



Group of Twenty

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**Global Economy Beyond the Crisis—
Challenges Over the Medium Term**

Prepared by Staff of the International Monetary Fund

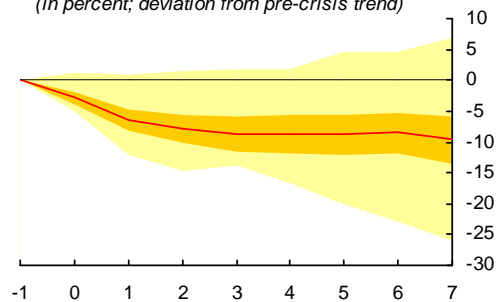
A fundamental challenge in the aftermath of the crisis will be to sustain solid global growth given the damage caused by the crisis to productive potential and balance sheets. In this setting, structural reforms take on renewed importance and rising structural unemployment will need to be addressed. Financial deleveraging is likely to weigh on credit creation for some time, and the financial system’s capacity for efficient intermediation and innovation will need to be restored to support growth, while safeguarding financial stability. From the demand side, the global economy faces a difficult rebalancing act—shifting the sources of growth from public to private sector demand, and from internal to external demand in external deficit countries affected by pronounced credit and housing cycles, matched by counterpart adjustments in surplus countries that have been heavily reliant on export-led growth.

I. POTENTIAL OUTPUT AFTER THE CRISIS AND POLICY CHALLENGES

1. **The financial crisis has hurt medium-term growth prospects through both supply- and demand-side effects.** From the supply side, the crisis is likely to have damaged potential output through several channels: declines in capital formation, substantial and protracted increases in unemployment, and disruptions to the financial system. Impaired financial intermediation and innovation will challenge the global economy’s capacity for growth for several years. The output effects are likely to be most severe in those G-20 economies directly hit by banking crises.

- *Experience for both advanced and emerging economies over the last 40 years indicates that output losses in the aftermath of banking crises are both sustained and significant. As shown in the chart, GDP per capita 7 years after the start of the crisis tends to be about 10 percent lower (on average) compared to pre-crisis trends.¹*
- *Protracted declines in capital accumulation, employment rates, and productivity levels all contribute, in broadly equal proportions, to the enduring loss of output. The fall in productivity may partly reflect the financial system’s diminished ability to allocate loanable funds following a crisis, as well as accelerated obsolescence of capital in most affected sectors (e.g., financial and housing industries).*

Output Losses After Banking Crises
(in percent; deviation from pre-crisis trend)



Source: IMF staff estimates.

Figure reports mean difference from pre-crisis trend (over t-10 to t-3); t-1 normalized to 0; crisis begins at t=0. Shading indicates 90% confidence interval for the mean (orange) and inter-quartile range (yellow).

¹ For detailed analysis, see Chapter 4 of the *World Economic Outlook* (October 2009).

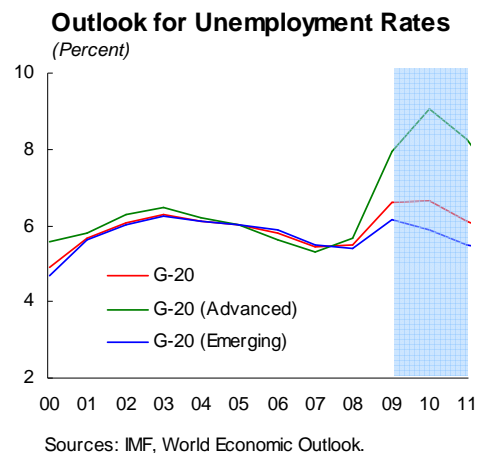
- *Typically, growth eventually recovers, but there is substantial variation in post-crisis output performance.* The appreciable diversity of past outcomes can be seen by the inter-quartile range in the chart—reflecting various country factors, including policy responses.

2. **Macroeconomic policy support can help limit the damage to activity.** Historical evidence suggests that supportive and timely macroeconomic policies to limit the initial depth of the downturn reduces the extent of medium term output losses.

3. **Effective structural reforms to enhance the flexibility of factor markets and successful repair of the financial system are integral steps to mitigate the loss of output.** Past experience suggests that reform measures that facilitate resource reallocation, including the capacity to reabsorb displaced labor, tend to mitigate the large disruptive effects of crises on economic activity. In terms of the financial sector, measures to fix impaired intermediation and strained balance sheets that typically accompany crises help mitigate losses to productivity and, thus, potential output.

