considerations indicate that stabilizing debt at high levels is not a good idea. First, the effects on the world economy, including on real interest rates, of having many advanced economies running 100 percent debt ratios are unknown. The relatively benign experience of just two countries, Italy and Japan, cannot be extrapolated to the whole group. Second, stabilizing debt at high levels would reduce the flexibility of fiscal policy to respond to future shocks. Indeed, Italy’s response to the recent crisis was constrained by its high debt.

The second approach would involve targeting a return to pre-crisis public debt levels. After all, if the problem was created by the crisis, a return to pre-crisis levels should be regarded as a reasonable goal. This approach is appealing and is a minimum requirement of any viable strategy. This said, even before the crisis, debt ratios in some advanced economies were too high. And debt *dynamics* was unsustainable in most of them because of demographic trends.

Therefore—now that the crisis has further exposed fiscal vulnerabilities and with the demographic shock approaching—a preferable strategy should aim at placing the fiscal accounts on a sustainable path, one that is indeed *stronger* than before the crisis, and that ensures the resilience of the fiscal accounts to the demographic shock. Thus, the goal should be to announce a comprehensive and credible strategy aimed at lowering over time public debt to levels regarded as prudent for advanced economies—at least pre-crisis level for countries without excessive debt—and to keep them there during the following decades.

In the past, many countries succeeded in lowering debt from very high levels in an orderly way. The good news is that the debt ratio always converges to a level that depends just on the nominal growth rate of the economy and the level of the deficit, not the initial debt level. For example, with a nominal GDP growth rate equal to the average real growth over the past two decades in advanced economies plus 2 percent of inflation, balanced budgets would be sufficient to cut debt ratios from 100 to 65 percent in 10 years. The bad news is that the

higher the initial debt level, the higher would be the primary surplus needed to run a certain overall balance. And the effort would need to be larger, the higher interest rates are.

It is thus critical to avoid that concerns about high deficits and debt cause a surge in interest rates, as this would lead to snowballing effects. Indeed, there is significant evidence that the effect of high deficits and debt on interest rates is especially pronounced when high deficits lead to a perception of “regime change,” that is, of a more relaxed attitude toward fiscal solvency. This is why it is crucial that countries clarify their strategy to ensure fiscal solvency. What should be the features of such a strategy?

The Role of Inflation in Lowering Public Debt

Some commentators have suggested that higher inflation is a reasonable price to pay to lower public debt. We discuss first why inflation should not be part of the solution; and later, we show that noninflationary solutions are possible.

Inflation can alleviate fiscal problems in two ways. First, by raising seigniorage. This helps even if inflation is fully anticipated. However, given the low levels of base money in most advanced economies, this channel is relatively less significant.⁷ Second, an *unexpected* rise in the inflation rate would reduce the real value of public debt. This could make a more significant dent in public debt ratios because medium- and long-term, non-indexed, domestic currency debt accounts for three-quarters of total public debt in advanced economies. However, long-term rates would probably also rise with inflation so any maturing debt would have to be refinanced at higher rates, an effect that would be magnified if maturities shortened and real interest rates increased as a result of higher perceived inflation risk. Altogether, if inflation were raised to, say, 6 percent (as recently suggested by Ken Rogoff) for the next 5 years—assuming this were feasible—the average debt ratio in advanced economies would be about 8–9 percentage points lower in 2014 than in the baseline.

Is this debt reduction worth the costs and risks of higher inflation? No. Inflation would erode less than one-fourth of the expected debt increase during 2008–14. Of course, double-digit inflation would have a larger effect. But a vast range of experience across the world has shown that high inflation gives rise to major distortions in resource allocation, reduces economic growth, hurts the poor, creates social and political instability, is not easily contained when unleashed, and would incur a substantial output cost when it is brought down again. Also, public debt profiles and the cost of borrowing would be adversely affected for many years to come. These were key lessons of the 1970s for the advanced economies; and the experience of developing and emerging market economies with high inflation has been arguably even worse.

