



GROUP OF TWENTY

TOWARD LASTING STABILITY AND GROWTH

Umbrella Report for G-20 Mutual Assessment Process



Prepared by Staff of the

INTERNATIONAL MONETARY FUND*

*Does not necessarily reflect the views of the IMF Executive Board.

EXECUTIVE SUMMARY

To attain their growth objectives, G-20 members must effectively manage rising risks, deliver on past commitments, and enact more complete and collective policies.

Specifically, this will require:

- **Effective crisis and risk management to restore stability and to insure against the possibly damaging effects of significant downside risks.** Global growth appears to be weakening and remains susceptible to serious risks. The euro area crisis remains the most immediate threat to financial stability and, thus, global growth (through spillovers). Gains following exceptional policy actions taken in Europe have been eroding. Recent steps toward providing external support to help recapitalize banks in Spain are welcome, but major economic, financial and political challenges remain for the euro area. Furthermore, the risk of excessive fiscal tightening in the United States and in a few advanced economies next year, as well as a possible adverse supply shock from oil markets, cannot be overlooked given the fragility of the recovery. Thus, achieving a durable and prompt exit from the euro area crisis, as well as avoiding the U.S. “fiscal cliff,” is crucial for sustained global recovery.
- **Advancing progress toward members' commitments made at Cannes, as well as further action.** While members have made progress toward their commitments, certain gaps remain in key areas. More attention is required to tackle stubbornly high *unemployment* in the near term in advanced economies, while doing more to ensure the soundness of *public finances* over time—especially in light of longer-term fiscal challenges. To complement steady consolidation in deficit economies, more action is needed in emerging surplus economies to facilitate *demand rebalancing* by addressing domestic distortions. Across a large part of the membership, *financial reforms* need to be implemented steadily and consistently to help lay the foundations for durable growth.

An upside scenario suggests that strengthened collective action by the membership would deliver appreciable mutual benefits towards achieving lasting stability and growth. Complementary and mutually reinforcing action in *all* members would help secure stronger and healthier global growth. The upside scenario shows that tangible benefits for the entire membership in terms of jobs and growth are within reach—global output would be higher by about 2½ percent in five years and global imbalances would be lowered further by ¾ percent of GDP. Cumulative gains would be larger. Collective and comprehensive policy action also helps insure against possible welfare losses associated with downside risks.

I. INTRODUCTION¹

1. **At Cannes, G-20 Leaders committed to the Action Plan for Jobs and Growth—setting the course for the Mutual Assessment Process (MAP) in 2012.** The destination remains the same, anchored by shared objectives of strong, sustainable and balanced growth. Two key guideposts were specified—containing key *risks* and enhancing *accountability* among members with respect to their policy commitments. With weakening global growth and deepening crisis in Europe in 2011, Leaders agreed to strengthen cooperation to address the dangers and bolster the foundations for growth. Moreover, members pledged to “hold ourselves accountable for meeting our commitments to address near-term vulnerabilities and move ahead on reforms... [and] enhance our reporting and monitoring in 2012 and future years, developing a framework to assess progress against our commitments...”

2. **Achieving lasting stability and growth remains the core challenge—requiring complete and collective action among the membership.** Defining features of desirable policies are complementary or mutually reinforcing actions within *and* across G-20 members. For example, financial stability is a requisite for economic growth. Thus, critical short-term imperatives to contain and durably resolve the crisis, as well as managing other key risks, are necessary for laying the foundations for growth over the medium term. Conversely, comprehensive medium-term collective action can provide an essential anchor for policies to secure stability in the near term and shore up confidence in policymakers’ efforts to succeed, as well as promote rebalancing to secure a path with healthier global growth.

3. **This umbrella report provides an integrated assessment of G-20 risks, policies and progress for the MAP along two main dimensions:**

- *Global risks and risk management policies.* Serious short-term risks can jeopardize growth—as evident at the time of the Cannes summit when systemic risks began materializing in Europe. Thus, at this juncture, greater attention to downside risks, their potential costs and spillovers, and policies to insure against them is warranted.
- *Possible policy or progress gaps relative to past commitments.* Enhancing accountability has become an increasingly important aspect of mutual assessment to increase its traction. Focusing on commitments elaborated in the Cannes Action Plan, staff re-examine individual members’ plans and track progress achieved in key areas in light of changing circumstances, the need for rebalancing, and achieving the shared growth objectives.

4. **These components provide the basis for staff’s upside scenario—toward informing the Los Cabos Action Plan.** Assessments also examine the *collective* implications of member policies and scope for strengthened collective action—motivating staff’s scenario analysis. The structure of the report is as follows. Section II presents a summary of the global conjuncture and key risks. Section III provides a summary of staff’s enhanced accountability assessments of progress across the main policy areas—fiscal policy, monetary and exchange rate policies, structural reform, and financial sector policies. Finally, an upside scenario of strengthened collective action is constructed in Section IV.

¹ Prepared by Research Department team led by Hamid Faruqee and Emil Stavrev, in collaboration with African, Asia and Pacific, European, Middle East and Central Asia, Western Hemisphere, as well as Fiscal Affairs, and Monetary and Capital Markets Departments.

II. GLOBAL RISKS

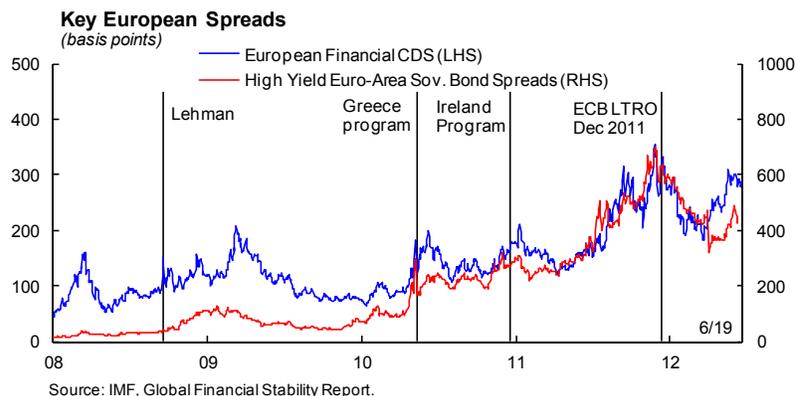
Global risks have risen again. Notwithstanding exceptional steps taken by European policymakers, the euro area crisis remains the most immediate threat to financial stability—with possible global spillovers. In the United States, a sharp budgetary contraction or “fiscal cliff” is set to occur that—if not avoided—would jeopardize recovery, while a few other economies will also need to carefully manage fiscal risks next year. An adverse supply shock from oil markets given reduced policy space is another key global risk. To secure stability, euro area policies to manage and contain the crisis are essential to build on recent efforts, complemented by measured but steady fiscal consolidation and very accommodative monetary policies to support growth. Elsewhere, credible and ambitious medium-term consolidation plans need to be adopted in Japan and the United States to anchor sustained and steady adjustment and minimize risks down the road. Policy challenges in emerging economies are more differentiated—depending on policy space, inflation risks, and volatile capital flows.

