Paying the Piper

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ASSIVE and unprecedented intervention by governments in the United States and other advanced economies aims to restore economic growth and clean up the financial sector. But the impact of the crisis on public finances is substantial: the increase in government debt (as a share of GDP) in advanced economies is projected to be the largest and most pervasive since World War II. And this increase is taking place against the background of preexisting long-run pressures from pension and health care spending, especially in countries that will soon experience a rapid shift toward an older population.

Governments have had little choice but to intervene to save the financial system from collapse, and to provide fiscal stimulus to counter the sharp contraction in private sector demand. And we may not be finished vet. It is not difficult to imagine a scenario in which higher interest costs and lower economic growth snowball into even higher debt-to-GDP ratios, ultimately leading investors to raise questions about the sustainability of government finances around the world. So far, in general, this has not happened (although credit default swap spreads have been on the uptick in many countries), and the perceived likelihood of default remains small. But because investor confidence in governments' creditworthiness has been key in preventing a complete meltdown of the financial and economic system, preserving such confidence is of paramount importance. Perceptions of fiscal solvency problems, pushing interest rates up as debt holders demand a higher risk premium, would also undermine the effectiveness of fiscal stimulus measures.

So how should governments respond in the wake of a crisis that is leaving nations with far more demands on the public purse? This article presents the quantitative findings of a recent study by the IMF's Fiscal Affairs Department about the direct and indirect costs of the financial crisis. We examined the size of interventions in the financial sector; indirect, nondiscretionary costs, such as those from the impact on revenues of the economic slowdown and

the collapse in asset prices; and indirect costs from discretionary fiscal stimulus, intended to jump-start economic growth. The crisis is also placed in a broader context by (1) comparing it with previous episodes of major debt accumulation and contraction in some of the largest economies; and (2) comparing the costs of the ongoing crisis with the preexisting, and far more severe, long-run challenges from aging populations. The article concludes by summarizing a possible strategy whereby fiscal policy can foster the resumption of normal economic growth while maintaining public sector solvency, and by indicating a few key areas where the IMF can play a constructive role.

Mounting direct costs and liabilities

The unprecedented scale and nature of the financial crisis have prompted policymakers to be remarkably inventive in their efforts to support troubled financial institutions and markets. These interventions have essentially involved capital injections, asset purchases, or direct lending or guarantees by governments or central banks. In most cases, operations undertaken directly by governments have led to increases in gross public debt, though not

The role of medium-term fiscal policy in rebounding from the crisis

A window display in Hong Kong SAR.



necessarily a change in net worth or the overall deficit, after taking into account the related acquisition of assets—at least to the extent that specific asset transactions reflect actual market value, without any subsidy element.

The combined gross cost of capital injections and purchases of assets, plus direct lending by governments has amounted to 5 percentage points of GDP, on average, for the advanced economies in the Group of Twenty (G-20) (see box). Over time, however, the net fiscal impact will depend on the recovery rate from the sale of the acquired assets. Experience from previous banking crises suggests that recovery rates on these operations vary widely, and recoveries only become significant once economic growth has resumed on a solid footing.

Beyond these operations, which have an immediate impact on gross government debt, new contingent liabilities in the form of central bank lines of credit and guarantees for bank deposits have been far larger. Indeed, most countries have raised their deposit insurance limits, and several have guaranteed interbank loans and other instruments—in a few cases for amounts equivalent to multiples of GDP. While the ultimate net costs of such guarantees would be limited in benign scenarios, it is important to bear in mind that the range of possible outcomes is much wider and the outcomes could be far worse, particularly if the economic and financial crisis turns out to be protracted.

Fiscal stimulus

Faced with the economic slowdown, many countries have announced fiscal stimulus packages. The headline numbers have in some cases been truly impressive. However, with governments under pressure to be seen providing help to their citizens, it is important to distinguish between headline numbers provided to the press and actual facts by keeping track of how many of the measures are genuinely additional to what would have already been contained in budgets for the next year. In some cases, the differences are substantial. Correcting the data for these factors, the fiscal stimulus is somewhat smaller, but still significant. For example, it amounts to $1\frac{1}{2}$ percentage points of GDP, on average, for the G-20 countries in 2009.

