Group of Twenty

Meeting of the Deputies
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Note by the Staff of the International Monetary Fund

Executive Summary

The global economy is in the midst of a deep downturn, as an adverse feedback loop between the real and financial sectors is taking its toll. The dramatic worsening of the financial crisis since mid-September has generated historic declines in confidence and severe disruptions in credit intermediation. The precipitous decline in activity across the globe is in turn further damaging the financial sector.

Wide-ranging policy actions have helped avert a global financial meltdown. But systemic risks are at elevated levels and credit conditions remain seriously impaired, as financial losses continue to mount. In the advanced economies, heavy pressure to delever will continue, while financial pressures will remain acute for emerging economies, notably for corporates facing large rollover requirements.

Global growth is expected to decline sharply from 3½ percent in 2008 to ½ percent in 2009—the lowest increase since World War II—before recovering gradually to around 3 percent in 2010. This turnaround depends critically on more effectively addressing financial problems while sustaining strong policy support for domestic demand. Advanced economies will experience their sharpest contraction in the post-war period. Emerging and developing economies in the aggregate would be more resilient than in previous global downturns, but some economies will suffer serious setbacks.

Downside risks to the outlook remain substantial. The overarching risk revolves around the possibility of further corrosive interaction between more severe contraction in global economic activity and even greater and more prolonged financial strains than currently envisaged, particularly if policy implementation falls short.

Policy actions to resolve the financial crisis have been broad in scope, but have not yet achieved a decisive breakthrough. While there are pockets of improvement in some markets where policy intervention has taken place, financial markets remain under heavy strain and systemic institutions are still perceived as fragile. Challenges persist across a wide range of markets and instruments.

Conventional monetary easing has had a limited impact on financial conditions and in normalizing credit intermediation, necessitating direct intervention in credit markets. This has led to a rapid expansion of public balance sheets, including those of central banks. Fiscal policy is providing important support to the economy through a range of channels. While such support is critical to bolster aggregate demand and to limit the impact of the financial crisis on the real economy, it implies a significant deterioration in the fiscal accounts.

More aggressive and concerted policy actions are urgently needed to resolve the crisis and establish a durable turnaround in global activity. To be effective, policies need to be comprehensive and internationally coordinated to limit unintended cross-border effects. Action is needed on two fronts—to restore financial sectors to health and to bolster demand to sustain a durable recovery in global activity.

Restoring financial health will require a three-pronged approach, involving the continued provision of ample liquidity and term funding support from central banks, dealing promptly and aggressively with distressed assets, and recapitalizing viable institutions with public funds. Immediate, short-run policies and actions taken need to be consistent with the long-run vision for the structure of a viable financial system and with medium-term fiscal sustainability. If the financial sector is not restored to health, an enduring recovery will not be possible.

Various approaches may be used to resolve distress assets, tailored to individual institution and country circumstances. Cleaning bank balance sheets—including through a transparent process for valuing distressed assets and putting a ceiling on losses—will be critical to restore confidence in financial institutions and reduce counterparty risk. An approach that would ensure maximum transparency and greatly reduce uncertainty, although entailing high upfront fiscal costs, would be to transfer the assets to a "bad" bank. Such an approach has been tried and tested in previous crises and has yielded generally favorable outcomes.

Recapitalization using public balance sheets should make a clear differentiation between viable and non-viable institutions to enable greater consolidation in the financial sector. Most critically, recapitalization must be of a sufficient size to decisively address solvency concerns, especially by ensuring that it is resilient to further deterioration in bank balance sheets as a result of the worsening macroeconomic environment.

International cooperation on a coherent set of financial policies should receive high priority. The application of substantially different conditions when supporting financial institutions should be avoided in order to prevent unintended consequences that may arise from competitive distortions and regulatory arbitrage. International coordination is also needed to avoid excessive "national bias" to the detriment of other countries.

Macroeconomic policy stimulus will be critical to support demand while financial issues are addressed and to avoid a deep and prolonged recession. With conventional monetary policy reaching its limits, central banks will need to explore alternative policy approaches with a focus on intervention to unlock key credit markets. That said, with constraints on the effectiveness of monetary policy, fiscal policy must play a central role in supporting demand, while remaining consistent with medium-term sustainability. A key feature of a fiscal stimulus program is that it should support demand for a prolonged period of time and be applied broadly across countries with policy space to minimize cross-border leakages.

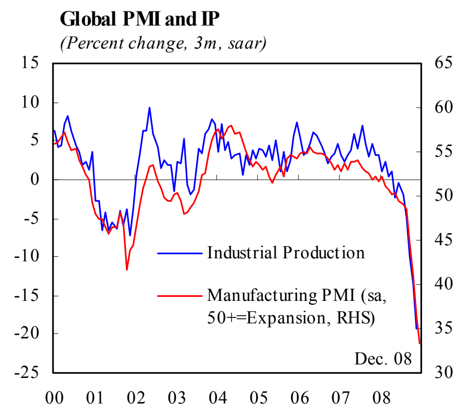
Policymakers need to be mindful of the importance of maintaining confidence in medium-term fiscal sustainability. Stimulus measures must be accompanied by credible steps to strengthen medium-term fiscal prospects. Fiscal packages should rely on temporary measures and policies should be formulated within credible medium-term fiscal frameworks. These frameworks should entail gradual fiscal corrections as conditions improve. Countries facing forthcoming demographic challenges—particularly faster aging—should have a clear plan for reform of health and pension entitlements.

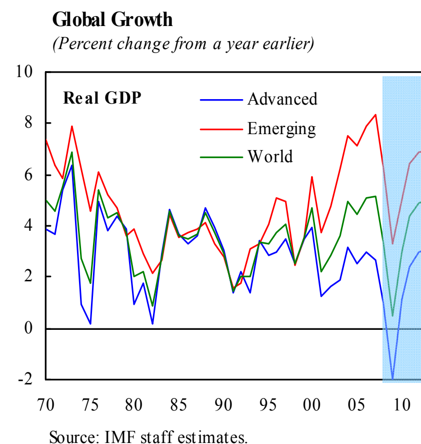
I. Recent Developments, Prospects, and Risks[1]

The global economy is in the midst of a deep downturn, as severe financial market stress persists notwithstanding continued policy efforts. World trade and industrial activity are falling sharply, while labor markets are weakening at a rapid pace, particularly in the United States. The advanced economies as a group are facing their sharpest contraction in the post-war era, while activity is slowing abruptly in emerging economies. The January update of the World Economic Outlook projects global growth to slow from 3½ percent in 2008 to ½ percent in 2009, before gradually recovering to around 3 percent in 2010, helped by fiscal stimulus that now looks likely to be implemented in major economies. The outlook is, however, exceptionally uncertain and a turnaround depends critically on more effectively addressing financial problems, while sustaining strong policy support for demand.

A. Recent Developments

1. **The global economy is in the midst of a deep downturn, with the financial crisis driving an abrupt slump in the real economy**. The dramatic intensification of the financial crisis since the mid-September collapse of Lehman Brothers has generated historic declines in consumer and business confidence, steep falls in household wealth, and severe disruptions in credit intermediation. This has triggered a sharp deceleration in activity across the globe. Industrial production has fallen precipitously across both advanced and emerging economies, declining by some 15-20 percent in the last quarter of 2008. Merchandise exports have fallen by some 30-40 percent, at an annual rate, in the past 3 months. Labor markets are weakening rapidly, particularly in the advanced economies. At the same time, inflation is easing quickly across the globe, reflecting the sharp fall in economic activity and the collapse of commodity prices since mid-2008.





Source: IMF staff estimates.

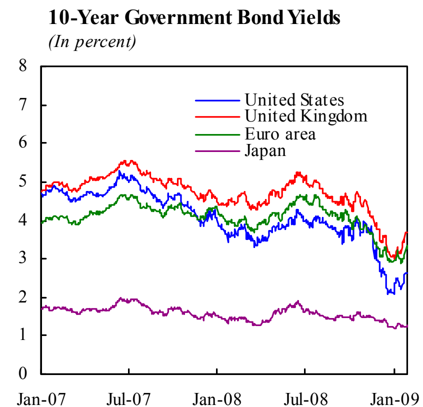
2. **After factoring in an estimated decline in activity in the fourth quarter, global growth is projected to have slowed to 3½ percent in 2008, down from the robust 5 percent pace sustained over the four previous years**. At present, all major advanced economies are in recession. Activity is also slowing abruptly in emerging economies, reflecting the confluence of weakening global growth prospects, sharply tighter financial conditions, and

[1] Prepared by staff of the IMF's Research Department, with input from the Fiscal Affairs and Monetary and Capital Markets Departments.

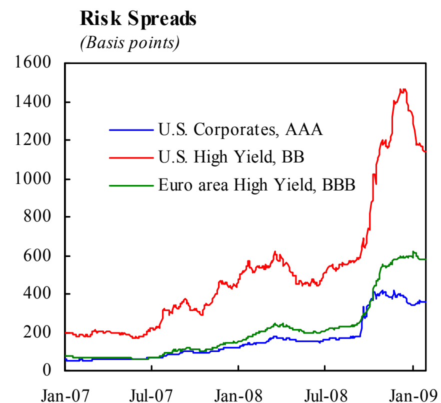
plunging commodity prices. Growth in these economies already moderated to 6¼ percent in 2008, down from 8 percent in 2007.