A. Conjuncture & Outlook

5. **The global economy is struggling to regain its footing.** After an intense bout of market volatility in late 2011—including adverse self-fulfilling dynamics—exceptional liquidity provided by the ECB and a strengthened firewall averted a systemic crisis. This brought a respite to the markets and helped pull vulnerable economies from a potential sharp downturn. Policy easing in several emerging economies helped reignite growth. As a result, the global economy appeared to regain momentum early this year, but recent indicators suggest that momentum is weakening again. Job creation in the United States has slowed while growth in the euro area is weak or negative. Emerging economies have been a relatively bright spot, although recent signs point to slowing growth in key countries.

6. **Notwithstanding exceptional actions and welcome improvement earlier, the financial crisis is far from over as stability risks remain elevated.** Bold steps taken have helped avert a systemic banking crisis in Europe and created much-needed breathing space at the end of last year. However, while the EU strategy to address the crisis continues to be implemented, recent gains are fragile and have been eroding—partly reflecting increased market concerns over political will and reform fatigue in some economies. Past relief during the crisis has

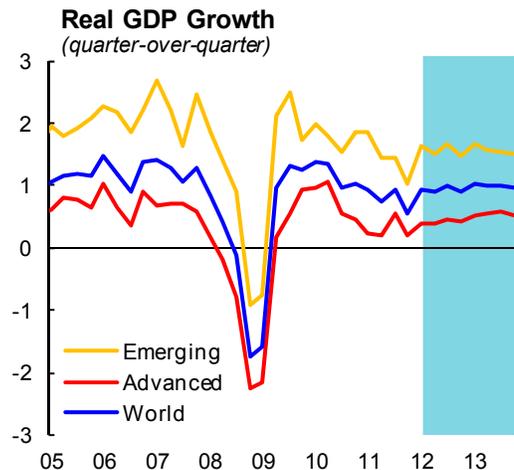
proven to be short-lived and appreciable reversals in market conditions have occurred. Bank funding costs and sovereign spreads in the periphery remain noticeably elevated, while market sentiment indicators and equity prices in certain markets are sharply lower



and market focus on weaker periphery banks has intensified, exacerbating adverse feedback loops between vulnerable sovereigns and banks reminiscent of events in 2011Q4.

7. **Policymakers have yet to get ahead of the crisis, underscoring the need to maintain policy momentum and to overcome political constraints.** Recent moves by Spain to seek external support (to be provided by the EFSF/ESM) to help shore up its banks and market confidence are welcome. However, more action is likely to be required in the euro area to sever adverse feedback loops underlying the sovereign debt challenges and to resolve the wider challenges facing EMU. At the heart of the crisis is a lack of clarity and confidence in the direction and effectiveness of policies—given market concerns over debt restructuring, firewalls, and how to complete EMU to make it more resilient. Moreover, key economic and financial pressures remain in place. Specifically: (i) *European banking systems continue deleveraging* (Annex 1), including re-fragmentation along national lines (e.g., reduced cross-border claims) as banks remain vulnerable to sovereign stress and weaker growth; (ii) *public finances remain under pressure*, with spreads elevated; and (iii) *weak growth prospects dent the credibility of adjustment*, as fiscal austerity adversely affects output in the short run.

8. **Against this backdrop, global growth will only gradually pick up in the near term.** Overall, global growth is expected to accelerate gradually from 3½ percent (annual rate) in 2012 to about 4 percent in 2013 in the baseline, driven by emerging and developing economies. Slow growth in advanced economies is envisaged given legacies of the crisis. In this setting, with accommodative monetary policy and swings in market risk perceptions, capital flows to emerging economies are likely to remain volatile.



Source: IMF, *Global Data Source*.

B. Key Risks

9. **The global economy remains highly vulnerable to key risks.** Downside risks remain elevated. The most immediate threat is a re-intensification of the euro area crisis. Other key downside risks are a sharp fiscal contraction (see below) in the United States, a large spike in oil prices triggered by fears over geopolitical tensions or supply disruptions, and an unwinding of credit booms in some emerging economies that may lead to a sharp growth slowdown and banking strains. Less proximate risks include fiscal sustainability concerns and the absence of credible medium-term fiscal adjustment plans in Japan and the United States that might lead to disruptions in their bond markets down the road. Upside risks include stronger-than-assumed policy responses to the euro area crisis that could significantly bolster confidence.

10. **The euro area still remains in the danger zone amid elevated financial stress.** More severe consequences from a possible deepening of the crisis cannot be ruled out as yet—including more serious pressures on weak banking systems and loss of market access for some sovereigns. A key threat is a renewed escalation of adverse feedback loops between weak sovereigns, banks, and growth. In a downside scenario, a loss of confidence, heightened risk aversion, and forced front-loaded fiscal consolidation in several euro area economies would appreciably lower area-wide growth (Annex 1). While the impact of intensified stress would be felt most acutely in Europe, the rest of the world would also be affected via financial and trade linkages. To achieve a durable exit from the crisis would also require a stronger, more resilient monetary union.

11. **Fiscal risks in the near term could jeopardize recovery.** In the United States, fiscal policy is scheduled to contract markedly under current law (a so-called “fiscal cliff”). Specifically, several contractionary actions are set to occur—notably, expiring income tax cuts as well as activation of automatic spending cuts—that would altogether amount to roughly 4 percent of GDP in 2013 (see Annex 1). Uncertainty about the outcome of contentious political decisions on the budget can provoke market turbulence. Therefore, it is essential to reach an agreement that durably removes uncertainty over fiscal plans. In the euro area, while steady consolidation must continue, there are risks of overdoing fiscal tightening in a few countries next year in an environment of weak growth and credit. Risks from a more negative short-run impact on growth from fiscal consolidation remain a concern given low confidence. Moreover, synchronized fiscal retrenchment across many economies poses risks of reinforcing dampening effects on global demand (via trade spillovers) while the recovery remains fragile.