Almost two-thirds of the fiscal stimulus has so far been represented by expenditure measures, with particular emphasis on increased infrastructure spending. Many

Who's in the G-20?

The G-20 comprises the finance ministers and central bank governors of 19 countries: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom, and the United States, plus the European Union, represented by the rotating Council presidency and the European Central Bank. The Managing Director of the International Monetary Fund and the President of the World Bank, plus the chairs of the International Monetary and Financial Committee and Development Committee of the IMF and World Bank, also participate. Together, member countries represent around 90 percent of global gross national product, 80 percent of world trade (including intra-EU trade), as well as two-thirds of the world's population.

countries have also announced plans to protect vulnerable groups—including strengthened unemployment benefits, cash transfers to the poor, and support to children and pensioners. A few countries have stepped up support for small and medium-sized enterprises; others have supported specific sectors (such as the automobile industry).

On the revenue side, measures have targeted primarily households, mostly through cuts in personal income and indirect taxes. Most of the stimulus measures on the spending side are designed to expire after a certain period—although some spending programs are likely to have recurrent cost implications, such as maintenance costs for new infrastructure projects. Most revenue measures, though, are permanent; a few sets of measures are self-reversing, with some tax cuts today already scheduled to be offset by tax increases a few years from now. (For example, in the United Kingdom, a value-added tax cut will be offset by revenue-increasing measures starting in 2010.)

Other fiscal implications of the crisis

The global slump in economic growth triggered by the financial crisis also has adverse consequences for government revenues through the operation of automatic stabilizers. If economic activity recovers relatively soon, the impact of lower revenues should not raise major concerns. But should the slowdown turn into a prolonged recession, the impact for the sustainability of public finances would be far more severe.

In addition, larger nondiscretionary effects of the crisis have resulted from the collapse in equity and housing prices, and financial sector profits; this has caused a sharp decline in tax revenues on items such as capital gains and corporate profits. Further, to the extent that the collapse in commodity prices may be attributed to the worldwide economic growth slowdown, another adverse effect—for commodity producers—is the sharp decline in revenues linked to commodities.

Losses suffered as a result of the asset price collapse have also been substantial for funded pension systems (both public and private), and it is possible that public pressures will emerge for the state to compensate pension system participants adversely impacted by the crisis.

Rising debt

Advanced economies will see a dramatic rise in their public debt because of the economic crisis.

(change in fiscal balances and government debt in the G-20,1 percent of GDP; difference over previous period)

	2008 (A)	2009 (B)	2008-09 (A+B)
Fiscal balance			
Advanced G-20 economies	-2.3	-3.8	-6.1
Emerging market G-20 economies	-0.3	-3.2	-3.4
G-20	-1.5	-3.6	-5.1
Public debt			
Advanced G-20 economies	4.4	10.0	14.4
Emerging market G-20 economies	-2.0	1.9	-0.1
G-20	2.0	7.0	9.0

Source: January 2009 World Economic Outlook, updated to reflect the final version of the stimulus package in the United States and recent financial support measures in the United Kingdom.

¹General government if available; otherwise most comprehensive fiscal aggregate reported in the IMF's World Economic Outlook, updated as noted above. Table reports purchasing-power-parity GDP-weighted averages.

Picking up the tab

Summing up these various costs, it is clear that public finances will be severely affected by the crisis in the short run and beyond (see table). Indeed, our projections, based on the IMF's January 2009 growth forecast, would worsen if growth is further revised downward.