4. **Learning from this experience, structural reforms in product and labor markets would help address the substantial supply-side damage caused by the current crisis.** Many of the same challenges from past episodes now confront policy makers in the context of a crisis with truly global reach.

- *Labor market reforms have taken on renewed importance after the crisis.* Significant excess capacity, mounting job losses, and a sluggish economic recovery raise the risk of longer unemployment spells (and decaying work skills). There is an increased need to shift labor across sectors. In these circumstances, impediments to labor market flexibility could translate into persistently high unemployment.
- *Redeployment of displaced workers would be facilitated by greater labor mobility from ailing sectors hit hard by the crisis to healthier sectors.* Prior to the crisis, Europe's reform agenda met with some success in lowering high unemployment, including through active labor market policies (ALMPs) that helped improve labor market functioning and fostered wage moderation. As a complement to more comprehensive institutional reform, cost-effective ALMPs targeting job search, matching, and training programs would be particularly helpful in current circumstances. Additionally, policymakers will need to ensure that unemployment benefits are generous but short in duration to provide strong incentives for job search and re-entering the workforce.
- *Product market reforms—particularly in services—could open new employment opportunities and boost productivity.* Often supportive of labor market reforms, efforts to strengthen competition policies in more insular sectors can be useful approaches to



strengthen productivity. Liberalization in services could be particularly beneficial as these sectors tend to be less open and often have lackluster productivity growth. An ambitious conclusion to the Doha round would also provide a timely boost to global trade and confidence, reassuring markets that backsliding toward more protectionist measures would be avoided.

II. REMAKING THE FINANCIAL SYSTEM

5. **The future functioning of the financial system will be a key determinant of global growth prospects.** A healthy and dynamic financial system is crucial for efficient intermediation and innovation, which contributes to economic growth by channeling credit to high-return investment activities around the globe. New regulations and reforms will need to strike the right balance between rebuilding key financial markets in support of growth, while effectively safeguarding against future threats to financial stability.

6. **Policymakers face substantial reform challenges to effectively reduce the risk of future systemic crises detrimental to growth and prosperity.** The crisis has exposed major fault lines in the financial system in terms of private incentives and risk management, as well as in financial regulations and prudential oversight. Plans are being developed to address deep flaws that led to a build-up of systemic risk, but a growing sense that the most severe crisis dangers are past could undermine support for a major overhaul. Four key areas where policy progress or architectural reforms are needed include:

- *First, the perimeter of regulation needs to be broadened and made more flexible, covering all systemically important institutions.* The limited perimeter gave incentives for banks to create off-balance sheet entities to avoid some prudential rules and increase leverage. Regulatory arbitrage allowed credit risk to be transferred to financial institutions that faced different regulatory requirements than banks. In both cases, the regulatory system failed to detect or manage increasing systemic risk.
- *Second, prudential frameworks must play a greater stabilizing role over the business cycle.* Once the crisis started, mark-to-market rules and static regulatory capital ratios forced financial institutions to quickly reduce the size of their balance sheets, exacerbating fire sales and deleveraging. By contrast, during boom times these forces worked in the opposite direction. An element of procyclicality would be addressed through establishing minimum capital requirements according to stress-test scenarios and an overall leverage ratio. Other proposals include countercyclical capital charges or allowing regulators to alter capital requirements (or other regulatory requirements) over the cycle, just as central banks adjust interest rates, although determining when capital buffers need to be raised or reduced would be a formidable policy challenge.
- *Third, better mechanisms are needed to deal with institutions that are “too big or too connected to fail.”* Proposals have been made to require such institutions to develop resolution plans and to hold supplemental capital to compensate for their larger

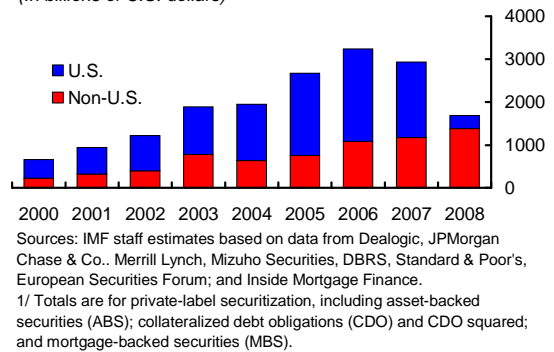
contribution to systemic risk, but these proposals face significant operational challenges. So far, the “too big or too connected to fail” problem has been aggravated rather than remedied, as governments have supported sales of distressed banks to large rivals. Proposals worth considering further include giving authorities the power to impose losses on senior creditors; separating commercial from investment banking; and applying enhanced competition policy to manage firm size.