12. **An adverse oil supply shock would hurt growth given reduced policy space.** Notwithstanding higher production by G-20 oil exporters,² upside risks to oil prices remain a concern given geopolitical uncertainty and limited spare capacity. Supply-side risks along with high demand in Asia have, until recently, countered downward price pressure from slow activity in advanced economies, notably in the euro area. Although average spot prices have now eased some from their peak in March and oil inventories have increased, upside risks to oil prices remain. A major disruption in oil supply related to geopolitical tensions could have a large impact on oil prices and economic activity given the lack of policy space (e.g., limited fiscal room for maneuver) to help offset weaker demand or confidence. In an adverse oil shock scenario in which the real price of oil is 40 percent above the baseline, global output is about 1 percent lower (Annex 1).

13. **Less proximate risks—notably, unwinding of past credit booms in emerging economies and fiscal sustainability concerns in major advanced economies—should still be**

² Saudi Arabia, for example, has significantly ramped up oil production to historically high levels since 2011Q2 in an effort to calm markets in line with the G-20 commitment. However, spare capacity in OPEC has now been reduced.

watched. Rapid credit expansion may have pushed output growth above sustainable rates in some emerging economies and could amplify a possible boom-bust cycle. Throughout the crisis, Japan and the United States have retained their safe haven status, but investor confidence cannot be taken for granted amid rising sovereign debt levels. A disruption to their sovereign bond markets, given their size and special role, could destabilize global financial and currency markets, with severe implications for economic activity.

C. Policy Implications

14. **Moving toward lasting stability and growth will first require comprehensive policies to exit from the crisis.** This requires both short- and medium-terms actions that are effective, complementary, and mutually reinforcing to shore up the baseline for growth:

- *Securing stability and managing risks in the near term.* To lay the foundations for growth over the medium term, resolving the euro area crisis will require prudent fiscal adjustment as part of a broader package. If conditions worsen, for example, countries should adhere to their announced fiscal measures but not necessarily to nominal targets. In combination, further easing of monetary policy should be considered, alongside ample liquidity support for banks from the ECB to alleviate their elevated funding strains. These measures, however, can only provide a temporary reprieve and should be complemented with restructuring and recapitalizing the banking system, if necessary with direct equity injections from official sources using pan-European funds, to avoid disorderly deleveraging. To be effective, the strengthening of the European firewall needs to be ratified by national parliaments as soon as possible.
- *Addressing excessive euro area imbalances to further support lasting stability and growth.* These imbalances provide an important perspective on the current crisis and its resolution. They largely reflected overly optimistic expectations; mispricing of risks; and insufficient adjustment to shocks, as well as cyclical factors (Annex 2). Neither markets, nor governments, nor supranational bodies imposed enough restraint on the exuberant borrowing that financed them. As market perceptions changed, there was no effective mechanism in place to deal with a wider banking and sovereign debt crisis that ensued. Improving EMU's architecture to address these shortcomings would thus make the union stronger over time and less prone to excessive imbalances and future crises.
- *Building a stronger monetary union that can robustly grow over the medium term.* Beyond immediate challenges, the euro area should anchor crisis management efforts by building a stronger, more resilient EMU through governance and structural reform. Key building blocks are deeper *fiscal integration* (strong fiscal governance and ex ante risk sharing); *structural reform* to improve competitiveness of deficit economies through a combination of wage adjustment and accelerated productivity; and *financial policies* and integration (e.g., centralized supervision and resolution; and common deposit insurance) to monitor systemic risks, ensure efficient bank resolution, inject capital as needed into

banks directly from centralized resource pools (sooner rather than later), and maintain a cooperative process of deleveraging.

- *Many key elements of this approach are embodied in the EU 5-point strategy to address the euro area sovereign debt crisis—through strengthening firewalls; funding and recapitalizing banks; strengthening euro area governance; supporting growth through structural reform; and differentiated and growth-friendly fiscal consolidation. Effective follow-through remains critical, and policy momentum needs to be sustained to get ahead of the crisis.*

15. **Policies for many other advanced economies, with similar, if less acute, challenges will also need to navigate along a narrow path.** Given the dangers, a risk management approach is warranted. Where financing conditions allow, countries should maintain a gradual but steady pace of underlying consolidation given a fragile recovery, while allowing automatic stabilizers to operate freely if growth weakens. Japan and the United States should also urgently adopt credible and substantial consolidation roadmaps—partly to set course for the long journey ahead but also, in the U.S. case, to avoid abrupt fiscal retrenchment in the short run due to inaction. Monetary policy should be kept very accommodative, including through the use of unconventional measures, and some countries should consider or pursue further easing. Financial reform still needs to be implemented; regulation and supervision need to be improved, particularly over shadow banks; and cross-border cooperation of supervisory authorities must be strengthened to help secure lasting stability.

16. **Emerging economies face a difficult balancing act and policies vary across countries.** Weaker growth in advanced partner countries places pressure on domestic growth through trade. On the financial side, volatile capital flows, reflecting both push and pull factors, in the current environment complicate macroeconomic management. Appropriate policy responses in the baseline will vary by country. In those with easing inflation pressures but weaker fiscal positions, monetary policy can be used to support activity if necessary, with macro-prudential measures employed as needed to prevent asset bubbles. In those where inflation is under control, public debt is modest, and external surpluses are large, fiscal consolidation may be deferred and social spending, for example, used to support poorer households. Where inflation and public debt are high, focus should be on rebuilding policy space.