- Fiscal balances are projected to worsen by 6 percentage points of GDP in 2008–09 compared with 2007 for the G-20 advanced economies, with half of the deterioration accounted for by the fiscal stimulus and financial sector support. The remainder is due to automatic stabilizers and revenue losses from other nondiscretionary effects. For the G-20 emerging economies, the deterioration is somewhat smaller, reflecting the lower impact of the crisis on output, and possibly that many of these countries have less room for providing fiscal stimulus. That said, the crisis is still unfolding, and some emerging economies are increasingly feeling the pinch.
- The increase in debt-to-GDP ratios is projected at 14½ percentage points of GDP for the G-20 advanced economies, half of which is accounted for by financial sector support packages. Again, the impact is smaller for the G-20 emerging economies. However, the expected pickup in debt in 2009 is a reversal of the declining trend since 2002.

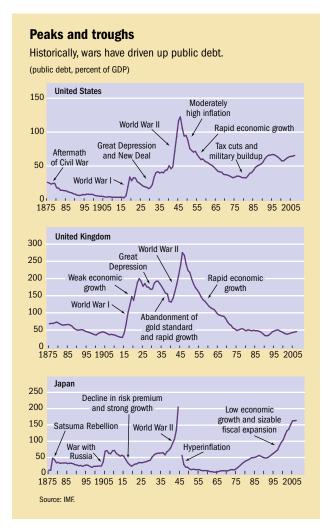
Historically, perhaps not so exceptional

Today's crisis has thus resulted in the sharpest and most pervasive rise in debt-to-GDP ratios since World War II for the advanced economies. However, even larger increases were observed in the past—notably at the time of the two world wars; the Great Depression also saw a generalized increase in debt-to-GDP ratios, though this occurred more gradually, primarily as a result of the prolonged recession. To put the ongoing crisis in perspective, it is useful to recall the main features of earlier episodes involving large debt accumulations and reductions in some of the largest economies (see chart). These may lead one to view the present debt increases with a reasonable degree of optimism.

- Very large debts—in excess of 100 percent of GDP—have been accumulated by some of the world's largest economies on a number of previous occasions, and have in several cases been reduced without much economic or social upheaval.
- Sustained and rapid economic growth has been a principal factor underlying most cases of successful reduction in debt-to-GDP ratios over the past couple of centuries. For example, rapid economic growth following World War II reduced the debt-to-GDP ratio in the United States from 121 percent in 1946 to 50 percent in 1965. In contrast, with overly prudent fiscal policies and continued compliance with the gold standard, sluggish economic growth in the 1920s and during the Great Depression led the debt-to-GDP ratio to rise in the United Kingdom from 130 percent in 1919 to 178 percent in 1933.

However, there are reasons to be more guarded in considering the present outlook, and to place emphasis on the need to preserve fiscal solvency.

• Disruptive ways of reducing debt are not unknown to the major advanced economies. Hyperinflation occurred in the aftermath of major wars and in a context of domestic political



instability, and moderate inflation also played a significant role in reducing the real value of debt—especially until the 1950s. Partial defaults also took place in the context of severe economic slowdowns during the interwar period, for example in Italy in the late 1920s; and the abrogation of "gold clauses" in debt contracts in 1933 in the United States prevented a 25 percentage point increase in the public-debt-to-GDP ratio when the United States went off the gold standard.

• When considering lessons from past episodes, it is also important to bear in mind two important differences. First, in wartime episodes—which represent some of the largest and most rapid increases observed in the past—domestic financing of the debt was facilitated by comprehensive government control over the economy, including capital controls; citizens may also have felt a moral duty to support the war effort. Second, the current crisis involves truly novel features compared with historical episodes: in particular, it involves contingent liabilities associated with guarantees of financial sector obligations, on a scale not previously observed.

Don't forget a bigger crisis: population aging

A further difference between the ongoing debt accumulation episode and those experienced in the past is the context of today's preexisting fiscal challenges in the areas of pension and health care systems.

While present day pension and health care systems are highly developed (and costly) in most advanced economies and several emerging economies, this was not the case during the pre–World War II episodes. For example, one of the best known accomplishments of Franklin Delano Roosevelt's administration in responding to the Great Depression was to establish the social security system in the United States in 1935 (with immediate increases in contributions and delayed pension payments).