3. **In mature financial markets, wide-ranging policy actions have averted a financial meltdown, but systemic risks remain at elevated levels and credit conditions remain severely impaired**. Financial sector losses are now being exacerbated by the sharp economic slowdown. Deleveraging pressures and wide credit spreads on risky assets are likely to be sustained throughout the year ahead. Markets for securitized assets, except for mortgage securities with government guarantees, remain frozen.

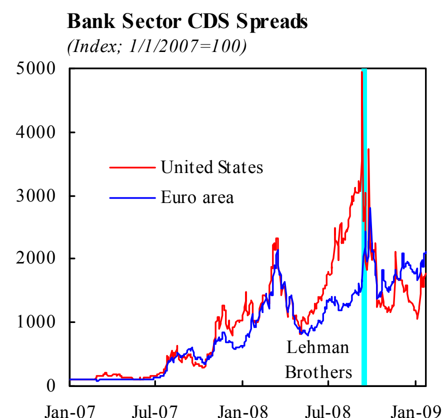
- *Government bond yields remain exceptionally low, as the crisis continues to fuel a flight to safety*. After plummeting to their lowest levels in decades, yields on U.S. Treasury securities have risen somewhat. However, investors are increasingly differentiating between government issuers. In some advanced economies where fiscal sustainability has become an increasing concern in the face of large public costs associated with the financial crisis, sovereign spreads have widened significantly.



- *Corporate securities markets have pulled back from October 2008 extremes, but remain deeply distressed as weakening activity threatens further increases in defaults.* Corporate bond spreads have declined from historic highs, but remain at elevated levels, reflecting ongoing credit strains. Nonetheless, issuance of high grade corporate debt has picked up since its trough in the third quarter of 2008.



- *Uncertainty regarding the state of bank balance sheets remains unresolved and funding markets remain disrupted*. Banks in the United States and Europe continue to endure rising losses and falling profits amid weaker growth. Bank balance sheets remain saddled with troubled assets, and loan losses are affecting a widening range of household and corporate credit. The great uncertainty about the ultimate size and distribution of the shortfall in bank capital has allowed concerns about bank solvency to linger and hindered a restoration of market trust and confidence, as reflected in still-high bank CDS spreads.



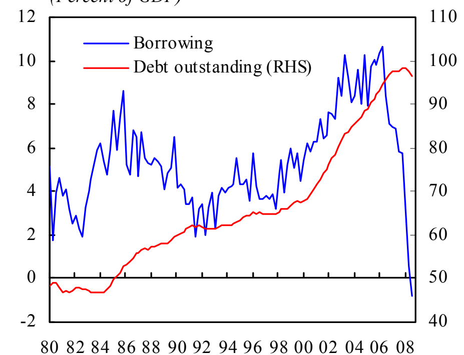
- *Private sector borrowing is falling sharply in the United States*. As U.S. households move to repair balance sheets in the wake of the severe erosion of wealth and tight financial conditions, borrowing is being curtailed at a rapid pace. As a result, household debt in relation to GDP has begun to decline from its recent peak.

4. **The financial crisis has spread abruptly to emerging markets, where the situation remains fragile despite a slight recovery in market sentiment**. The pullback from emerging economy assets since mid-September has been widespread, and financing costs for these countries remain much higher than earlier levels. Countries with large external financing needs—including with respect to their corporate sectors—and highly levered financial systems have faced particularly intense strains, with CDS spreads at very high levels.

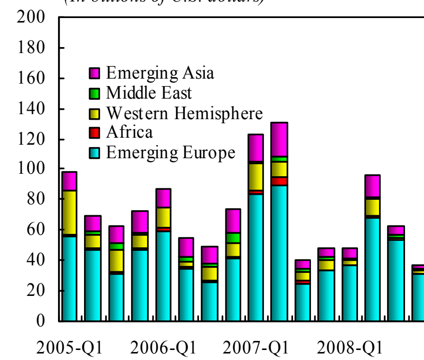
- *The disorderly deleveraging sparked by the financial crisis led to sharp reversals of capital flows to emerging economies in October and November 2008*, with the corporate sector being particularly hard hit. External debt markets were virtually closed to both corporate and sovereign issues and hedge funds and other institutional investors sold off positions. As a result, equity and local debt markets fell sharply, and currencies came under heavy pressure.

- *Emerging markets remain under severe financial pressure, although there appears to be a tentative improvement in sentiment in recent weeks*. An easing of capital outflows and some new issues by sovereigns have provided support to weakening currencies. Exchange rates have appreciated in recent weeks and volatility has moderated. However, corporate spreads remain very high, and trade and other corporate finance lines have been cut as major lenders have sharply tightened credit limits or more generally scaled back their involvement in this business segment. As a result, there is considerable uncertainty about whether markets will absorb the substantial financing requirements of sovereigns and, particularly, corporates in 2009. And there are serious concerns regarding the

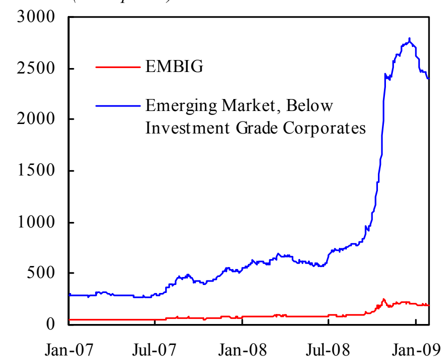
U.S. Household Borrowing and Debt
(Percent of GDP)



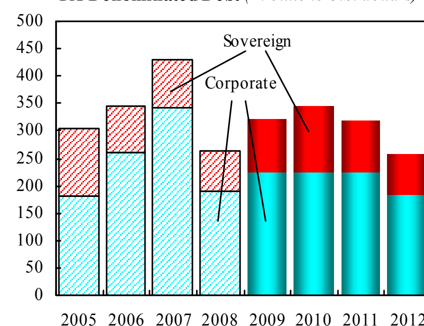
Emerging Market Private Sector Gross External Issuance
(In billions of U.S. dollars)



Risk Spreads
(Basis points)



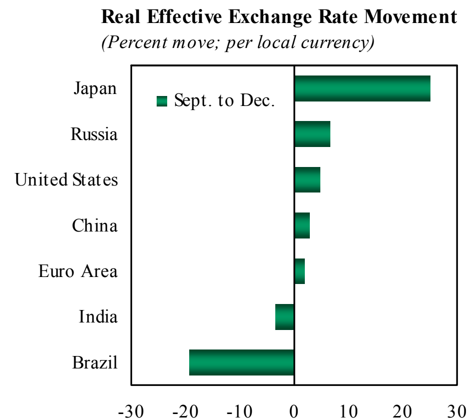
Historical Issuance and Upcoming Rollover of FX-Denominated Debt *(In billions U.S. dollars)*



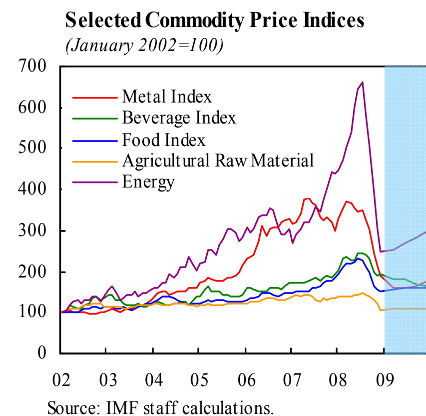
Sources: BEL, Bloomberg L.P., and IMF staff estimates.

capacity of financial systems in these economies to cope with such shocks.

5. **The crisis has prompted a flight to safety that has boosted the main reserve currencies**. Over the past few months, the dollar, the yen, and the euro have all appreciated in real effective terms. The strengthening of the yen has been especially notable, as carry trades were unwound in the context of highly volatile markets. As a result, and despite recent weakness in the dollar and the yen, all three major currencies are now on the strong side relative to medium-term fundamentals. By contrast, the renminbi remains substantially undervalued, notwithstanding some further real appreciation over the past year. Other emerging economy currencies have faced significant depreciations and have moved close to their medium-term equilibrium levels (Brazilian real and Polish zloty) or below them (Korean won, Mexican peso, and Indonesian rupiah).



6. **Commodity prices have collapsed over the past few months, as the global downturn has spread to emerging and developing economies**. Despite production cut-backs by OPEC, oil prices have declined by nearly 70 percent since their July 2008 peak, although in real terms prices remain well above levels in the 1990s. This price fall reflects the major global downturn which has now engulfed emerging economies, the strengthening of the U.S. dollar, and the financial crisis. Similarly, metals prices are now around 50 percent below their March peaks. Food prices have eased 35 percent from their peak, reflecting not only deteriorating global cyclical conditions, but also favorable harvests. Looking forward, commodity prices are unlikely to recover while global activity is slowing.



B. Prospects

7. **Global growth prospects have weakened further against a background of rapidly slowing activity**. Financial stress remains higher than previously envisaged, and is expected to continue for some time, despite actual and expected actions by policymakers. Moreover, the disruptive effects of the crisis on real activity has proven to be stronger than anticipated. At the same time, the projections now build in sizeable fiscal support that is now being mobilized, while lower commodity prices should also support demand in importing countries. The IMF's oil price baseline has been marked down to $50 a barrel in 2009 and $60 a barrel in 2010, down from nearly $100 a barrel in 2008.