⁷ One additional point of inflation would raise seigniorage in the G-7 average by about 0.1 percent of GDP.

It will thus be essential to strongly reaffirm the commitment to price stability and ensure that central banks continue to have the independence and the tools needed to fulfill this mandate.

How Have Large Public Debts Been Reduced in the Past? The Role of Growth

Standard debt dynamics decompositions show that the top ten largest reductions in debt ratios in advanced economies over the last three decades occurred largely by running primary surpluses, not through higher growth (Table 1). The contribution of the differential between growth and interest rates was significant only in a few episodes of rapid growth catch-up (e.g., Iceland, Ireland, and Spain). This, however, does not take into account that it is much easier for governments to run stronger primary balances when growth is higher. Higher growth raises revenues and, if these are not spent, the effect on debt dynamics can be powerful. For example, assuming a baseline debt-to-GDP ratio of 100 percent, a one percentage point increase in growth for 10 years (holding spending constant and assuming a 40 percent tax rate) lowers public debt by 29 percentage points of GDP. Therefore, growth enhancing reforms—including more competitive goods markets, removal of labor market and tax distortions—should be a priority, as they counteract the undesirable effects of population aging on both growth and public spending. Faster immigration could also help, but this may face insurmountable political difficulties.

Nevertheless, there are two reasons why governments should not rely excessively on stronger growth as solution to their fiscal problem. First, as far as faster growth reflects the closing of the output gap, this is already reflected in the above baseline projections. Second, there is too much uncertainty on both the magnitude and timing of the effects of structural reforms on potential growth to build a credible fiscal adjustment strategy primarily around this. In sum, while structural reforms to boost growth should be pursued as part of a fiscal consolidation strategy, it would be prudent to base such a strategy on conservative growth assumption, hoping for upside surprises.⁸

The Magnitude of the Primary Balance Adjustment

The magnitude of the needed primary adjustment depends on the debt reduction target. And, at least in part, the debt reduction target and path depend on the nature of the supporting measures: measures affecting long-term spending trends would likely allow a more gradual adjustment, as markets would feel reassured that long-term sustainability is also being addressed.

⁸ Prudence is also required because studies of growth in the aftermath of financial crises show that only a small share of the deepest output loss is regained at the end of the decade following a crisis (Cerra and Saxena, 2008; and Chapter IV of the forthcoming IMF's *World Economic Outlook*, October 2009).

For illustrative purposes, but in line with the considerations put forward above, we assume that: (i) the goal is to lower debt ratios to below 60 percent by 2030⁹; (ii) the adjustment in the structural primary balance starts in 2011 and lasts 10 years (after which the primary is maintained at the needed level.¹⁰ This 10-year primary adjustment strategy would involve the average structural primary balance to improve from $-3\frac{1}{2}$ percent of GDP in 2010 to $4\frac{1}{2}$ percent of GDP in 2020, an 8 percentage point of GDP adjustment (Figure 1), almost 1 percent per year.¹¹ Given the underlying pressures from population aging, the adjustment with respect to a no-policy-change scenario is more demanding,¹² although attaining it could be facilitated by an increase in potential growth, as noted above.

This adjustment will be daunting. It will be the first time that most advanced economies undertake a simultaneous adjustment of such a magnitude. This will cast additional challenges, including from a global demand management perspective. But the adjustment is not unprecedented at the individual country level.¹³ It will require addressing more forcefully than in the past some long-standing fiscal issues both on the spending and the revenue side.

What Policies Will Deliver the Needed Fiscal Adjustment?

Fiscal adjustments in the years ahead will have to reflect the specific circumstances currently faced by advanced economies. In this respect, two features are relevant: first, these countries already have fairly high revenue-to-GDP ratios, which means that a large part of the adjustment will have to take place on the spending side; second, pressures from aging will imply that entitlement spending will have to be reformed. More specifically:

⁹ Given the weaker initial primary balance, the goal for Japan would be to lower net debt to 80 percent of GDP.