Today, most advanced economies and several emerging economies face major long-run fiscal pressures from the impact of population aging on costs for the pension and health care systems: for most of the G-20 countries for which data are available, spending on pensions and health care is expected to rise by more than 3 percentage points of GDP between 2005 and 2050. Indeed, these pressures are far more severe than those stemming from the financial crisis: in net present value terms, the burden of the crisis is equivalent to less than 5 percent of the impact of aging. Yet, because of the slow-moving nature of the aging problem compared with the far more pressing and visible implications of the financial crisis, there is a danger that the challenges from population aging may be temporarily forgotten, and their resolution postponed to a time when it will be more costly.

A strategy to bounce back

Based on these considerations, although successful economic recovery from the financial crisis requires both restoring the health of the financial system and providing substantial stimulus in the near term for countries that can afford it, countries need to clarify soon their strategy to ensure fiscal solvency.

Policymakers will have to balance two opposing risks.

- The risk of prolonged depression and stagnation: here, the economic and fiscal costs of inaction could be even larger than those of action; should the economic and financial situation deteriorate further, additional support to the financial sector, as a key priority, but possibly also to bolster aggregate demand, may become necessary.
- The risk of a loss of confidence in government solvency: from this perspective, there is a need to closely monitor indicators of perceived fiscal vulnerability, such as real interest rates, inflation expectations, bond and credit default spreads, and debt maturity.

The trade-off between these two risks will depend on country-specific circumstances. Indeed, countries differ widely in whether they can afford further stimulus: projected debt levels and indicators of fiscal vulnerability will be relevant in making policy choices in this regard.

For all countries, however, the trade-off can be improved if governments clarify, in a credible way, their strategy to ensure fiscal solvency. A strategy to ensure fiscal solvency should be based on four pillars.

First, fiscal stimulus packages should consist as much as possible of temporary measures to avoid raising deficits permanently. While the stimulus will likely have to be prolonged—because the decline in private sector demand is likely to be long-lasting—it should not become permanent.

Second, policies should be cast within medium-term fiscal frameworks providing for fiscal consolidation, once economic conditions improve. A medium-term framework (supported by fiscal responsibility laws, fiscal rules, or independent fiscal councils) would anchor expenditure and revenue policies. But given the elevated uncertainty about the economic outlook, the fiscal frameworks should provide sufficient flexibility to provide additional fiscal support, if needed.

Third, governments should implement structural reforms to enhance growth prospects—a key factor in reducing the debt burden in most past episodes of successful fiscal consolidation. In the fiscal area, this should include expenditure reforms to reduce unproductive spending while preserving programs that yield high-quality growth and a high social rate of return. Tax reforms should improve incentives to work and invest; there is also merit in reducing the bias in favor of debt vis-à-vis equity financing, present in most tax systems.

Fourth, a clear plan for reforming pension and health entitlements is needed to tackle long-run pressures arising from population aging. The amount and speed of adjustment will be country-specific. Nevertheless, for most countries, postponing reforms would eventually result in the need for larger and more painful measures. In some ways, the vast scale of the challenges from aging could even be viewed as an opportunity in the present context: addressing pressures from aging, through measures such as increases in retirement age, could go a long way toward allaying market concerns about fiscal solvency.

Opportunities too

These prescriptions are not new—some are part of long-standing IMF policy advice. However, the weaker state of public finances has increased the need to implement them.

Enacting major fiscal reforms at times of severe economic weakening is likely to be challenging from a political economy perspective, but there are opportunities too. Indeed, sometimes crises have provided the spark for politically difficult reforms, and the crisis environment may give scope for a comprehensive big bang approach, where immediate stimulus to support the economy could be combined with the introduction of long-lasting reforms in entitlements.

The IMF, together with other international financial institutions, has an important and constructive role to play in promoting the fiscal reforms that are part of this proposed strategy. Given its global membership, the IMF is uniquely placed to help—through both its country and policy work and technical assistance to member countries, all of which are affected, albeit to different degrees, by the ongoing crisis. Work efforts in the areas of entitlement reform, mediumterm fiscal frameworks, fiscal reporting, and fiscal rules are among those that are likely to come to the forefront in the coming years.

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