8. **Global growth is now projected at ½ percent in 2009, down 1¾ percentage points since the November WEO update (using purchasing power parities and on an annual**

average basis), and the weakest outcome since the Second World War. On a fourth quarter over fourth quarter basis, the global economy is expected to expand by 1¼ percent, reflecting the pick-up in activity over the course of the year. Projections have been marked down in both advanced and emerging economies by broadly similar magnitudes. In 2010, the global economy is expected to recover gradually, with growth reaching 3 percent on an annual average basis and 3½ percent on a fourth quarter over fourth quarter basis.

Table 1. IMF Real GDP Growth Projections

(In percent change from a year earlier)

		Proj.	Proj.		Proj.	Proj.
	2008 (YOY)	2009 (YOY)	2010 (YOY)	2008 (Q4/Q4)	2009 (Q4/Q4)	2010 (Q4/Q4)
World	3.4	0.5	3.0	1.1	1.2	3.4
G-7	0.8	-2.0	1.0	-1.2	-0.5	1.5
Euro area	1.0	-2.0	0.2	-0.7	-1.4	0.9
Argentina	6.5	0.0	1.5	3.9	-1.0	2.6
Australia	2.3	-0.2	1.8	1.1	-0.2	2.7
Brazil	5.8	1.8	3.5	4.3	2.2	4.2
Canada	0.6	-1.2	1.6	-0.4	-0.4	2.0
China	9.0	6.7	8.0	6.8	7.5	8.1
France	0.8	-1.9	0.7	-0.5	-1.8	2.2
Germany	1.3	-2.5	0.1	-1.2	-1.0	0.4
India	7.3	5.1	6.5	5.1	5.3	7.1
Indonesia	6.1	3.5	4.0	5.7	2.7	4.9
Italy	-0.6	-2.1	-0.1	-1.5	-1.3	0.8
Japan	-0.3	-2.6	0.6	-3.0	-0.2	0.8
Korea	2.6	-4.0	4.2	-3.6	1.0	4.8
Mexico	1.8	-0.3	2.1	0.0	0.2	3.3
Russia	6.2	-0.7	1.3	2.7	-1.3	1.9
Saudi Arabia	5.5	0.8	3.7	...	...	...
South Africa	3.1	1.3	3.5	1.5	2.2	3.8
Turkey	1.0	-1.5	3.5	-4.8	4.1	3.1
United Kingdom	0.7	-2.8	0.2	-1.8	-1.5	0.8
United States	1.1	-1.6	1.6	-0.7	0.0	2.0

Source: World Economic Outook, January 2009.

9. **Activity in advanced economies is now expected to contract by 2 percent in 2009**. By a considerable margin, this would be the sharpest contraction for these countries as a group in the post-war period. Significant monetary and fiscal stimulus and easing financial strains are expected to underpin a recovery in 2010.

- In the *United States*, GDP is projected to decline by around 1½ percent in 2009, before expanding by about 1½ percent in 2010. Confidence and forward looking indicators suggest that households and businesses are bracing for a difficult year, with job losses coming on top of significant wealth destruction and tighter credit conditions. Despite some support from the decline in oil prices and expected tax cuts, private consumption is expected to fall by around 1 percent in 2009, and recover only slowly next year. Business investment will be dampened by tight credit conditions and unusually high uncertainty about the course of the economy. Residential construction is expected to remain depressed because of inventory overhang and continued declines in housing prices, but to find a floor by end-2009. However, public expenditure is projected to rise sharply starting in the second half of 2009 as the expected fiscal package comes on stream.

- In the *euro area*, activity is expected to contract by 2 percent in 2009, with a very modest recovery in 2010. The impact of falling external demand has been larger, while policy stimulus has been slower and more moderate in the euro area than in the United States. Tight financial conditions and rising unemployment are expected to dampen consumption and business investment, while falling house prices—particularly in Ireland and Spain—are taking a toll on consumption. A number of countries have announced fiscal stimulus measures, which should provide some support to demand. That said, not all countries in the euro area have space to undertake expansionary fiscal policy, as evidenced by some widening of sovereign spreads within Europe.

- *Japan* is experiencing a deep recession. While not at the epicenter of the crisis, Japan's exports have been hit hard by the slump in global demand, aggravated by the sharp appreciation of the yen. This has contributed to a steep decline in business investment and consumer confidence. At the same time, Japanese banks—with their large equity holdings—remain under stress from falling equity prices, while corporate bankruptcies are on the rise. Against this background, the Japanese economy is expected to contract by 2½ percent this year, before modestly recovering in 2010, supported by fiscal stimulus and a pickup in global growth.

10. **In emerging and developing economies, growth will be impeded by financing constraints, lower commodity prices, weak external demand, and associated spillovers to domestic demand**. Activity is expected to expand by around 3¼ percent in 2009—a markdown of 1¾ percentage point compared with the November WEO update and almost half the pace experienced in 2007—before rebounding to around 5 percent in 2010. In the aggregate, these economies would thus be more resilient than in previous global downturns—reflecting benefits of market reforms and stronger policy frameworks—but some economies will suffer serious setbacks.

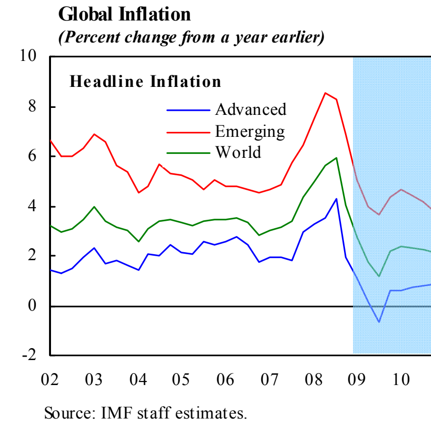
- *Central and eastern Europe (CEE), the Commonwealth of Independent States (CIS), and Latin America have been the most adversely affected*. The global financial disruptions have severely affected the CEE region in particular, given its large current account deficits, with several countries facing outright crisis and seeking financial support from the IMF. Elsewhere, Russia—which has seen severe financial strains and a reversal of bank-related inflows, as well as slumping oil prices—and Mexico—which is facing difficulties on account of its close ties to the United States—are both projected to experience declines in GDP in 2009, while growth in Brazil is expected at a sluggish 1¾ percent.

- *Growth in emerging Asia, Africa, and the Middle East is also projected to slow, but more modestly than in other regions.* In Asia, which is expected to grow by 5½ percent in 2009, lower commodity prices are providing a boost to purchasing power at a time when external demand is weakening, while fiscal and monetary policies are providing support. Growth in China is projected at 6¾ percent in 2009 and around 8 percent in 2010, as a large fiscal package supports domestic demand despite a sharp setback to exports. The Indian economy should expand by about 5 percent in 2009 and 6½ percent in 2010. In Africa, growth is expected to slowdown to around 3½

percent in 2009, before recovering modestly to about 5 percent in 2010. In the Middle East, which is expected to grow at 4 percent in 2009, the effects of the financial crisis are more muted, as government spending has been largely sustained—and in some countries (such as Saudi Arabia) increased further—despite the fact that the decline in oil prices is taking a toll on activity.

11. **Inflation will continue to retreat due to the combination of lower commodity prices and increasing economic slack**. In the advanced economies, headline inflation is expected to decline to about ¼ percent in 2009 (on a fourth quarter over fourth quarter basis), with Germany, Japan, and the United States experiencing temporary price declines. In emerging economies, inflation is also expected to moderate to 4¾ percent in 2009, down from 7½ percent in 2008.

Global Inflation
(Percent change from a year earlier)



Source: IMF staff estimates.

Table 2. IMF Headline CPI Inflation Projections
(In percent change from a year earlier)

		Proj.	Proj.	Est.	Proj.	Proj.
	2008 (YOY)	2009 (YOY)	2010 (YOY)	2008 (Q4/Q4)	2009 (Q4/Q4)	2010 (Q4/Q4)
World	6.0	2.8	2.8	4.5	2.0	2.2
G-7	3.3	0.0	0.5	2.4	-0.2	0.7
Euro area	3.3	0.8	1.2	1.9	1.1	1.2
Argentina	8.6	6.8	7.3	7.8	6.9	7.2
Australia	4.5	2.9	2.8	4.2	2.8	2.8
Brazil	5.7	4.8	4.5	6.2	4.4	4.5
Canada	2.4	0.4	1.0	2.1	0.2	1.3
China	5.9	0.5	1.0	2.9	1.6	0.2
France	3.2	0.5	1.5	2.0	0.9	1.5
Germany	2.8	0.2	0.1	1.7	-0.5	0.1
India	7.9	3.7	4.0	8.5	2.8	3.9
Indonesia	9.8	7.3	6.7	11.5	6.1	6.3
Italy	3.5	1.2	1.5	2.9	0.4	2.1
Japan	1.4	-1.1	-0.2	1.0	-1.2	-0.1
Korea	4.7	2.2	3.0	4.5	2.3	3.0
Mexico	5.1	4.8	3.4	6.2	3.7	3.1
Russia	14.1	12.6	10.9	13.8	12.1	10.2
Saudi Arabia	9.9	6.5	5.0	...	...	...
South Africa	11.6	5.8	5.5	11.5	5.0	4.8
Turkey	10.4	7.9	6.9	10.9	6.5	7.2
United Kingdom	3.7	1.4	0.9	4.2	0.8	1.2
United States	4.1	-0.2	0.5	2.6	-0.2	0.6

Source: World Economic Outook, January 2009.