¹⁰ The choice of 2011 as the starting year of the tightening is in line with current WEO projections and announced government plans. This remains obviously tentative: the tightening will have to take place when there is confidence that private sector demand has clearly recovered. However, the results of the calculations of the needed primary adjustment are not much affected by the choice of the initial year.

¹¹ This assumes a 1 percentage point difference between the interest rate on debt and the growth rate, in line with the average differential during the last three decades. If the difference were zero, the required primary adjustment would be 7 percentage points of GDP. If the debt target were 70 percent, the required primary adjustment would be about $7\frac{1}{2}$ percentage points, with a 1 percentage point interest-growth differential. The estimate of the required fiscal adjustment is also contingent on the estimated current output gap. If the output gap were larger (smaller) than currently estimated, the initial structural primary deficit would be smaller (larger), requiring a correspondingly smaller (larger) adjustment effort.

¹² The combined effect of higher spending on pensions, health and long-term care during 2015–30 is of the order of 3–4 percent of GDP for both the U.S. and the EU.

¹³ Over the past four decades, 13 advanced and 22 emerging economies have experienced cumulative adjustment in the structural primary balance of at least 8 percentage points of GDP, with annual adjustment exceeding 1 percentage point per year in several cases (particularly in emerging economies).

- Fiscal adjustment will require reforming pension and health entitlements—the key source of spending pressures over the next decades. This spending already represents a sizeable share in total spending (e.g., in excess of one-third of total spending in G-7 countries); and the net present value of future spending increases due to aging is more than ten times as large as the fiscal cost of the crisis (Cottarelli et al., 2009). Policy measures in this area are politically difficult, but have one advantage: their effects will be phased in over time. Indeed, as noted, to the extent that long-term spending trends are affected through structural reform, a *smaller* improvement in the primary balance could be then targeted. Some measures in this area can have powerful effects: for example, a two-year increase in the retirement age in EU countries is estimated to save some 40 percent of GDP in NPV terms (Barell, Hurst, and Kirby, 2009). And some of these measures could, at least in principle, have a positive effect on output.¹⁴
- Fiscal reform will need to extend beyond pensions and health care. It is unrealistic to expect that reforms could reduce spending in percent of GDP significantly in these areas in the presence of population aging.
- To start with, not renewing the stimulus measures will improve the average primary position by about 1½ percentage points.
- Moving to more structural measures, on the spending side, a strategy focused on freezing real primary spending in per capita terms—the focus of some successful debt reduction strategies—could be considered.¹⁵ With a pre-crisis ratio of 23 percent between primary spending (excluding pension and health) and GDP for the large advanced economies, and a real growth rate of 2 percent, this approach would improve the primary balance by 3½ percentage points of GDP in 10 years. Reductions in spending ratios of this magnitude will require ensuring maximum spending efficiency, but have been implemented in countries undergoing fiscal adjustment in the late 1980s and early 1990s.
- Given the primary adjustment targets, and short of additional spending cuts, some 3 percentage points of the adjustment would have to come from the revenue side (see summary Table 2). Broadening the tax base, including by fighting tax evasion, will

¹⁴ Extending working lives would have a positive supply-side effect on output through an increase in the labor force, which would outweigh the impact of a possible decline in the capital stock due to a reduced need to save for retirement, as the retirement period is shortened. On the demand side, consumption would rise, owing to higher incomes.

¹⁵ In the U.S., the Budget Enforcement Act of 1990 actually imposed a *nominal* freeze on discretionary spending and a pay-go rule for any changes in entitlements to mandatory spending or tax rules. This was one of the key reasons why the fiscal deficit disappeared during the 1990s. The nominal freeze was successful because military spending fell at a sufficiently fast rate so that other discretionary spending had room to increase.

continue to be key. And changes to the tax structure are likely to become even more relevant than in the past. In this regard, externality-correcting taxes would be among the highest priorities. Given the requirements imposed by the fight against global warming, appropriate carbon pricing (through either carbon taxation or the sale of emission rights) could represent a new important source of revenue over the coming decades, averaging some ½ percent of GDP per year in some advanced economies over the next decade (and probably more later).