Implications of Staff's Risk Analysis for the Upside: *As possibly severe consequences from a deeper financial crisis cannot be ruled out, sufficient member policies and crisis and risk management are necessary to preserve the integrity of the baseline, to guard against rising and serious risks, and to avoid costly downside scenarios (as described in the annex). Staff presume that key member policies—notably, gradual but steady fiscal adjustment; accommodative monetary policy; restructuring and recapitalization of the banking system; and financial reform—are effectively implemented to avert a re-intensification of crisis feedback loops between banks, sovereigns and growth. The upside scenario is predicated on first securing staff's baseline, and potential gains are expressed relative to that point of reference.*

III. POLICY PROGRESS AND POSSIBLE GAPS

Enhanced accountability assessments find that G-20 members have made progress towards meeting their commitments in the Cannes Action Plan. The pace of fiscal consolidation in the near term appears broadly appropriate so far (with a few exceptions); many (but not all) members have credible medium-term consolidation plans; reserve accumulation has slowed in major surplus emerging economies; there has been some action on structural reform; and the global financial reform agenda has advanced. However, further action is needed to meet commitments and achieve the shared growth objectives. Greater focus is needed on addressing persistently high unemployment in advanced economies, while Japan and the United States should chart a clear course to firmly place their public finances on a sounder footing. Further action is required in emerging surplus economies to facilitate rebalancing by addressing domestic distortions, complemented by further exchange rate appreciation. Finally, financial regulation needs to be implemented on a consistent and steady basis across countries to safeguard financial stability—essential for sustained economic growth.

17. **Fiscal consolidation is, by and large, managing a delicate balance between supporting recovery and rebuilding confidence.** Japan and the United States have delivered on their commitments to implement *near-term* measures to sustain growth. Canada and the United Kingdom have allowed the pace of near-term consolidation to slow in response to a weaker near-term growth outlook (and for the U.K. lower estimates of potential growth). Consolidation in the euro area economies under market scrutiny was stronger and fiscal frameworks in the European Union as a whole were strengthened, although market pressures remain elevated. The broad pace of near-term consolidation is also appropriately slower than in 2011 and than previously planned in emerging economies—which have stronger initial fiscal positions. Overall, fiscal consolidation efforts are strongest in advanced deficit economies and weakest in emerging surplus economies as well as major oil exporters, which should contribute to rebalancing.

18. **Many (but not all) have credible and ambitious consolidation plans, though some members should reconsider the pace of adjustment given current conditions.**

- *With respect to G-20 commitments, most advanced economies have made significant progress toward achieving their 2013 Toronto target of halving the deficit from its 2010 level. Some will miss by a relatively small margin—at least relative to observed efforts—in part due to the Cannes commitment to support recovery. Achieving the Toronto debt target to stabilize or reduce public debt by 2016 also seems within reach. However, if growth turns out weaker, it is important not to adhere to targets mechanically.*
- *With respect to desirable adjustment, all members should have concrete medium-term roadmaps in place to anchor credibility, but a few advanced members may need to recalibrate their plans. For 2012, fiscal consolidation plans appear appropriate both individually and collectively across the membership, but a few euro area economies*

should take care to avoid too much tightening in 2013. Meanwhile, avoiding a “fiscal cliff” in the United States in 2013 will need to be paired with stronger adjustment over the longer term. Current medium-term consolidation efforts anticipated in Japan and the United States are insufficient to put their high debt decisively on downward paths by mid-decade. Most emerging economies are broadly on track to reach their medium-term targets to rebuild fiscal space eroded during the crisis. However, India will require cuts in key subsidies and revenue enhancement to attain its objectives; and medium-term targets should be more clearly specified in China and be more ambitious in Russia and Turkey.

19. **Reserve accumulation has generally slowed and there have been welcome *de jure* moves toward greater exchange rate flexibility, but increases in *observed* flexibility remain modest.** Major surplus economies have slowed reserve accumulation since mid-2011, although levels remain relatively high and often exceed simple measures of reserve adequacy. Some deficit economies have seen some reserve losses over the past six to eight months (India and Turkey). China allowed some appreciation last year of its exchange rate (in effective terms) partly through gradual appreciation against the U.S. dollar; Russia has reduced foreign exchange interventions; and both have widened the fluctuation bands for their currency, which could eventually lead to further flexibility. Overall, however, the IMF’s *de facto* exchange rate classifications indicate little *change* in exchange rate flexibility since Cannes. For example, while China has recently announced a wider band for its currency against the U.S. dollar, increased RMB flexibility has not yet been observed to warrant a change in its regime classification to a more flexible designation (Annex 2). Bilateral appreciation of the currency against the U.S. dollar and in effective terms has been minimal in 2012. Managing volatile capital inflows has been another challenge for emerging economies due to return differentials and swings in risk perceptions. A broad range of policy responses to capital inflows have been taken in several emerging economies, but more could rely on macroeconomic instruments.

20. **Progress on structural reform has been uneven and some commitments fall short.** Advanced economies have taken action to strengthen fiscal frameworks (notably, the European Union) and to raise labor force participation. Some economies under market scrutiny (Italy, Spain) have outlined major labor market reforms. But commitments tend not to be focused on addressing currently high and persistent unemployment in many advanced economies. Progress in the area of product market reform is also lagging with a few exceptions. Some emerging economies have acted on their commitments to improve social inclusion—through higher spending on safety nets, education, and health—and to increase investment in infrastructure and energy sectors. But overall ambition and progress are lacking on reforms to facilitate demand rebalancing and enhance growth potential, including by improving the business and investment environment.

21. **Members have advanced the global financial regulatory reform agenda, though implementation risks remain.** Work on the regulatory reform agenda has advanced and continues, and the implementation of the Basel III capital and liquidity framework is underway in

many jurisdictions, albeit it is still at an early stage and could be uneven, with some advanced economies falling behind their timetables. The newly developed Coordination Framework for Implementation Monitoring (CFIM) aims to foster discipline through more structured monitoring and reporting members' progress. The development of a policy framework for global systemically important banks is now completed and work on an assessment methodology is in progress.