C. Risks

12. **Downside risks to the new baseline forecast remain substantial**. The main risk to the outlook clearly revolves around the possibility of further corrosive interaction between more severe contraction in global economic activity and even greater and more prolonged

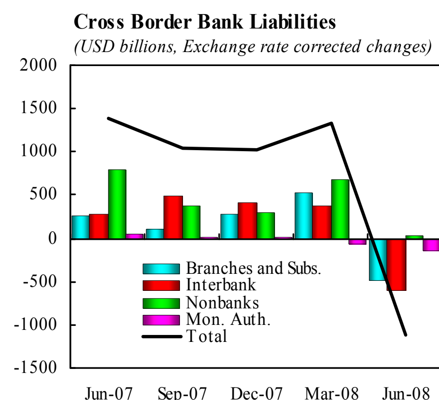
financial strains than currently envisaged. Two factors amplify such risks. First, uncertainty remains unusually high and has been so for longer than in previous downturns since the Great Depression. In such an environment, there are risks that households and businesses may continue to wind back spending, if policy actions are not effective in restoring confidence and economic stability. Second, as economies slow and labor markets weaken further, higher corporate and household defaults could inflict greater financial losses and more severe distress.

13. **Housing retrenchment in the United States and elsewhere may be deeper than envisaged in the baseline**. In the United States in particular, there is a risk of deeper and more prolonged housing correction, as labor markets deteriorate further, mortgage financing remains restrained and foreclosures rise steeply as the "negative equity" problem in housing spreads. House prices could continue to fall sharply through 2010, undermining recovery in financial markets and contributing to the adverse feedback loop with the real economy. Similarly, there are risks that house price declines could intensify in other advanced economies and also spread to a broader range of countries, particularly if the availability of housing finance is squeezed through adjustment in the financial sector.

14. **Deflation risks are becoming an increasing concern, particularly in advanced economies where the room for further monetary easing is limited**. Under normal circumstances, a quarter or two of negative headline inflation would not be a major problem, especially if it is a temporary by-product of declining commodity prices. However, in the current environment of sharply falling demand and output contractions in advanced economies, deflation may be particularly insidious. The scope for an effective monetary policy response would be limited, as the zero interest rate bound limits the capacity of central banks to lower real interest rates. Despite innovative measures by advanced economy central banks to unlock credit markets and jumpstart economic activity, a drop in inflation expectations could prompt consumers and firms to hold off on their spending decisions in anticipation of lower prices, while expected debt burdens rise. Thus, there is a tail risk of a deflationary spiral, where policy is unable to gain traction, output remains depressed, employment declines sharply in the face of downwardly rigid nominal wages, and the financial sector fails to recover.

Cross Border Bank Liabilities

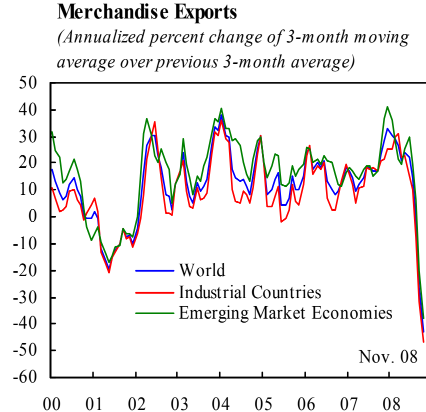
(USD billions, Exchange rate corrected changes)



15. **In the context of continued deleveraging and large scale sovereign borrowing by major advanced economies, there is a serious risk that emerging economies will be unable to secure external financing**. A growing range of emerging economy sovereigns and corporates may not have sufficient access to foreign financing, especially given the potentially large borrowing needs of advanced economies and prospect of increased home bias, forcing policy adjustments to compress domestic demand. With deleveraging becoming more widespread, mature market parent banks could scale back support for emerging economy subsidiaries as result of their own funding strains. Overall, risks are largest for emerging

economies that rely on cross-border flows to finance current account deficits or to fund the activities of their financial or corporate sectors.

16. **Rising protectionist sentiment would undermine global economic prospects**. Notwithstanding commitments made by G-20 countries not to resort to protectionist actions, signs are emerging that several countries have raised tariffs and non-tariff barriers to imports and provided subsidies to their export sector. Going forward, if such actions gain greater momentum, economic prospects and recovery from the crisis would be undermined.



II. Policy Response and Effectiveness

Policy actions to address the global crisis have been increasingly broad in scope as financial problems have spread and activity has deteriorated, but have not yet achieved a decisive breakthrough. Policies have been aimed at restoring confidence in global financial markets and institutions, supporting aggregate demand, and ultimately breaking the corrosive feedback loop between the financial and real sectors of the global economy. Although authorities' efforts have pulled the global financial system back from the brink of collapse, they have proved insufficient to restore confidence that the global economy can avoid a prolonged slump in activity. Additional actions are thus urgently required. They will need to be comprehensive in scope and applied in a well-coordinated fashion across a broad range of countries.

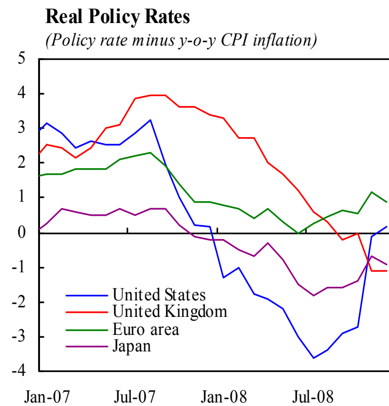
A. Monetary and Financial Sector Policies

17. **In the early phases of the financial crisis, the response of central banks was largely aimed at providing liquidity support to banks faced with funding shortages and a sudden drying up of securitization markets**. However, as the extent of the crisis and its real impact has been recognized, policies have increasingly turned to a combination of interest rate cuts, particularly as moderating oil and commodity prices since July 2008 eased inflationary concerns, actions to support credit flows, and measures to reduce systemic risks from failing institutions. In this context, the distinction between monetary policy and financial policy has been increasingly difficult to draw.

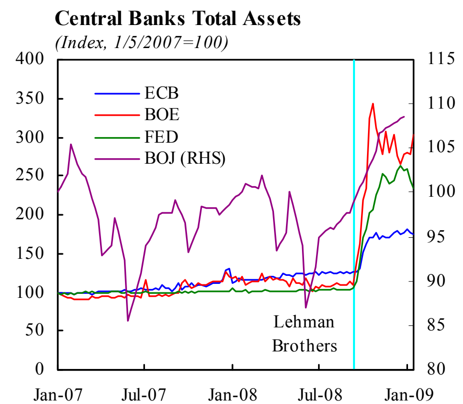
18. **Major central banks have eased policy rates to limit the direct effect of the crisis on the economy and to alleviate the risks of an adverse feedback loop between the real and financial sectors**. With the United States being the epicenter of the crisis, the Fed in particular has been extremely proactive and aggressive in cutting policy rates, lowering them by a cumulative 500 basis points since the beginning of the crisis to close to the zero bound. Other major central banks, including the ECB and the Bank of England, have also cut rates, although at a somewhat slower pace than the Fed. Actions have included an unprecedented coordinated cut in policy rates of 50 basis points by six major central banks in October 2008,

followed by a further lowering of rates by individual central banks in November, December, and January.

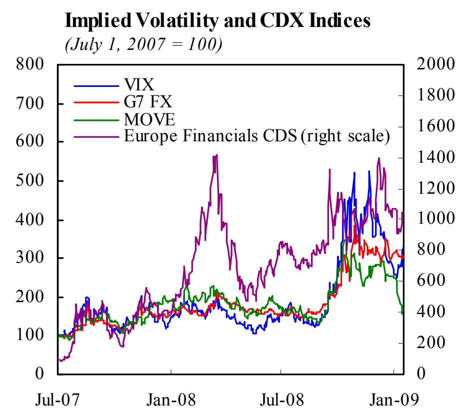
19. **Policy interest rate reductions, however, have had a limited impact on financial conditions**. Real policy rates are substantially lower than before the crisis, but have risen recently alongside sharp declines in inflation. In many credit markets, however, policy rate cuts have not translated into lower borrowing rates. Financial disruptions have weakened the monetary transmission mechanism, with banks tightening lending standards. Many traditional funding sources for financial institutions and markets have dried up, and banks and other lenders have found their ability to securitize credit greatly constrained. As a result, financial conditions have tightened overall, and borrowing rates, particularly for high-yield corporates, remain at elevated levels.



20. **With credit intermediation still impaired and major central banks approaching the zero bound on policy rates, direct intervention in credit markets has become key**. Major central banks, notably (but not exclusively) the Fed, have increasingly acted to provide direct support to credit markets. Balance sheets of central banks have expanded sharply, particularly since mid-October 2008. In the case of the Fed, this has included *inter alia* providing a backstop for the commercial paper market, money market mutual funds, and the market for asset-backed securities, including those backed by mortgage lending. Since September 2008, the Fed's balance sheet has grown from around 6 percent of GDP ($940 billion) to 15 percent of GDP ($2.3 trillion). The Fed's balance sheet could expand by another $800 billion to around 22 percent GDP, because of the planned purchases of agency debt and mortgage-backed securities as well as other asset-backed securities. Over the same time frame, the ECB's balance sheet has expanded by around 70 percent.