- *Fourth, international coordination should be strengthened and financial protectionism avoided.* This will require greater supervisory and regulatory cooperation and convergence. Robust arrangements (including consistent bank-specific resolution frameworks at national levels) will be needed to resolve cross-border institutions and counter incentives for beggar-thy-neighbor approaches. Progress is being made on convergence under the auspices of the FSB. However, advancing reforms on cross-border bank resolution still faces major political hurdles, even within the European Union, where these issues are well-known and have been debated for some time.

7. **Rebuilding key financial markets—notably, securitization—on a sounder footing would strengthen growth prospects.**

It will be important to repair key market structures, remedying weaknesses exposed by the crisis, to support intermediation and innovation while limiting the future risks to stability. Notably, securitization needs to be rebuilt to deliver on its promise to transfer and disperse credit risks from the banking system to capital markets. This would enhance the lending capacity of the financial system for a given amount of capital, alleviating pressures from bank deleveraging. However, securitization markets remain essentially closed or heavily dependent on public support (e.g., U.S. and euro area central bank facilities or operations) due to fundamental flaws that have undermined market trust and confidence. To repair the incentive and information problems that led to the collapse of securitization markets, reforms should seek to improve accounting standards and strengthen disclosure all along the chain of intermediation, encourage simplification and standardization of products, improve resolutions mechanisms after default, and realign incentives for issuers and rating agencies. Policies are generally moving in the right direction, including to require more “skin in the game” from issuers, but proposals will need to be carefully calibrated to avoid stifling market activity.²

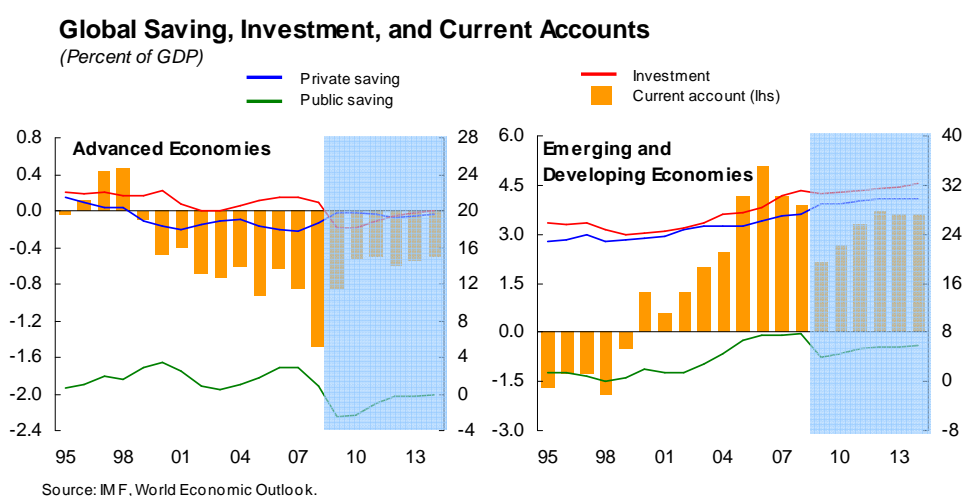
Global Securitization Issuances 1/
(In billions of U.S. dollars)



² For detailed analysis, see Chapter 2 of the *Global Financial Stability Report* (October 2009).

III. BALANCE SHEET ADJUSTMENT FOLLOWING THE CRISIS

8. **Balance sheet repair will weigh on global demand prospects long after the crisis.** Large financial losses and capital shortfalls in banks, reduced wealth and high indebtedness in households, alongside ballooning deficits in the public sector in several G-20 economies will all require a lengthy period of substantial balance sheet adjustment—particularly in countries with large public and external deficits and affected by large credit and housing booms and busts. Repair in public and private sector balance sheets will imply shifts in the underlying pattern of saving and investment. Specifically, higher saving (net of investment) and smaller current account deficits are likely among many G-20 advanced economies. Similar adjustment patterns are likely in much of emerging Europe, amid tighter external financing conditions.