22. **Policy or progress gaps in key areas relative to member commitments point to a need further action.** In particular:

- **Financial sector reform.**³ Ensuring financial stability, including by preventing a reemergence of the excesses of the last decade, is key to sustained and shared growth. Implementation of the agreed regulatory reform across countries on a consistent and steady basis, striking a balance between strengthening the resilience of the banking system and cushioning the impact on economic activity, is needed. Further work is also needed in a number of key areas—including cross-border resolution and supervision, reform of financial derivatives, and closing critical data and information gaps. Macroprudential frameworks still need to be developed.
- **Sound public finances.** Fiscal policy may need further adjustment to navigate between supporting growth and restoring sustainability. In the near-term, excessive consolidation due to expiry of measures and inaction should be avoided in the United States, as well as in a few euro area countries due to discretionary overtightening. Japan and the United States need to promptly adopt credible and more ambitious medium-term consolidation plans to reduce high public debt and to guard against risk of future market instability. Fiscal vulnerabilities in India (high debt and slow adjustment), Russia (low debt but high non-oil deficit) and Turkey (medium debt but slow adjustment) should also be addressed. Finally, reforms to address longer-term fiscal pressures from ageing and health care costs are needed in many economies.
- **Global demand rebalancing.** While global imbalances have narrowed with the crisis, this has reflected demand *compression* more than rebalancing—i.e., it has been asymmetric between surplus and deficit economies—leaving global growth weaker. To complement steady consolidation in deficit economies, more action is needed in emerging surplus economies to facilitate demand rebalancing by addressing domestic distortions, complemented with further exchange rate appreciation. In China, rebalancing should be centered on boosting relatively low consumption by removing distortions that lead to excessive saving and investment, including through financial sector reform and removing

³ See, for example, "Identifying the Effects of Regulatory Reforms on Emerging Market and Developing Economies," Report to the G-20 Finance Ministers and Central Bank Governors by FSB with inputs from the IMF and World Bank.

implicit subsidies to the cost of capital. In other surplus economies, the focus should be on boosting investment, including through improvements in the business environment and infrastructure.

- **Employment and growth.** Finally, more action may be directly needed to support the main objectives themselves. In advanced economies and some emerging economies (South Africa and Turkey), more decisive action is needed to address persistently high unemployment. Scope for further policy action includes cost-effective active labor market policies (and in particular worker retraining and employment services in countries which have undergone sector-specific shocks such as Spain and the United States), lowering labor taxes, removing impediments to hiring, and fostering greater wage flexibility. Accountability assessments also reveal gaps in the alignment of structural reform plans with the OECD's medium-term strategic priorities. More determined progress on *product market* reform, in particular reducing regulatory barriers to firm entry and strengthening competition in sheltered sectors such as services, would also enhance potential growth and employment.

Implications of Staff's Accountability Assessment for the Upside: *Key policy or progress gaps at the member level that are identified form the basis for strengthened actions for the upside. Specifically, steady fiscal consolidation over time, laid out in credible roadmaps; monetary easing; demand rebalancing, including by addressing domestic distortions and more flexible exchange rates; and policies tackling high unemployment are central. Accounting for spillovers—notably to support global demand—the upside further illustrates the benefits of collective action and potential gains at the global level toward achieving lasting stability and growth.*

IV. ACHIEVING LASTING STABILITY AND GROWTH—AN UPSIDE SCENARIO

Further collective action is still needed to attain the shared objectives of strong, sustainable, and balanced growth. Synergies exist between key policies and strengthened collective action across the membership can be mutually reinforcing—facilitating global rebalancing and securing more durable recovery. An “upside scenario”, where members address progress and policy gaps, offers appreciable gains. The scenario illustrates that collaborative policies—focused on steadily improving fiscal positions, easing monetary policy where appropriate, advancing healthy global rebalancing, and further promoting jobs and growth—would lead to welfare gains for the membership and help mitigate key risks threatening the recovery.

23. **Positive synergies exist between near-term policies that can kick-start growth and policies to secure medium-term objectives.** Given a still-fragile recovery, members need to strike the right balance between measures supporting growth in the near term and those aimed at achieving medium-term objectives. Risk management policies identified by the global risks analysis are necessary to ensure the baseline and avoid a costly downside scenario. Building on that baseline, an upside scenario considers scope for further collective gains by membership with adjustment suited to individual member circumstances. Cooperative action across the membership in key areas—namely, strengthened fiscal consolidation plans, further easing of monetary policy, key structural reform, global rebalancing policies, and post-crisis financial sector reform—will help members better achieve their medium-term growth objectives. Importantly, this will also improve private sector confidence and support growth in the near term, helping to guard against downside risks to the recovery.

24. **The upside scenario brings together key policy requisites at the *member level* identified in accountability assessments and the benefits of collective action.** The main policy contours and motivation are as follows:

- ***Financial sector reform.*** A stable and healthy financial sector is a prerequisite for durable growth. Given modeling limitations, additional financial sector reform is not explored in the upside scenario. Analysis elsewhere, however, suggests that further progress on financial sector reform would help reduce stability risks and lay the foundations for the strengthened growth prospects.
- ***Sounder fiscal positions.*** Sound public finances are requisite for durable growth. Greater medium-term consolidation efforts over time should be considered in some countries (e.g., India, Japan, and the United States) to restore soundness to public finances and to anchor shared growth objectives. The precise composition of expenditure and revenue measures differs across countries and is informed by staff’s bilateral surveillance. A general shift toward greater reliance on indirect taxes (e.g., VAT) away from more distortionary taxes, which is budget neutral in some countries (e.g. Germany) or part of

broader consolidation efforts in others (e.g., Australia and Japan) would be beneficial. While fiscal positions are relatively stronger in emerging economies, some emerging economies could adopt budget-neutral measures to boost further public investment in infrastructure and education (e.g., Brazil, India, and Indonesia).

- ***Easing monetary policy.*** Where appropriate, monetary policy should be eased further in some major advanced economies consistent with price stability objectives given weaker growth and continued fiscal consolidation. Given constraints on nominal policy rates in many regions, a mix of conventional and unconventional measures should be considered. This would not only cushion the impact of tighter fiscal policy in home countries, but will also help dampen their demand spillovers to other regions as well.
- ***Global demand rebalancing.*** As a multilateral undertaking, achieving global rebalancing and healthy growth requires effort in both deficit and surplus economies. Notably, policy scope exists for reducing key imbalances in China, Germany and the United States. In China, added rebalancing policies to reduce high private saving can tackle distortions that keep the cost of capital low, reforming the financial system, and strengthening the social safety net, complemented with greater exchange rate flexibility.⁴ In Germany, measures would focus on encouraging private investment. For the United States, efforts would be focused on raising or preserving higher private saving (e.g., through entitlement reform) as public finances consolidate.
- ***Employment and growth.*** Finally, direct actions should also be pursued to strengthen job creation and growth. Where possible, *demand-side* policies should be the focus in the short run given that they are a main driver of employment growth when involuntary unemployment is high. *Supply-side* policies should be medium- and long-term priorities, but a policy tradeoff involves deciding on good supply-side policies that may be less demand-friendly in the short run. *Advanced deficit economies* can make greater policy efforts to reduce persistently high unemployment—focusing, where possible, on effective active labor market policies to facilitate search, matching and reattachment of displaced workers. Further structural reform effort or reorientation is assumed to raise employment and potential output over the medium term, notably in *advanced surplus economies*—where those with rapidly-aging populations (Germany, Japan, and Korea) could also take additional measures to encourage female and old-age labor force participation (e.g., reducing the secondary earner tax wedge and raising retirement ages). Many emerging economies have considerable scope to boost formal sector employment and labor force participation.