21. **Supporting central bank actions, public balance sheets have been put to use to combat the financial crisis**. Governments have introduced or enhanced guarantees on deposits and other bank liabilities, injected capital directly into banks, and provided guarantees to central banks taking on credit risk. Since the collapse of Lehman Brothers in mid-September, financial authorities have also intervened to rescue, takeover, or facilitate the resolution of a broad range of systemically important financial institutions that have come to the brink of failure. At the international level, global policy makers have

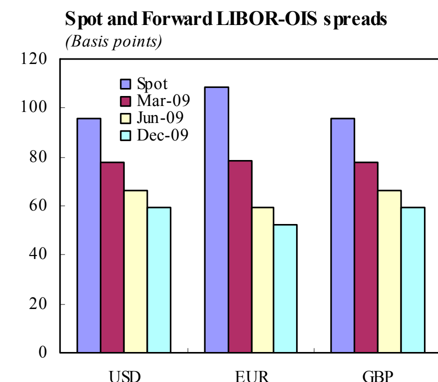


collaborated to extend funding across borders and to execute financial bailout packages.

22. **Despite these unprecedented efforts, financial markets remain under heavy strain and systemic institutions are still perceived as fragile.** Official actions have come too late to prevent the adverse feedback loop with the real economy, that is taking a crippling toll on financial balance sheets. Although some measures appear to be bearing fruit, and it will take time for the full impact of some of the measures already taken to be felt, challenges persist across a wide range of markets and instruments. Moreover, high uncertainty remains about the viability of core financial institutions, as reflected in wide CDS spreads and falling equity prices.

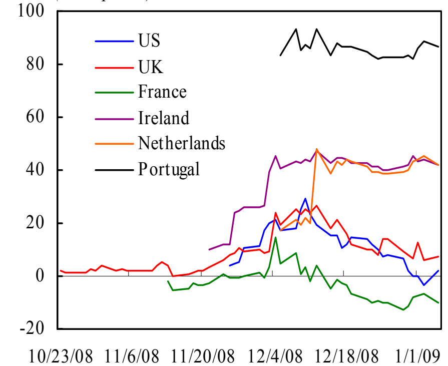
- *Despite public and private injections of capital into the banking system, additional capital is needed as the economic environment has deteriorated and confidence in banks has yet to be more fully restored*. Banks have received some $450 billion of private and $380 billion of public capital, sufficient to offset reported writedowns by banks in aggregate. The deepening credit deterioration to a broader range of markets has raised our estimate of potential losses on U.S.-originated assets for bank and non-bank financial institutions' balance sheets to $2.2 trillion, an increase of some $0.8 trillion relative to the October 2008 GFSR. Credit deterioration is also mounting on assets in Europe and emerging economies, and writedowns are expected to be sizable. As a result, additional sizeable capital injections will be required.

- *Overnight funding markets have stabilized as a result of massive central banks liquidity operations, but term funding and money markets remain seriously impaired*. Counterparty risk remains high, despite various forms of government guarantees on bank debt. Spreads between 3-month Libor and overnight index swap rates have narrowed only slowly, and forward markets indicate that spreads are expected to remain wide. Banks continue to hoard reserves at central banks rather than place funds on interbank markets. At the same time, term wholesale funding has virtually disappeared and financial institutions are relying on dedicated term facilities put in place by central banks. Previously important sources of funding—including structured investment vehicles and money market mutual funds—are likely to be greatly diminished for the foreseeable future, suggesting that banks need to change their funding strategies on a permanent basis.[2]

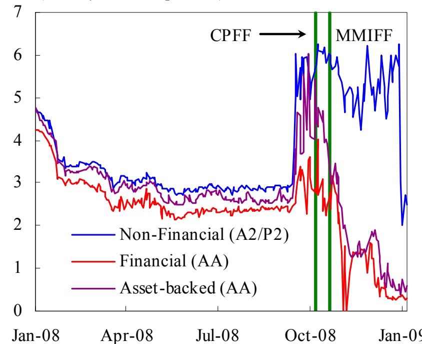


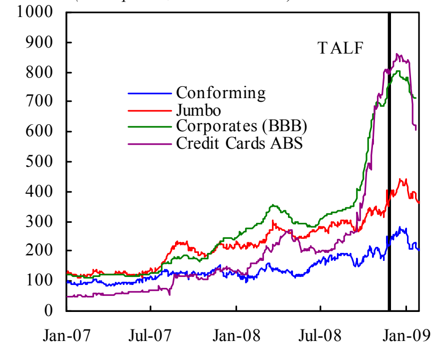
[2] The ratio of retail deposits to assets in advanced economy banks is viewed as too low by investors—for example, at the 60 largest European banks, this ratio was only one-third at end-2008. The remaining two-thirds of assets need to be funded by secured and unsecured financing, which remains scarce, or by central bank funding.

- *Banks have been able to issue increasing amounts of guaranteed debt, but the market for such debt remains limited*. Notwithstanding government guarantees, tiering in the spreads of different bank paper exists. Bonds issued by countries and banks viewed as having higher credit risks, whose guarantees are not explicit, whose guarantee fees are higher, and with less assured liquidity are facing higher spreads. More broadly, most guaranteed bank bonds still have spreads over 100 basis points above government securities and wider than government agency debt. This reflects in part growing concerns about the market's ability to absorb large amounts of such debt that are likely to be placed in the near term. French spreads are relatively low, partly because the issuance is by a government agency, which on-lends to the banks, rather by the banks themselves, thus centralizing liquidity and simplifying the credit risk for investors. Greater harmonization across countries of the features of the bonds, and closer equivalence to government securities in their treatment in regulations and for collateral purposes, would help to increase their acceptability to investors and reduce the cost of issuance for banks.

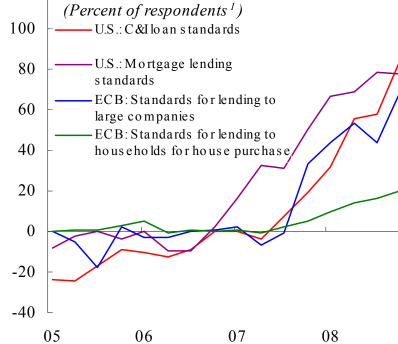


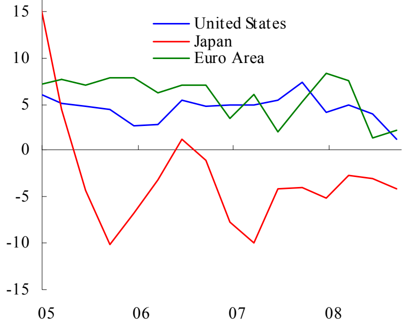
- *Credit markets remain under considerable stress, although there are pockets of improvement in some markets where policy interventions have taken place.* Markets for products with some form of official guarantee or support are beginning to recover, but the anticipated large scale issuance both of government-guaranteed bonds and of government securities risks crowding out nonguaranteed issuers. In the United States, interest rates on mortgage agency debt and mortgage-backed securities have declined as a result of direct purchase programs. The Fed's term asset-backed loan facility (TALF) to be launched in February, may also succeed in reviving consumer, student, and small business lending, and could be expanded to help other target markets such as commercial mortgages. The Fed and Bank of Japan appear to be having some early success in their programs to support the commercial paper market. Despite these efforts, however, large parts of the securities market are still impaired. As a result, credit risk spreads persist at historically wide levels in a host of segments, and the non-agency mortgage securitization market has not restarted.





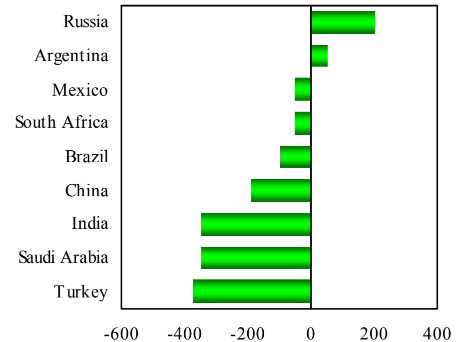
- *Bank lending standards have continued to tighten and credit growth is slowing*. In response to balance-sheet pressures, risk aversion, and the difficulty of reselling their loans as securitization remains constrained, banks in the United States and Europe have been tightening lending standards for both households and corporations. While the tightening in bank lending standards has so far had a relatively modest impact on the volume of lending to the non-financial sector, recent developments suggest that volumes have begun to contract in the United States.

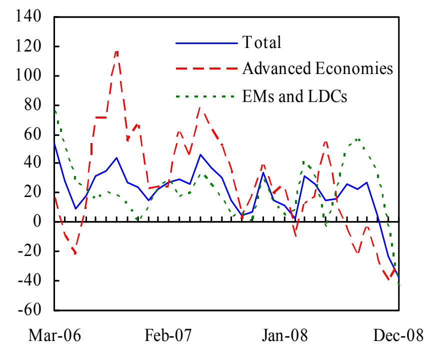




[1]Change in the balance of respondents between the "tightened considerably and tightened somewhat" and the "eased somewhat and eased considerably."