- To buttress the fiscal adjustment, developing further and strengthening institutional arrangements such as medium-term fiscal frameworks, fiscal responsibility laws, fiscal rules, and fiscal councils would be important. Policies should also ensure adequate recovery of the value of assets acquired by the public sector during the crisis. In this regard, country authorities may occasionally face trade-offs between rapidly reselling assets to the private sector as soon as acquired banks or companies return to profitability, against a more gradual approach that might ultimately yield larger gains to the government's budget.¹⁶

Securing a Return to Normalcy in Monetary Policy

As noted, the ability of central banks to preserve price stability will be critical to the strong and sustained economic growth that is desirable in itself and is also needed to ensure debt sustainability. While deflation would have pernicious effects and exacerbate the recession, inflation rates higher than those consistent with price stability would also be harmful.

The key actions that central banks will need to take are: limiting and then unwinding unconventional operations; restructuring balance sheets; preparing instruments for monetary tightening; and defining and communicating policies to anchor inflation expectations consistent with price stability. All of these steps need to be supported by governments, and implemented in a manner consistent with price stability.

It should be stressed at the outset that central banks have effective tools to steer money market rates to the appropriate levels, even in the presence of excess bank reserves, for example by increasing the rate of remuneration of reserves.

Unwinding unconventional operations

Some unconventional operations—justified only by the crisis—will be unwound as financial conditions normalize, and demand for excess reserve balances will automatically fall.

¹⁶ See “Crisis-Related Measures in the Financial System and Sovereign Balance Sheet Risks” (<http://www.imf.org/external/np/pp/eng/2009/073109.pdf>).

Other balance sheet positions will require more active management. Purchases of government securities under quantitative easing were made to reduce long-term interest rates. The United Kingdom has used this tool most actively during the crisis, with increases in holdings amounting to 10 percent of GDP since August 2007, and there have also been significant purchases in the United States. Selling these positions could thus have a macroeconomic impact, so the timing of any sales will be crucial. As government securities can be used in open market operations to drain excess liquidity, there is indeed no pressing reason to sell, and holding long-term securities is normal for many central banks.

Credit-easing programs (buying private sector assets to counteract credit spreads) are mostly time-limited and have been on a smaller scale—generally no more than 1 percent of GDP in the advanced economies. As with quantitative easing, a running down of substantial credit easing operations may imply an effective tightening of monetary policy. Here again, the timing needs to reflect an overall assessment of financial and economic conditions. The most difficult issues arising from credit easing will be related to holdings by the central bank of risky and often illiquid private sector securities. These assets may not be usable in normal open market operations and may thus create some drag on efforts to drain liquidity when inflationary pressures reemerge. Moreover, these assets could be a source of central bank losses.

Restructuring balance sheets

The greatly increased asset positions that many central banks now hold give rise to market risk, as longer-term assets purchased at low yields would likely lose value when interest rates rise. Some credit risk—whether taken on through credit easing or riskier collateral—may also materialize. The associated losses on these assets might erode the net capital position of some central banks.

The appropriate response for each central bank will depend on the structure of its balance sheet. If capital levels remain adequate and operations show an overall profit, then over time the balance sheet should strengthen. But if losses are large, the government would need to transfer funds to the central bank, to recapitalize it.

Preparing to tighten monetary policy

Central banks must reestablish the short-term policy rate as the key tool for setting the monetary policy stance, so that they are prepared to tighten when the time comes. The major central banks have the tools to do this—although in some cases they may need to be strengthened—and using these tools may entail losses.