9. **In the financial sector, the process of deleveraging that is already underway will likely continue for some time, weighing on credit supply and spending.** Notwithstanding better-than-expected bank earnings recently and efforts to raise bank capital, the core balance sheet problems of banks remain—including thin capital bases and troubled assets that lock-up part of bank portfolios. Banks also remain exposed to further deterioration of asset quality during what is likely to be a sluggish recovery.

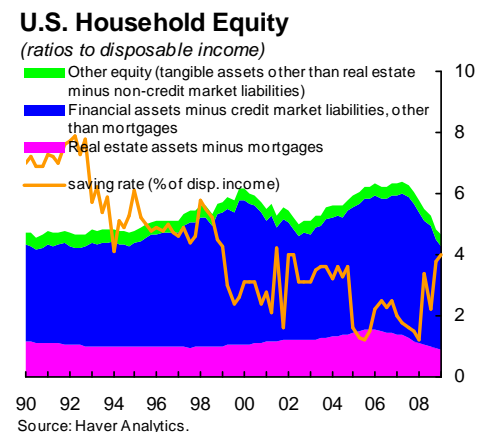
- Staff simulations suggest that deleveraging of bank balance sheets will likely continue to restrain credit provision in G-20 advanced economies for some years, weighing on domestic spending going forward.
- Many G-20 emerging economies with large external deficits face continued tight external financing conditions (especially, cross-border banking flows) and continued pressure on rollovers of maturing corporate debt and on new household borrowing.

10. **As the recovery takes hold, public sector accounts will need to be consolidated significantly to achieve fiscal sustainability, restraining public demand.** Following

exceptional public actions taken to stabilize the financial system and to support aggregate demand, substantial efforts will be needed to reverse the deterioration of budgetary positions and place public debt onto sustainable trajectories, particularly in the many economies with high public debt.³ For high-debt advanced economies in the G-20, an improvement in the primary fiscal balance by 5½ percentage points of GDP is needed to reduce debt ratios after 2014, substantially larger fiscal adjustment than for emerging economies or low-debt advanced economies.⁴ The amount of adjustment needed would be even larger if growth is weaker over the medium term. High debt countries would be especially vulnerable to deterioration in market confidence and potentially higher interest rates that could raise public borrowing costs, dampen investment, and reinforce the negative impact of the crisis on productivity. Reform measures to contain pension and health care costs (especially, entitlement reform) will be essential to place public finances on a sound footing without a very heavy tax burden that could adversely affect future growth.

11. Overextended household balance sheets will also need to be strengthened, implying higher private saving. In the United States, steep losses in both financial and housing wealth—exceeding the decline seen during the 2001-02 downturn when housing wealth was rising—will weigh on consumer demand.

Moreover, lower collateral values and tighter credit standards will reduce access to credit. Also, U.S. household (mainly, mortgage) debt remains at historic highs in percent of disposable income, against the background of weaker growth prospects and rising unemployment. This indicates that the recent sharp recovery in U.S. household saving rates will need to be sustained or even extended. Staff projections, envisage U.S. personal saving rates rising to 8 percent of disposable income over 2011 to 2014 (compared to 2 percent on average from 2004 to 2007). Other advanced economies—e.g., the United Kingdom, Ireland, and Spain—and some



³ For a detailed discussion of exit strategies and fiscal adjustment, see staff surveillance note on *Global Economic Prospects and Policy Challenges*, August [28], 2009

⁴ Lower debt countries are assumed to be (i) advanced economies whose debt-to-GDP ratios are projected below 60 percent in 2014, and (ii) emerging market countries whose debt-to-GDP ratios are projected below 40 percent. The required adjustments are based on a stabilization or reduction of the debt-to-GDP ratio from 2014 onward—stabilization for lower debt countries and for the higher debt countries, reduction of the debt ratio to 60 percent for advanced countries (halve for Japan) and to 40 percent for emerging market economies) in 2029. The analysis is illustrative and makes some simplifying assumptions: in particular, beyond 2014, an interest rate–growth rate differential of 1 percent is assumed, regardless of country-specific circumstances; moreover, the projections are "passive" scenarios based on constant policies.

emerging economies (especially in Europe) will also need to see significant consolidation of household finances in the wake of significant housing and credit booms and busts.