- *Emerging economies continue to face a hostile external environment, while policy actions have had mixed success in addressing local strains*. Central banks have responded to the severe liquidity strains and slowing activity by cutting interest rates and reducing reserve requirements. Brazil, China, India, Mexico, Saudi Arabia and Turkey have all eased monetary policy aggressively. Some countries have gained access to cross-border liquidity and foreign exchange swap lines, while others have drawn down foreign exchange reserves to meet financing needs. Despite these steps, longer-term funding risks are still rising, especially for the corporate sector, given the drying up of external bond and syndicated loan markets, including with respect to trade credit. As a result, some emerging economies have taken steps to either provide direct financing or guarantee trade-related lending. Others are forming export finance agencies or increasing the availability of financing or guarantees through their existing agencies with their efforts supported by multilateral agencies.





B. Fiscal Policy[3]

Fiscal policy is providing important support to the economy through a range of channels, including direct stimulus, automatic stabilizers and the use of public balance sheets to shore up the financial system. While such support is critical to bolster aggregate demand and to limit the impact of the financial crisis on the real economy, it implies a significant deterioration in the fiscal accounts.

23. **Many countries have announced plans to implement a sizeable discretionary fiscal stimulus to boost aggregate demand**. To date, the G-20 countries have adopted (or plan to adopt) fiscal stimulus measures amounting on average to around ½ percent of GDP in 2008, 1½ percent of GDP in 2009, and about 1¼ percent of GDP in 2010. For 2010, however, most G-20 countries have not yet announced fiscal packages, so the current estimate should be viewed as tentative.

24. **There is considerable variation across G-20 countries in the size and composition of the stimulus packages**.[4] The fiscal stimulus has so far consisted of one-third revenue measures and two-thirds expenditure measures. Revenue measures have been focused on cuts in personal income taxes and indirect taxes, such as VAT or excises, while increased spending for infrastructure has been emphasized on the expenditure side. Other expenditure measures include transfers to states or local governments, support for housing sectors, and aid to small and medium enterprises.

- Almost half of the G-20 countries have announced sizeable cuts in personal income taxes (including Canada, Germany, Indonesia, Italy, the United Kingdom, and the United States), while around one-third have announced reductions in indirect taxes.[5] At the same time, about half of the G-20 countries also have plans to cut corporate income taxes (Canada, France, Germany, Indonesia, Korea, Russia, Spain, and the United States, among others).

- Three-quarters of the G-20 countries have announced plans to increase spending on infrastructure, largely on transportation networks (Canada, China, France, Germany, Indonesia, Italy, Korea, Saudi Arabia, and the United States among others)—either in the form of direct central government spending, or through capital transfers to local authorities.

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[3] This note draws heavily from IMF (forthcoming), "The State of Public Finances: Outlook and Medium-Term Policies After the 2008 Crisis", prepared by the Fiscal Affairs Department.

[4] Some of the information used to determine the breakdown of the various fiscal packages is tentative or based on staff estimates.

[5] For China, the burden of indirect taxes was reduced by allowing offsetting tax credits for investment spending, rather than through reductions in tax rates.

G-20 Countries: Estimated Size and Growth Impact of Discretionary Measures, 2008-10 1/

	Size 2/ (In percent of GDP)			Growth Impact 3/ (In percent)	
	2008	2009	2010	2009	2010
Argentina 4/	0.0	1.3	n.a.	0.3 - 1.1	-0.1 - -0.2
Australia	0.7	0.8	0.3	0.2 - 0.7	-0.1 - -0.4
Brazil	0.0	0.3	0.2	0.1 - 0.2	0.0 - 0.0
Canada	0.0	1.5	1.3	0.4 - 1.3	0.1 - 0.4
China	0.4	2.0	2.0	0.6 - 2.1	0.5 - 1.4
France	0.0	0.7	0.0	0.2 - 0.6	0.0 - -0.1
Germany	0.0	1.5	2.0	0.4 - 1.2	0.3 - 0.9
India 5/	0.0	0.5	n.a.	0.2 - 0.5	-0.1 - -0.3
Indonesia	0.0	1.3	1.1	0.4 - 0.8	0.0 - 0.0
Italy	0.0	0.2	0.1	0.1 - 0.2	0.0 - -0.1
Japan	0.4	1.4	0.4	0.4 - 1.3	-0.3 - -0.7
Korea	1.0	1.5	0.3	0.5 - 1.3	-0.3 - -0.8
Mexico	0.0	1.0	n.a.	0.3 - 1.0	-0.2 - -0.6
Russia	0.0	1.7	n.a.	0.6 - 1.7	-0.6 - -1.7
Saudi Arabia	2.4	3.3	3.5	1.3 - 4.2	0.2 - 0.6
South Africa 6/	1.3	1.3	n.a.	0.4 - 1.3	-0.4 - -1.3
Spain	3.1	1.1	0.3	0.3 - 0.9	0.0 - 0.1
Turkey	0.0	0.0	n.a.	0.0 - 0.0	0.0 - 0.0
United Kingdom	0.2	1.4	-0.1	0.4 - 1.0	-0.4 - -1.0
United States	1.1	1.9	2.9	0.6 - 1.4	0.4 - 1.2
Total (PPP weighted average)	0.5	1.4	1.3	0.4 - 1.3	0.1 - 0.3

Source: IMF staff estimates.

1/ The figures in this table reflect the budgetary cost of the stimulus measures in each year. They are based on packages announced through late January. The figures do not include (i) "below-the-line" operations that do not have an impact on the fiscal balance, (ii) measures that were already planned for; or (iii) banking-sector support measures. Some figures represent staff's preliminary analysis.

2/ For 2010, "n.a." is used for countries for which no information is available on the size of their fiscal packages. For the purposes of calculating the growth impact and the weighted average totals, "n.a." is treated as equivalent to zero.

3/ The calculations assume that "baseline" GDP already includes fiscal stimulus for 2008. This implies that the growth impact is calculated from the full amount of the 2009 stimulus (rather than the change in the stimulus between 2008 and 2009). For 2010, the growth impact is calculated from the change in the stimulus between 2009 and 2010. It is assumed that the growth impact of infrastructure expenditure occurs with a lag, such that half of the growth impact occurs in the year of the stimulus package and half in the following year.

4/ With EMBI spreads at about 1500bps, the growth impact in Argentina is likely to be much smaller.

5/ Fiscal year basis.

6/ No official stimulus package has been announced. Figure shown is an estimate of the discretionary fiscal impulse, based on Fund staff calculations.

- Many countries have announced plans to protect liquidity-constrained or vulnerable groups, including by strengthening unemployment benefits (Canada, Russia, the United Kingdom, and the United States), cash transfers, including to the poor, (Canada, Korea, Japan), or support to children (Australia, Germany) or pensioners (Australia, Canada); or by extending concessional loans to low-income citizens (Saudi Arabia).

- A few G-20 countries are also stepping up support for small- and medium-sized enterprises (Korea) and strategic or vulnerable sectors, such as construction (Canada and Germany), defense and agriculture (Russia).

- Finally, a few countries are using stimulus measures to address longer-term policy challenges, such as improving the quality of health and education (Australia, China, and Saudi Arabia) or introducing incentives for development of environmentally-friendly technologies (Canada, China, Germany, and the United Kingdom).

25. **Assessing the likely impact of the discretionary fiscal stimulus on activity is difficult**. Researchers have used many different econometric models and specifications in an attempt to estimate multipliers, arriving at a wide range of outcomes. The wide range of results reflects a variety of empirical problems, most notably the difficulty of distinguishing passive changes in taxes, transfers, and spending from those that represent a true discretionary adjustment in fiscal policy. Multipliers also depend on country circumstances, including type of instruments used, trade openness, constraints on borrowing, the response of monetary policy, and long-term sustainability.[6]

26. **Keeping in mind these difficulties, broad estimates of the likely effectiveness of the various fiscal packages being implemented by G-20 countries have been derived**. These are based on fiscal multipliers used by IMF country teams and model-based empirical research on multipliers for the various components of countries' fiscal packages (revenue measures, infrastructure spending, and other spending). Infrastructure spending is expected to have the largest impact on growth, although it also has the longest implementation lags, while tax cuts are likely to have a more modest growth impact—particularly if they are not targeted to credit constrained consumers. Because of the wide dispersion of multiplier estimates used by both country teams and in the literature, the exercise uses a range for the multiplier for each instrument, with a lower and an upper bound. In current circumstances, there are reasons to believe that the multiplier would be closer to the upper level—the financial turmoil is likely to raise the share of credit-constrained households, while the limits on monetary policy effectiveness imply that monetary policy would tend to accommodate rather than seek to offset the boost to demand from fiscal stimulus. In the exercise, the same multipliers are used across G-20 advanced and emerging economies. This was done in part to allow for comparison across countries and in part because of the lack of empirical evidence supporting different multipliers in different country groups.[7] Finally, it is assumed that the growth

Fiscal Multipliers

	Lower Bound	Upper Bound
Tax cuts	0.3	0.6
Infrastructure Investment	0.5	1.8
Other 1/	0.3	1.0

1/ Includes additional spending on safety nets, transfers to state and local governements, assistance to small and medium enterprises, and support for housing markets.

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[6] See IMF, 2008, *World Economic Outlook*, Chapter 5 and Spilimbergo et al., 2008, "Fiscal Policy for the Crisis" for evidence on the size of fiscal multipliers and their variability across different country circumstances.