As the economy emerges from the crisis, banks may still be holding substantial excess liquidity, which must be properly managed by the central bank to keep credit growth and

inflation in check. Central banks can use many instruments and measures to this end, including reverse repos (selling government securities on their books that they agree to buy back later), issuing central bank bills, and raising remuneration on bank reserves held at the central bank. Increasing the remuneration for reserves will be important, as will incentives for a return to normal interbank trading. A smaller interbank market would affect the transmission of changes in the policy interest rate to the wider economy, and this must be taken into account in setting monetary policy.

Central banks that have engaged substantially in credit easing may hold long-term assets that cannot be used in open market operations, and might have to use term deposits or central bank bills to reabsorb liquidity.

Finally, tightening collateral policy will be important for some central banks, to reduce the risk of future losses and avoid market distortions. This will require careful planning to avoid sudden shocks to the market.

Communication to anchor expectations

It is not too early for central banks to anchor expectations by defining and communicating their strategies and proposed measures. Markets must be reassured that longer-term concerns about price stability will be addressed.

Just as importantly, government support of central bank independence and price stability through the appropriate statements and actions are needed. These would include facilitating the restructuring of central bank balance sheets through appropriate public debt management, and helping the central bank to fend off inappropriate criticism of central bank actions during the crisis, including by emphasizing the negative consequences that inaction would have had.

IV. TIMING AND COORDINATION

It is still too soon to tighten fiscal and monetary policies. Uncertainty as to whether and when the recovery will take place remains too great. In the 1930s, fiscal policy in the U.S. was tightened prematurely, and monetary policy did not provide support for several years, delaying the recovery. This said, both the speed of recovery to date and the fiscal space to provide stimulus differ substantially across countries, so that the desirable extent of further stimulus also needs to reflect country-specific circumstances. In any case, it is important that any further measures be easily reversible.

However, postponing the fiscal adjustment to a time when the recovery has consolidated does not mean inaction. First, it is not too soon, and indeed is now necessary, for governments to design and communicate their strategies and measures to ensure fiscal solvency. Markets

need to be reassured that fiscal policy will be tightened when the economy recovers. Second, some actions that do not risk having a negative impact on demand could be implemented now, such as institutional reforms to enhance fiscal transparency and medium-term fiscal frameworks.¹⁷ Even a more substantive reform of entitlements, though politically difficult, would yield important benefits in terms of signaling commitment to fiscal sustainability, without necessarily undermining demand, if the reforms focus on, say, increasing the retirement age, or if they are passed now but implemented in a gradual manner.

Markets will also react positively to monetary policy actions that reassure them of the commitment to keeping inflation in check. Going into the crisis, there were at times challenges in clearly communicating to markets the monetary policy stance, owing to extraordinary measures aimed at ensuring financial stability or easing liquidity conditions. Meeting those challenges on the way out of the crisis will require careful analysis and clear communication. Drawing a distinction between the policy stance and the measures taken to implement it will be key. The use of a commonly-agreed terminology by central banks should assist the process.

Continued international cooperation will be key to a successful exit process. A factor facilitating coordination in the introduction of the unprecedented policy measures was the substantial synchronicity of the onset of the crisis. However, early signs of recovery in some countries, but not others, suggest that the recovery may be less synchronized. As a result, ensuring international consistency of macroeconomic policies may face greater challenges in the next few years, with differing country specific circumstances playing a greater role in country authorities' deliberations regarding the policy stance.

Coordination in fiscal policy will continue to be relevant in four key areas. First, in the short-run, the international dialogue is likely to continue to focus on fiscal stimulus spillovers onto trading partners' demand. Second, over the medium term, the challenge will be to manage the fiscal tightening in major advanced economies without weakening global demand. This will also require appropriate monetary policy cooperation consistent with preserving price stability, to crowd in private demand as fiscal policy is tightened, and strengthening other sources of demand, including from emerging economies with stronger current savings. Third, any increases in taxation—undertaken as part of the effort to bring the public finances under control—will be more effective when such increases are discussed with neighboring