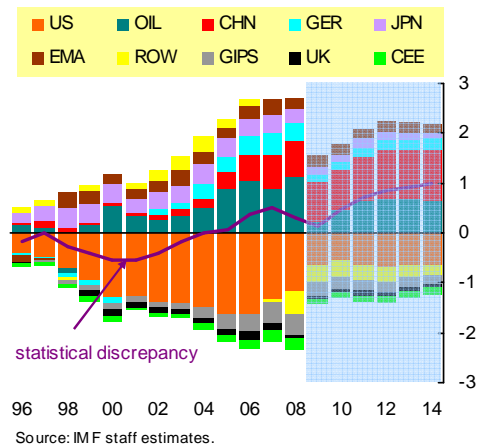
12. **Corporate saving may also rise as businesses look to shore up balance sheets.** In a more uncertain credit environment, non-financial corporates may rely on retained earnings to help finance investment. With excess capacity in production and an overhang of unsold homes, investment is likely to remain subdued in many economies.

IV. GLOBAL REBALANCING AND POLICY CHALLENGES

13. **To sustain solid global growth, higher saving in many advanced and some emerging economies will need to be accompanied by a rebalancing in the sources of global demand.** Namely, given weaker growth prospects in advanced trading partners directly hit by the financial crisis, emerging economies (notably, in Asia) would have to become less reliant on export-led growth and more reliant on domestic demand. On the supply side, advanced economies such as Japan and Germany, as well as oil exporters, could also support rebalancing through desirable reforms or policies that strengthen growth prospects from domestic sources.

14. **Global imbalances have narrowed sharply after the crisis, reflecting some painful corrections** (see chart). The U.S. current account deficit has narrowed quickly, as household saving rates have jumped. Also, current account deficits in advanced (Greece, Ireland, Portugal, Spain (GIPS), and the United Kingdom) and emerging Europe (CEE) have narrowed sharply, as credit and housing booms have turned to busts. Together with the United States, these economies account for the bulk of the world's current account deficits. Germany and Japan's external surpluses have noticeably narrowed, alongside falling exports and manufacturing; while surpluses have diminished for oil exporters, as the value of oil revenues has dropped sharply. Emerging Asia (EMA)—notably, China—has seen less adjustment in its external positions.

Global Imbalances
(Percent of World GDP)



15. **However, imbalances—based on current policy trajectories—are projected to widen again in the WEO baseline, signaling the need for further underlying adjustment.**⁵ The recovery of oil prices is expected to boost saving and current account

⁵ The global current account discrepancy is projected to rise over time (see chart), possibly reflecting some excessive optimism over exports in country forecasts, although some increase in the discrepancy can be justified by past trends.

surpluses of oil exporters, while lowering those of importers. The turnaround in the global manufacturing cycle is expected to have similar implications for external surpluses in Germany and to a lesser extent Japan (because of the recent appreciation of the yen). Little external adjustment is projected for the economies of emerging Asia, including China.

16. **Absent further policy adjustment, limited realignment in the sources of global demand is likely to constrain growth prospects.** In the WEO baseline projections, global growth averages 4 percent over 2011-2014 compared to 5 percent over 2005-2008, but part of this growth is catch-up and underlying growth potential is even weaker. Moreover, the recovery could be even less robust if progress to facilitate rebalancing is even more limited (see discussion of a downside scenario below).

17. **Successful rebalancing to sustain solid growth will require more forceful policy action in a broad range of external deficit and surplus countries.** Rapid progress toward fixing the financial system is essential to support productivity and growth in advanced economies. Given weaker growth prospects in key trading partners, emerging Asia (notably, China) should step up structural efforts—such as financial reforms to improve access to credit for smaller enterprises and households—to boost domestic spending, recognizing the strength of household balance sheets. Also, strengthening social safety nets, as well as pension and healthcare systems, are key policy elements to reduce precautionary saving. Public investment spending (concentrated on “green” initiatives and infrastructure spending) in emerging Asia and oil exporters would help meet the need for additional infrastructure.

18. **Supply-side reform measures are also key to successful rebalancing.** Structural reform efforts to boost productivity in the non-tradables sector in key surplus countries could enhance domestic growth prospects, as well as facilitate a shift in demand toward the domestic economy. Among major advanced economies with sizeable external surpluses (notably, Germany and Japan), service sectors have tended to lag in productivity growth compared to their U.S. counterparts—including in retail and distribution. In emerging Asia as well, services have tended to fall behind manufacturing in terms of the progress made toward productivity catch-up.