[7] Multipliers for emerging economies could, in principle, be either higher or lower than those in advanced economies. For instance, consumers may be more credit constrained in emerging economies, suggesting that tax cuts or transfers could be spent at a higher rate than in advanced economies. Similarly, infrastructure bottlenecks are likely to be more pervasive, suggesting that spending in this area could result in greater gains to growth. At the same time, in emerging economies where there is less confidence in medium-term sustainability, fiscal stimulus may lead to an increase in real interest rates as market participants demand a higher interest rate risk premium. This reduces output multipliers, especially for revenue-based measures.

impact of infrastructure expenditure occurs with a lag, such that half of the impact occurs in the year of the stimulus package and half in the following year.

27. **Based on these assumptions, the fiscal stimulus currently planned is expected to have a considerable impact on G-20 growth in 2009—on the order of ½ - 1¼ percentage points**. The effects on advanced and emerging economies would be broadly similar. Among the advanced economies, the growth impact is expected to be highest in Canada, Germany, Japan, Korea, and the United States. Among the emerging economies, China, Russia, and South Africa are expected to receive the most significant boost to growth. In 2010, under current information regarding the size of fiscal packages, the growth effect would be minimal, but would obviously increase should countries adopt additional measures.

28. **The operation of automatic stabilizers is also helping to bolster demand by lowering the tax burden and increasing public spending, thereby contributing to a deterioration of countries' fiscal accounts**. Looking across G-20 countries, there is considerable variability on the strength of automatic stabilizers both within the advanced economies and between advanced and emerging economies— the projected impact in 2009 ranges from around 2 percent of GDP for France, Korea, and the United Kingdom to 1½ percent for the United States, down to ¼-½ percent for several emerging economies, including Brazil, China, India, Indonesia, and South Africa.[8] The impact of the automatic stabilizers on countries' fiscal account appears to have been small so far, but it is increasing rapidly with the weakening of economic conditions. For 2008, automatic stabilizers led to a worsening of G-20 countries' fiscal accounts by less than ¼ percent of GDP, on average. A larger deterioration, of 1¼ percent of GDP, is projected for the G-20 countries as a group in 2009, as the output gap widens.

G-20 Countries: Estimated Size of Automatic Stabilizers, 2008-09 1/
(In percent of GDP, relative to previous year)

	2008	2009
Argentina	0.2	-0.8
Australia	-0.4	-1.3
Brazil	0.1	-0.5
Canada	-0.8	-1.4
China	-0.1	-0.6
France	-0.6	-1.9
Germany	0.2	-1.7
India	-0.1	-0.5
Indonesia	0.2	-0.3
Italy	-0.6	-1.4
Japan	-0.6	-1.4
Korea	-0.2	-2.0
Mexico	-0.3	-0.8
Russia	0.5	-1.4
Saudi Arabia	0.5	-0.9
South Africa	-0.1	-0.6
Spain	-0.7	-1.8
Turkey	-0.9	-0.8
United Kingdom	-0.7	-2.0
United States	-0.4	-1.5
Total (PPP weighted average)	-0.3	-1.2

Source: IMF staff estimates.
1/ Change in the cyclical (fiscal) balance between two consecutive years.

[8] The impact on fiscal balances from automatic stabilizers was computed as the change in the cyclical (fiscal) balance between two consecutive years. For details on the methodology, see Chapter 5 of IMF (forthcoming), "Companion Paper—The State of Public Finances: Outlook and Medium-Term Policies After the 2008 Crisis".

29. **Lower tax revenues owing to specific features of the recent downturn have also adversely affected fiscal balances**. These non-discretionary effects include plunging asset and commodity prices as well as lower financial sector profits. For instance, the sharp decline in equity prices has reduced tax revenues through lower capital gains and consumptions taxes and a fall in profit tax revenues from firms with trading activity. Similarly, housing market corrections underway in many G-20 countries are reducing tax burdens and fiscal revenues, although the fall in cyclically-adjusted revenues arising from house price declines would be relatively modest. Likewise, falling financial sector profits would lower corporate tax burdens and fiscal revenues. Finally, the decline in commodity prices could have a sizeable impact on commodity exporters, most notably Brazil, Russia, and Saudi Arabia. Taken together, these effects had a limited impact in 2008, but could imply an estimated 1¼ percent of GDP rise in the fiscal deficits of G-20 countries, on average, in 2009.

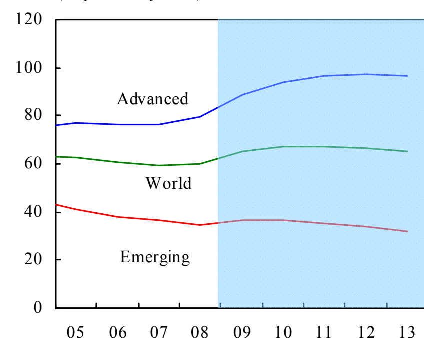
G-20 Countries: Estimated Change in Fiscal Balance from Non-Discretionary Fiscal Stimulus 1/
(In percent of GDP)

	2008	2009
Other non-discretionary factors	0.2	-1.3
Equity prices	-0.2	-0.4
House prices	0.1	-0.1
Financial sector	-0.1	-0.1
Commodity prices	0.3	-0.7

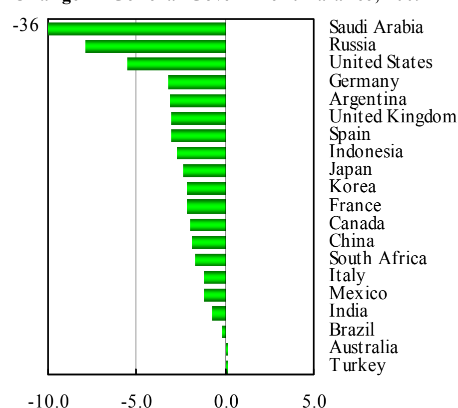
Source: IMF staff estimates.
1/ PPP GDP-weighted average for G-20 countries.

30. **Government debt is also being boosted by extraordinary support to troubled financial institutions and markets in advanced economies, and to a lesser extent in emerging economies.** Many governments, particularly in advanced economies, have injected capital into systemically important banks, provided direct loans to financial institutions, and, in some cases, purchased illiquid assets. Such support is critical to restoring the health of the financial sector, and greater recourse to recapitalization of banks using public balance sheets may become necessary in the period ahead. Such operations typically entail an upfront rise in gross public debt, but do not necessarily imply an immediate change in government net worth and the fiscal deficit given the related acquisition of assets. Over time, however, the fiscal impact will depend critically on the recovery value of the acquired assets. Other forms of financial support, most notably liquidity provision by central banks and the extension of government deposit and interbank guarantees, do not require upfront Treasury financing, but could eventually entail fiscal costs. To date, for G-20 advanced economies, the upfront cost of this financial support—excluding central bank liquidity provision and guarantees—amounts to 5 percent of GDP, while for G-20 emerging economies, it totals ¼ percent of GDP.

General Government Debt
(In percent of GDP)



Change in General Government Balance, 2009



31. **The combination of discretionary fiscal stimulus, automatic stabilizers, impact of non-discretionary effects and direct balance sheet support to financial institutions will lead to a sizeable worsening of G-20 countries' fiscal positions in the**

short run. Based on measures already taken and current plans, it is estimated that government debt ratios and fiscal deficits, particularly in advanced economies, will increase significantly. For the G-20 as a whole, the general government balance is expected to deteriorate by 3½ percent of GDP, on average, in 2009. While the fiscal cost for some countries will be large in the short-run, the alternative of providing no fiscal stimulus or financial sector support would be extremely costly in terms of the lost output.

III. Policies Going Forward

While policymakers across advanced and emerging economies have adopted extraordinary policy measures, further policy actions are needed to resolve the crisis and establish a durable turnaround in global activity. Policy must act urgently on two fronts, to restore financial sectors to health and to support demand. Restoring financial health will require dealing aggressively with distressed assets and the recapitalization of banks. Limiting the fall in demand will require using the full range of macroeconomic policies. Immediate, short-run policies and actions taken need to be consistent with the long-run vision for the structure of a viable financial system and with medium-term fiscal sustainability.

A. Financial sector policies

32. **Comprehensive approaches are needed to deal with distressed assets on bank balance sheets to repair the erosion of market trust and prevent "fire sale" liquidations**. Various approaches may be used, tailored to individual institution and country circumstances, but transparency concerning the valuation of distressed assets and putting a limit on losses would be critical. To help mitigate uncertainty, this would require inspecting distressed assets rigorously and valuing them conservatively. One approach that would allow the expertise within existing bank management to deal with asset recovery could involve ring-fencing distressed assets on balance sheets using explicit government guarantees. A related approach would also leave distressed assets on bank balance sheets, but new capital injections would cover the losses. Alternatively, the distressed assets could be transferred to a new "bad bank". This approach would ensure maximum transparency and greatly reduce uncertainty, although it will likely entail high upfront fiscal costs. It is also is a tried and tested approach that has yielded generally favorable outcomes in the context of previous banking crises, and may be best suited to address problems in the current context.