¹⁷ Few G-20 countries have so far developed fully fledged medium-term fiscal adjustment strategies, although some have announced medium-term targets or have extended the horizon of their fiscal projections. The most notable development in this area relates to the German parliament's adoption, in June, of a new constitutional fiscal rule for both federal and state governments that envisages a gradual move toward tighter structural balances. The rule requires the federal government's structural deficit (the deficit adjusted for the cycle and one-off operations) not to exceed 0.35 percent of GDP from 2016; states are required to run structurally balanced budgets from 2020.

countries. Fourth, should some countries' public debt sustainability be at risk, there would be a danger of contagion to other countries. Given these spillovers, close monitoring of fiscal developments by the international community—and appropriate peer pressure—will therefore remain important.

Table 1. Decomposition of Large Reductions in Government Debt-to-GDP Ratios in Advanced Economies ^{1/}

Episodes 2/	Starting Debt Ratio	Debt Reduction	Ending Debt Ratio	Primary Surplus Contribution	Growth - Interest Rate Differential 3/	Residual
Ireland (1987-2002)	109.2	77.1	32.2	53.3	31.1	-7.4
Denmark (1993-2008)	80.1	58.1	22.0	51.3	-26.7	33.4
Belgium (1993-2007)	136.9	53.0	84.0	70.2	-25.2	8.0
New Zealand (1986-2001)	71.6	41.8	29.8	52.1	-8.9	-1.4
Canada (1996-2008)	101.7	39.0	62.7	39.3	-19.2	18.9
Sweden (1996-2008)	73.2	35.2	38.0	21.0	-4.6	18.7
Iceland (1995-2005)	58.9	33.6	25.4	17.4	4.7	11.4
Netherlands (1993-2007)	78.5	32.9	45.6	27.5	-8.3	13.7
Spain (1996-2007)	67.4	31.4	36.1	21.6	11.5	-1.7
Norway (1979-1984)	56.5	21.4	35.1	24.2	11.7	-14.5
Average	83.4	42.3	41.1	37.8	-3.4	7.9

Sources: *World Economic Outlook* database, September 2009; and IMF staff calculations.

1/ Figures are in percent of GDP.

2/ The episodes listed are based on a sorting of the largest reductions in the Government Debt-to-GDP ratio observed between any two years up to 15 years apart over the last three decades.

3/ The interest rate used in the computation of the growth interest rate differential is the “effective” interest rate, calculated as a ratio of government interest payments to the previous period’s ending debt stock.