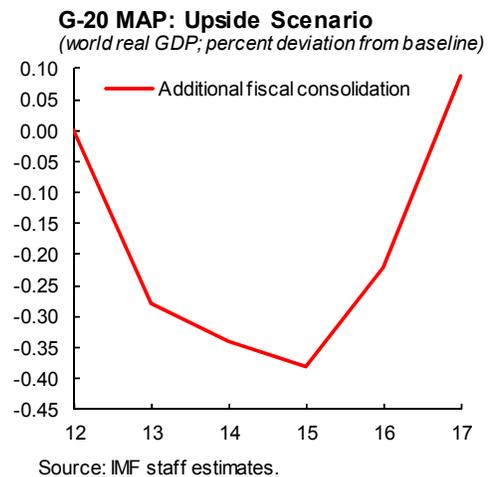
25. **For evenhandedness, policy actions in all G-20 members are considered for the upside scenario.** Previous staff analysis for the upside had focused on *systemic* members largely

⁴ In each upside layer, China's exchange rate is assumed to be freely floating.

based on sustainability reports.⁵ Informed by accountability assessments, the present scenario is conducted using a new global macroeconomic model developed to support the G-20 MAP exercise (G20MOD), which treats each G-20 member separately. This allows policies to be considered and tailored to every member's individual circumstances.⁶ While any model is necessarily stylized, staff's multi-country framework provides essential and explicit structure to the analysis of G-20 economies and their interdependence. The upside scenario builds on the Fund's April WEO economic baseline and policy assumptions.

26. **A complementary package of policies results in stronger medium-term growth and rebalancing.** Box 1 provides details of the policy and technical assumptions underpinning the scenario.⁷ At a higher level, key elements are as follows:

- Stronger consolidation over time is necessary to ensure debt sustainability and rebuild policy space, but this will reduce growth on impact (including through spillovers).** Additional fiscal consolidation (around 1½ percent of world GDP) would reduce world GDP by around ½ percent by 2015. More front-loaded consolidation would risk deepening the negative effects on growth. This underscores the need for fiscal plans to be well timed and as “growth friendly” as possible. Fiscal consolidation would also have negative spillovers on trading partners. To limit the dampening effects on global demand through spillovers, some countries should *not* tighten further and instead consider budget-neutral adjustment where appropriate (see below). This also highlights the need for a complementary set of policies to offset the temporary dampening effects of fiscal consolidation and weaker demand from trading partners.
- Easing monetary policy, through both conventional and unconventional means, can substantially mitigate the near-term fiscal drag.** Several members, particularly those



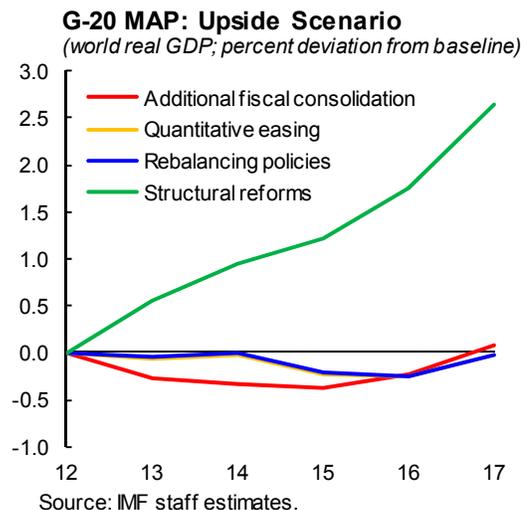
⁵ See <http://www.imf.org/external/np/g20/pdf/110411.pdf>

⁶ G20MOD is similar in structure to the Global Integrated Monetary and Fiscal (GIMF) model used in previous MAP work. The model has 23 blocks, comprising all G-20 countries plus three aggregate country groups (other non-euro-area European Union countries, other industrial countries, and the rest of the world).

⁷ Work on the upside scenario was undertaken in close partnership with the OECD. The OECD contributed simulations of the effects of stylized and country-specific structural reforms for individual G-20 members.

with acute needs to further strengthen fiscal positions, should ease monetary policy through lower policy rates where recovery is weakening and price pressures are likely to diminish. In countries with monetary policy rates already close to zero, (further) unconventional easing should be pursued or considered. In the model, if unconventional measures equivalent to 100 basis points of short-term rate cuts were implemented in the euro area, Japan, and the United Kingdom for two years, the negative impact on global growth from required fiscal measures would be largely offset. In terms of spillovers, this would lead to currency appreciation elsewhere but also stronger import demand from countries where monetary stimulus is introduced. On balance, the effects on partner country growth are broadly neutral.

- Complementing consolidation, structural and tax reform and rebalancing policies would lead to stronger and more balanced growth.** Budget-neutral adjustment, where tax reform shifts the composition of revenue away from distortionary taxes, limits the adverse impact on growth. Structural reforms in labor and product markets boost productivity and potential growth. Meanwhile, in the near term, active labor market policies mitigate potential negative near-term effects of some labor market reforms. G20MOD simulations suggest that key structural reform not only have own benefits to members by boosting jobs and growth domestically but have also positive spillovers via trade, strengthening overall growth and helping further rebalance the global economy. Rebalancing policies would support growth by avoiding more asymmetric adjustment that would hurt global demand. This is critical for healthier, more sustainable growth over time by further shifting to a more balanced global pattern of domestic demand and would help narrow large external imbalances. Stronger internal demand in surplus members, through positive spillovers, would help offset the need to rebuild saving in deficit members.