33. **Recapitalization of viable financial institutions should proceed swiftly and on a large scale**. Policymakers are making progress in implementing their recapitalization plans, but markets remain unconvinced of the adequacy of bank capital, because of which credit intermediation remains impaired. The size and scope of the plans will need to be expanded in tandem with efforts aimed at resolving distressed assets. Most critically, recapitalization must be of a sufficient size to decisively address solvency concerns, especially by ensuring that it is resilient to further deterioration in bank balance sheets as a result of the worsening macroeconomic environment. It should also proceed on a clear differentiation between viable and non-viable institutions to enable greater consolidation in the financial sector. Along these lines, authorities should show readiness to intervene and resolve banks that have lost the confidence of markets. Like other shareholders, governments should protect their ownership through financial and corporate governance safeguards, including through the suspension of

dividends and share repurchases. Moral hazard should be minimized, including through limits on executive compensation and bonuses. Where shareholder equity has been wiped out, institutions may need to be temporarily nationalized, but this should be for a limited period until a longer term private solution is found.

34. **Further measures are needed to stabilize the housing sector.** Public resources can limit avoidable foreclosures and defaults and reduce risks of an over-shooting of house prices. In the United States, initiatives to promote loan modifications, backstopped by a guarantee from the Federal Housing Administration (FHA), have not yet been very effective in addressing rising foreclosures. These programs need to be made less restrictive in scope, while providing greater incentives for lender participation through a modification of the bankruptcy system to allow courts to write down mortgage principal.

35. **Central bank liquidity support should continue to be provided generously.** Resolving the issue of distressed assets and recapitalizing the banks should eventually help alleviate liquidity pressures in advanced economies. In the mean time, central banks should continue to provide liquidity support, including by accepting a wide range of collateral and extending maturities to bridge the period until bank funding conditions normalize.

36. **The need to ensure adequate provision of liquidity applies equally to emerging economies, to reduce risks that sudden stops in foreign capital could generate solvency problems.** Since the intensification of the crisis in September, several emerging economies have provided extraordinary liquidity support to financial systems. Countries with large reserve buffers have room to provide foreign currency liquidity as needed to prevent shortages from affecting firms' ability to operate. Major central banks should continue to provide liquidity support to emerging economies with sound fundamentals, including through swap facilities and lines of credit for purposes of trade financing.

37. **Emerging economies need to prepare contingency plans for limiting risks of banks runs, comprehensive mechanisms to reduce the risk of systemic solvency problems, and strengthen corporate work-out frameworks.**

- Countries should assess their preparedness for dealing with possible bank runs, including whether existing mechanisms (such as deposit insurance schemes) are sufficient or if they need to be bolstered. Countries with sound fiscal positions may also wish to consider putting in place (or extending) guarantees of various forms of bank liabilities. Similarly, contingency mechanisms need to be considered to deal with the possible risk of systemic banking problems, including a recapitalization using public resources.

- Corporations in many emerging economies are under pressure from financial strains and risks of default have risen sharply. Legal frameworks for corporate insolvencies may need to be put in place or modified to promote efficient and predictable resolution of mounting debt problems in the corporate sector. Market-based bankruptcy frameworks—such as the Chapter 11 procedures in the United States—are best practice, and help to avoid unnecessary liquidations and the associated economic costs and could be introduced in countries where such frameworks do not

yet exist. Consideration could also be given to the creation of a standardized out-of-court workout framework—similar to those successfully used during the Asian crisis to help restructure a highly leveraged corporate sector.

B. Macroeconomic policies

Until confidence returns and the deleveraging process has run its course, there is little alternative but to use macroeconomic policies to support demand to avoid a deep and prolonged global recession.

38. **Conventional monetary policy may be reaching its limits in advanced economies.** Declining headline inflation and rapidly cooling activity have allowed aggressive monetary easing in most advanced economies. While some central banks, notably the ECB, have some room for further cuts, others—especially the U.S. Fed and the Bank of Japan—have already cut policy rates to very low levels. Indeed, deflation risks have become a concern in some advanced economies, where real interest rates are rising as policy rates approach the zero bound and inflation falls.

39. **With policy rates approaching the zero bound in major advanced economies, central banks, notably the Fed, will need to explore alternative policy approaches with a focus on intervention to unlock key credit markets**. Drawing lessons from the Bank of Japan's experience with quantitative easing, centrals banks should focus more directly on credit market operations rather than purchases of government debt. In the case of Japan, the BoJ focused primarily on increasing bank reserves through purchases of government debt, which helped to maintain financial stability, but had a limited stimulative effect on economic activity on account of the undercapitalized banking system.

- This could involve several options; (i) purchases of long-term treasuries, involving minimal risk to the balance sheet. Such action would, however, likely have limited impact, as the extent of pass-through from treasury yields to riskier yields may be minimal; (ii) greater purchases of agency debt and mortgage-backed securities would help to drive down further spreads on these instruments, and help a turnaround in the housing markets; (iii) with private debt markets severely dislocated, purchases of private (non-guaranteed) debt or the provision of direct loans to individuals, corporations and partnerships, would alleviate serious credit constraints and significantly lower spreads and boost liquidity. It would, however, expose the Fed to significant credit risk, and would thus require protection from the public balance sheet.

- The use of unconventional monetary policy tools will need to be accompanied by a clear communication of the objectives and criteria of success of interventions. That said, even with such actions, the effectiveness of monetary policy could be curtailed if financial conditions remain disrupted and uncertainty remains high.

40. **With constraints on the effectiveness of monetary policy, fiscal policy must play a central role in supporting demand, while remaining consistent with medium-term**

sustainability. A total stimulus of around 2 percent of global GDP in 2009—along with a firm commitment to do more if the situation deteriorated further—would seem commensurate with the depth of the downturn and risks of even worse outcomes than foreseen in the baseline. A key feature of a fiscal stimulus program is that it should support demand for a prolonged period of time, implying that additional measures are likely to be required for 2010 unless the global economy is clearly regaining momentum. Moreover, in order to increase the effectiveness of fiscal expansion and minimize cross-border leakages, policy efforts should apply broadly across those advanced economies and emerging economies where disciplined policies in the past and low current debt provide sufficient policy space.

41. **Spending measures are likely to be most effective.** The key is to ensure that initiatives provide a boost to activity over the relevant time frame, while seeking lasting benefits to productive capacity. Recessions in several advanced economies are expected to last longer than in most previous instances, justifying greater public investment in projects that typically have long lags but bring substantial longer-term benefits. Moreover, in several countries, fiscal rules for sub-national governments, or balanced budget constraints more generally, force these governments to suspend various spending programs, or to raise taxes. Against this background, attention should be paid to alleviate the pro-cyclicality of rules constraining sub-national entities, including through transfers from the central government.

42. **Policymakers need to be mindful of the importance of maintaining confidence in medium-term fiscal sustainability**. Stimulus measures must be accompanied by credible steps to strengthen medium-term fiscal prospects. Fiscal packages should rely on temporary measures and policies should be formulated within credible medium-term fiscal frameworks. These frameworks should entail gradual fiscal corrections as conditions improve. Countries facing forthcoming demographic challenges—particularly faster aging—should have a clear plan for reform of health and pension entitlements.

43. **The balance of macroeconomic policy response varies across the advanced economies.** In the United States, in addition to steps aimed at unlocking credit markets, fiscal easing is needed to support economic activity and limit risks of deflation. Stimulus should *inter alia* include direct support for the housing sector, steps to improving public infrastructure, including operation and maintenance, and boosting transfers to state and local governments to avoid pro-cyclical cut backs. In Western Europe, there is scope for further rate cuts, as well as room for coordinated discretionary fiscal expansion as envisaged by the common approach and commonly agreed principles adopted by the European Union. This approach fully exploits the flexibility allowed under the revised Stability and Growth Pact while maintaining its integrity, with the size and nature of the fiscal stimulus adapted to individual country circumstances. In Japan, monetary policy should continue to explore options to support credit markets, while keeping rates accommodative given that the economy has weakened and that underlying prices pressures are well contained. Discretionary stimulus should target short-term measures that maximize support to domestic demand.

44. **Emerging economies should use policy buffers to smooth the impact of interruptions or reversals in capital flows, but also recognize that some of the capital**

outflows that they are experiencing may be permanent, given global deleveraging and consolidation in the financial sector. For countries with flexible exchange rate regimes, the exchange rate should be allowed to absorb much of the pressures. Some countries may need to increase the flexibility of their exchange rate regime, while ensuring the maintenance of a credible anchor for monetary policy. Moreover, large stocks of international reserves accumulated by many countries in recent years should provide room for intervention to avoid disorderly market conditions, but should not resist sustained pressure on exchange rates.

45. **Macroeconomic policy support can help to boost internal momentum, but priorities vary considerably across emerging economies, and again adjustment will be needed to new long-term realities**. In several countries, second-round effects on inflation have been limited and inflation expectations remain well anchored, justifying a shift to rapid monetary easing. However, countries with pegged regimes may have little scope for interest rate cuts to the extent that the crisis has put sustained pressure on their exchange rates. And for countries facing crisis conditions, policy tightening may be required, particularly in the absence of large reserve buffers. On the fiscal front, priorities vary considerably across emerging economies. Many, but not all, emerging economies have some room for countercyclical fiscal support. However, a tighter global financing environment could limit the scope for, and increase the costs of such stimulus. Countries with relatively sound macroeconomic fundamentals, but faced with deteriorating economic prospects, have greater scope than in the past to let automatic stabilizers work and even to use discretionary measures to support demand. In countries facing crisis conditions or significant external funding constraints, however, fiscal policy may need to be tightened alongside monetary policy as revenues decline and lack of external funding constrains fiscal spending.