19. **More flexible exchange rate management in some countries would be a valuable policy complement to demand- and supply-side measures.** Stronger currencies would boost purchasing power, helping expand the opportunity set for domestic consumers in surplus countries and encourage the needed shift in productive resources from tradable to nontradable sectors. As the counterpart, depreciating currencies in major deficit countries would facilitate a needed adjustment away from overstretched domestic demand. To promote this flexibility, strengthened country insurance mechanisms and multilateral liquidity provision could help limit the incentives for self insurance through reserve accumulation that, along with inflexible exchange rates, has been a feature of export-led growth strategies in the past.

20. **Joint implementation of policies in key surplus and deficit countries to advance rebalancing would appreciably strengthen global growth prospects.**⁶ As highlighted in Box 1, in an upside scenario based on strong pursuit of these policy actions, global growth is about 1 percentage point higher on average than the baseline through 2014; and there is gradual movement towards rebalancing, with current account ratios shifting by around one percent of GDP in the U.S. and emerging Asia, and somewhat less elsewhere. Box 1 also shows the impact of unsuccessful or misguided policies in a downside scenario, where rebalancing is limited and growth is lower. With slow progress on key policies (including repair of the financial system) and a drift toward protectionist measures, growth would be 1½ percentage points lower than the central projection over the next three years. The larger losses than gains across scenarios reflect important policy constraints (i.e., zero bound on nominal interest rates) in some regions, especially Japan, but also the United States.

⁶ The main policy requirements for rebalancing are consistent with recommendations and policy plans highlighted in the Multilateral Consultations on Global Imbalances. See IMF Staff Report on the Multilateral Consultation on Global Imbalances with China, the Euro Area, Japan, Saudi Arabia, and the United States; June 29, 2007 (<http://www.imf.org/external/np/pp/2007/eng/062907.pdf>).

BOX 1. GLOBAL REBALANCING AND GROWTH

Multi-region simulation analysis based on the Fund's Global Integrated Monetary and Financial Module (GIMF) highlights the risks to growth from key policy actions that could support smoother rebalancing. Private and public saving play crucial roles in the failure or success of the rebalancing process.

1. Upside Scenario: This scenario assumes successful and well-targeted policies that lead to higher growth and a more sustainable distribution of demand. The major economies succeed in repairing their financial systems and intermediation, thereby increasing productivity. Emerging Asia permits a sustained appreciation of both its real and nominal exchange rates to support domestic demand. Government spending on “green” and infrastructure projects enhances productivity, especially in emerging Asia. The result is an upsurge in consumer confidence that reduces private saving in Japan, emerging Asia and the remaining countries, and to a lesser extent in the euro area. In the United States private saving increases, consistent with durable strengthening of household balance sheets.

Under this scenario, world GDP growth is about 1 percent higher over the medium term on average. There is significant movement towards global current account rebalancing as net debtors' current account deficits improve and net creditors' surpluses decline, with magnitudes equal to about 1 percent of GDP in the United States and emerging Asia, and less elsewhere. One reason is an improvement of fiscal deficits worldwide, and especially in deficit regions. But more important is the reduction in private saving rates in the surplus regions. This emphasizes the critical importance of well designed policies that can support confidence, and thus demand, in regions with traditionally high saving rates, in order to permit a controlled and desirable increase in saving elsewhere that does not imperil the recovery.

2. Downside Scenario: This scenario highlights the risks of unsuccessful or misguided policies leading to lower growth and wider current account imbalances than in the WEO baseline. In particular, delays in repairing ailing financial sectors limits productivity growth. In emerging Asia, policy does not succeed in redirecting demand towards domestic sources. Finally, protectionist policies distort incentives and lower productivity worldwide.

Under this scenario, the global economy fallback into recession, before gradually returning toward baseline growth rates. Growth is sharply lower initially, partly due to confidence effects, and 1¼ percentage points lower, on average, over the medium term (5 years). In some economies, especially Japan, but also the United States, the contraction is exacerbated by monetary policy hitting the zero lower bound on nominal interest rates. The goal of global current account rebalancing is even further from resolution, as emerging Asia's current account moves further into surplus, with the United States and the euro area experiencing current account deteriorations. This is partly due to higher private saving in emerging Asia, combined with lower private saving elsewhere, the latter as a result of the difficulties caused by the financial system and by protectionist measures. But higher fiscal deficits in the euro area and the United States also add to current account deficits.

Global Scenarios

(All variables in levels; x-axis in years)

Thin Solid = Pre-Crisis April 2007 WEO

SOLID = Current Baseline; DASHED = Upside Scenario; DOTTED = Downside Scenario