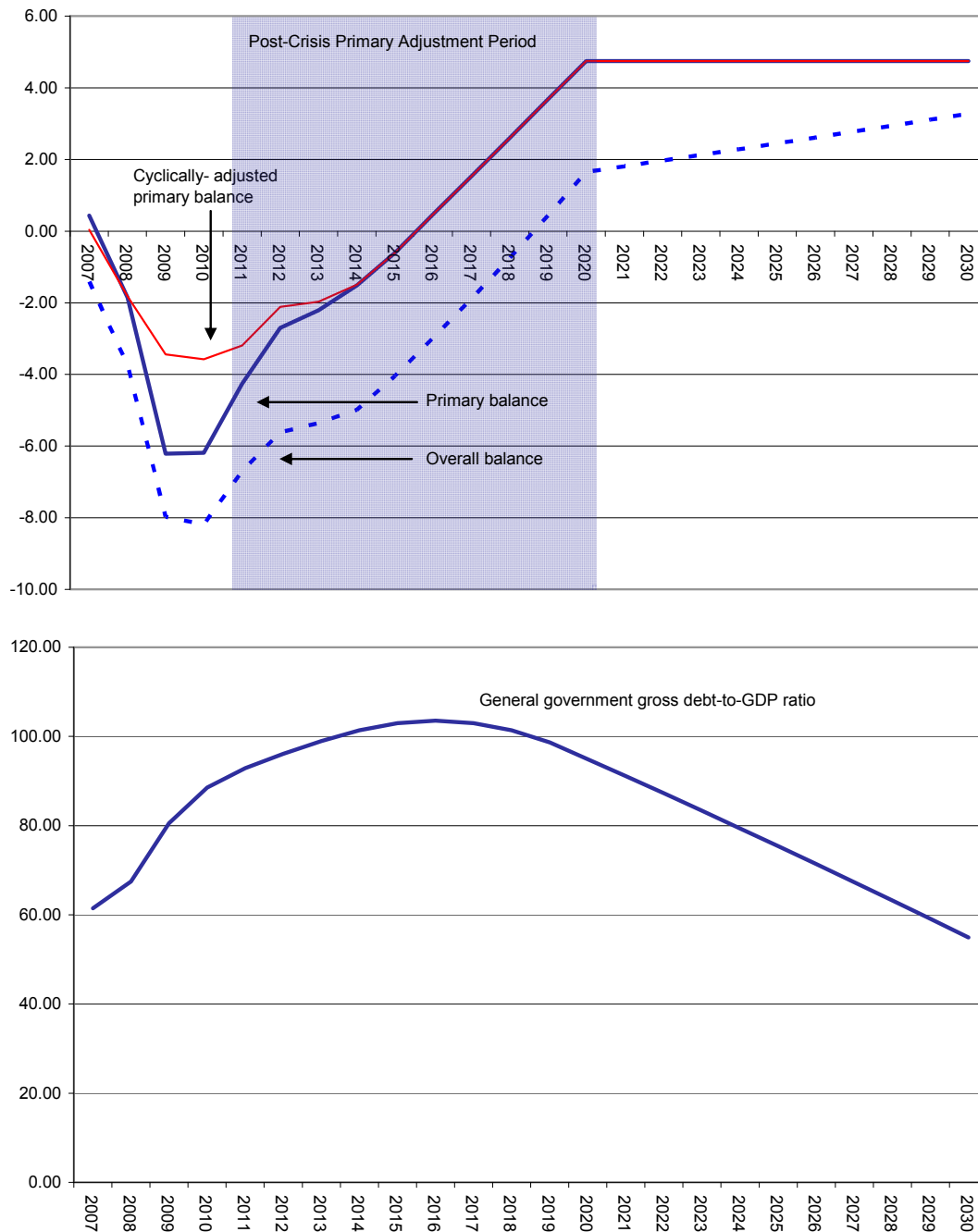
Table 2. Required Improvement in the Primary Position, 2011–20 ^{1/}
(in percentage points of GDP)

Cyclically adjusted primary balance in 2010	-3½
Cyclically adjusted primary balance in 2020	4½
Improvement in the cyclically adjusted primary balance	8
Allowing fiscal stimulus to expire	1½
Freeze in real spending outside pension and health	3½
Tax increases	3
Memorandum item:	
Measures to keep health and pension spending constant in relation to GDP 2/	3–4

1/ Improvement in the cyclically adjusted primary balance of advanced economies needed to lower the general government gross debt below 60 percent (below 80 percent for net debt for Japan) by 2030, assuming the primary improvement takes place during 2011–20 and the primary surplus is maintained at its 2020 level in relation to GDP for the following 10 years. The average primary cyclically adjusted balance during 2011–29 would be 2½ percent of GDP (3¾ percent of GDP during 2015–29).

2/ In the absence of measures, health and pension spending will rise by 3–4 percentage points of GDP over the next two decades. Offsetting measures for that amount would thus be required to maintain health and pension spending constant as a share of GDP.

Figure 1. Advanced Countries: Illustrative Scenario for Primary Balance Adjustment and Debt (in percentage points of GDP) ^{1/}



Sources: IMF, *World Economic Outlook* database; and IMF staff estimates.

^{1/} Estimates for the United States exclude losses from financial system support measures (estimated at 3.2 percent of GDP in 2009 and 0.6 percent of GDP in 2010) to better reflect the underlying adjustment need. Calculations for Japan are based on net debt. During 2011–14, the pace of adjustment reflects the current WEO projections.

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