27. Further collaborative action would have appreciable benefits for growth and jobs.

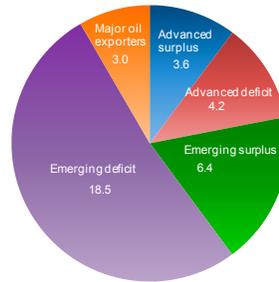
The upside scenario shows that joint actions by all members would result in an overall increase in world GDP of over 2½ percent relative to the WEO baseline in 2017. Moreover, if fully implemented, the comprehensive set of policies would add almost 36 million jobs across the G-20. Cumulative output gains over the medium term are about 2¾ times larger than the 2017 gains. Across the membership, there are relatively large gains in GDP for advanced surplus economies, with GDP rising by around 4 percent relative to baseline. The growth benefits from collective action for advanced deficit economies and emerging surplus economies are also significant, with their GDP rising by around 2 to 3 percent relative to the baseline by 2017.

Contributions to G-20 GDP in 2017 by Thematic Groups 1/ 2/
(percentage points deviation from baseline)



Source: IMF staff estimates.
1/ Scenario includes all reforms.
2/ The overall increase in G-20 GDP in 2017 is 3.3 percent.

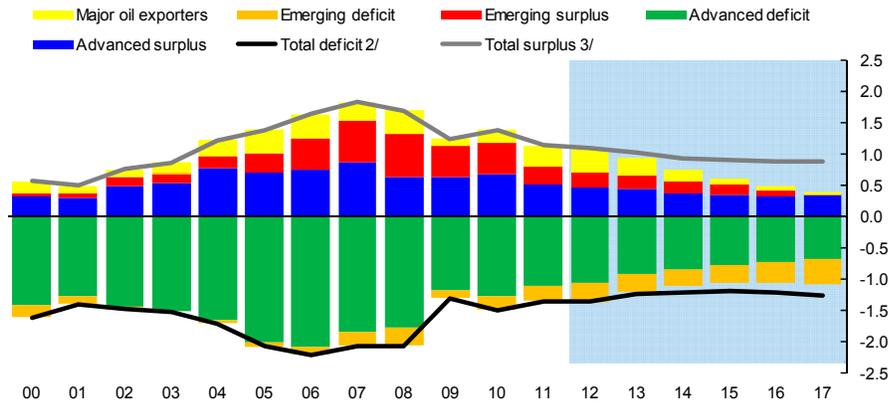
Total Jobs Increase by Thematic Groups 1/ 2/
(millions)



Source: IMF staff estimates.
1/ Scenario includes all reforms.
2/ The overall increase in G-20 number of jobs in 2017 is 35.7 million.

28. **Stronger growth is accompanied by global rebalancing.** The upside scenario shows a reduction of global imbalances by around ¾ percent of world GDP relative to the WEO baseline by 2017. This is driven by a narrowing of imbalances for both surplus and deficit countries. The reduction is relatively large for advanced deficit and emerging surplus economies, largely reflecting the effects of rebalancing policies in China and the United States. Current account surpluses narrow across all advanced surplus economies, except Japan, where greater efforts to achieve fiscal sustainability take priority and result in an increase national saving.

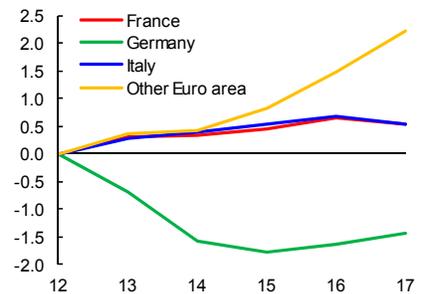
Current Account Balances 1/
(percent of world GDP)



Sources: IMF, World Economic Outlook and staff estimates.
1/ 2000 - 2011 reflect WEO history; 2012 - 2017 reflects WEO projections + upside scenario except for total deficit/surplus lines, which reflect WEO baseline.
2/ Total for deficit countries in the WEO baseline.
3/ Total for surplus countries in the WEO baseline.

- **Euro area imbalances would narrow in the upside.** Germany's current account surplus and the deficits of France, Italy, and other euro area countries diminish. The policy tradeoff for Germany involves accepting higher (relative) inflation to facilitate area-wide adjustment, while supporting stronger area-wide growth through stronger domestic demand and investment. Deficit countries experience improvements in competitiveness through structural reform and relative price adjustment,

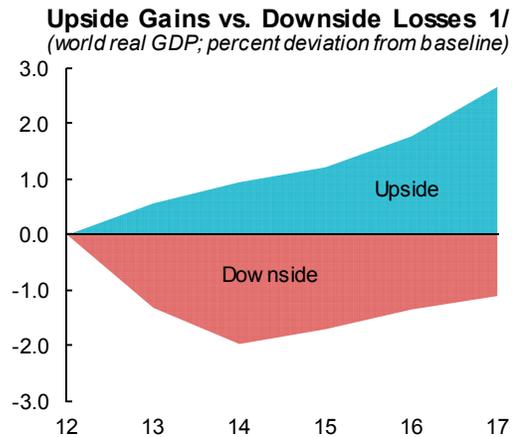
G-20 MAP: Upside Scenario for Euro Area Current Account Balances 1/
(percentage point of GDP deviation from baseline)



Source: IMF staff estimates.
1/ Scenario includes all reforms.

helping to facilitate rebalancing within the region. Overall, the scenario shows that more symmetric adjustment across surplus and deficit euro area economies can lead to stronger, more balanced growth and strengthen the foundations of the monetary union.

29. **Finally, upside policies to deliver stronger growth, alongside a risk management approach, is the best insurance against downside risks and potential losses.** Securing stability opens the way to durable growth and stronger confidence. In turn, stronger growth helps reinforce fiscal consolidation and financial sector repair. This can help reverse the damaging adverse feedback loops that have characterized this crisis (Annex 1). Thus, upside gains can also be viewed in relation to the avoidance of costs associated with less complete, indecisive, and inconsistent policies. Viewed from this perspective, the relative gains are compelling. The gains in the upside compared against the downside (relative to baseline) amount to 4 percent of GDP and 58 million jobs in 2017. Cumulative output gains over five years between 2012 and 2017 would be 3½ times larger (see blue plus red shaded area).



Source: IMF staff estimates.

1/ Downside losses based on Euro area stress scenario starting in 2012.

Box 1. Policy Assumptions for the Upside Scenario

The upside scenario consists of four layers: (i) additional fiscal consolidation over the medium term; (ii) monetary easing in euro area, Japan and U.K.; (iii) structural reforms in product and labor markets (based on simulation results from the OECD, scaled to account for policies assumed in the baseline), including budget-neutral fiscal reform; and (iv) rebalancing reforms in China, Germany, and the United States.

G-20 members are assumed to fully implement their policy commitments and take *additional* actions that are desirable to anchor the members' growth objectives. In particular:

- **Fiscal consolidation and budget-neutral fiscal reform.** Specifically:

Total Consolidation and Contributions in 2017 (in percent of GDP)

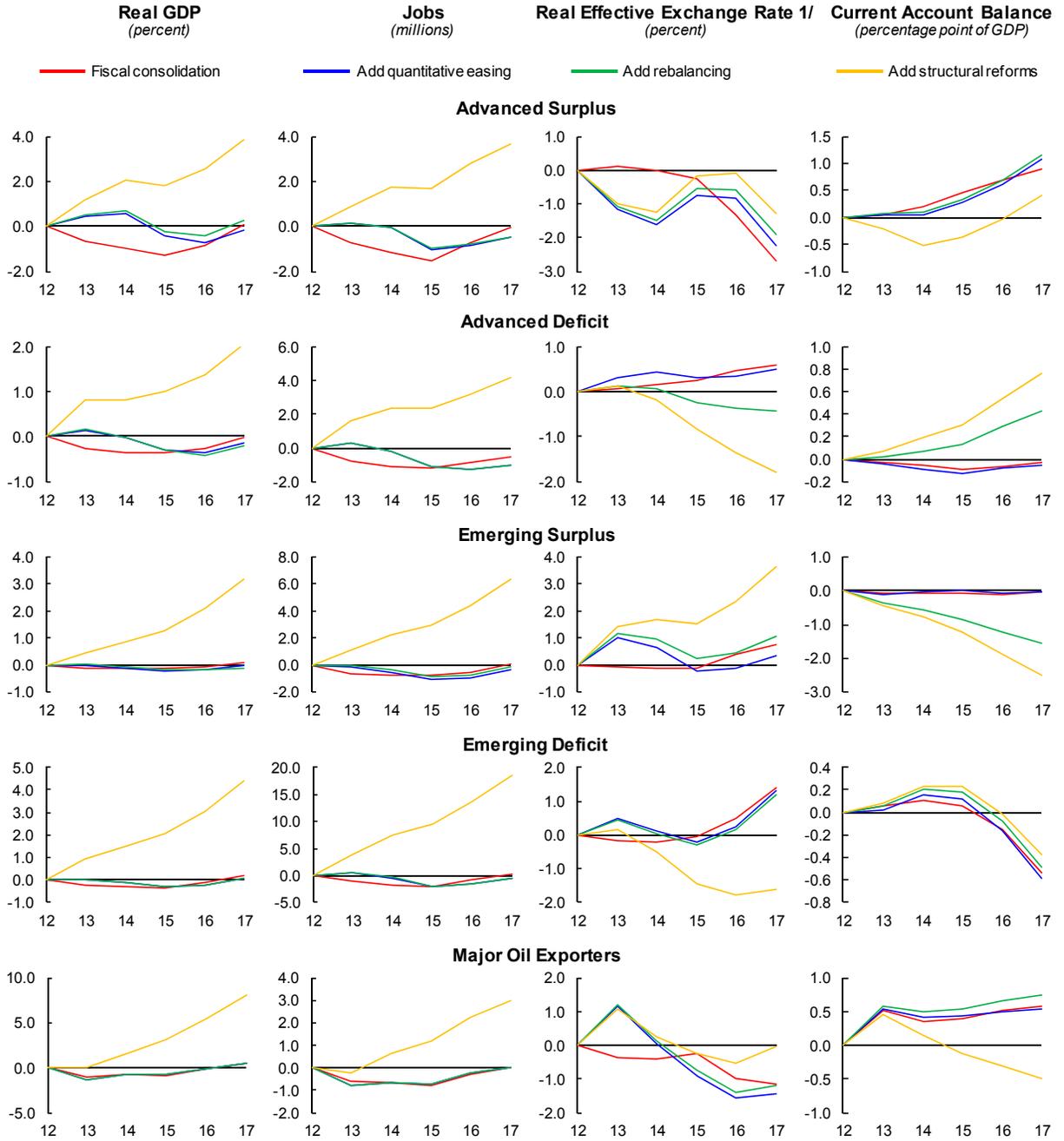
	Expenditure Cuts			Revenue Increases			Total Consolidation
	Transfers	Consumption	Investment	VAT	Labor Tax	Corporate Tax	
Australia	-0.2	-0.2		0.2			0.6
Brazil	0.5		-0.5	1.0	-1.0		
Germany				2.0	-2.0		
France		0.3					0.3
India	2.1		-1.0	1.9	-0.5	-0.5	2.0
Indonesia	1.0		-1.0				
Italy		0.5		2.0	-1.5	-0.5	0.5
Japan		2.5		5.9	-2.0		6.4
Russia	3.3	1.1					4.4
Turkey		3.5					3.5
United States	0.5	0.5		1.5		-0.5	2.0
Other EU (not in euro area)		1.0					1.0

- **Structural reforms.** Two types of structural reforms are considered—product market and labor market reforms. The reforms assumed for each member are shown in the table below. Product market reforms (PMR) boost productivity across tradable and non-tradable sectors. Labor market reforms comprise: active labor market policies (ALMP); easing overly restrictive employment protection legislation (EPL); reducing average replacement rates (ARR); actuarially neutral pension reform (AN); retirement age reform (RA); and policies that boost general or female labor force participation (PR). The labor market reforms reduce unemployment (ALMP and ARR) and increase labor productivity (EPL) and labor force participation (AN, RA, and PR).

	PMR	ALMP	EPL	ARR	AN	RA	PR
<i>Advanced Deficit</i>							
Australia	✓		✓		✓	✓	
Canada	✓	✓	✓		✓	✓	
France	✓	✓	✓	✓	✓	✓	
Italy	✓	✓	✓				✓
United Kingdom	✓	✓	✓	✓	✓	✓	
United States	✓	✓			✓	✓	
Other Euro Area	✓	✓	✓	✓	✓	✓	
<i>Advanced Surplus</i>							
Germany	✓	✓	✓	✓	✓	✓	✓
Japan	✓		✓		✓	✓	✓
Korea	✓	✓	✓	✓	✓	✓	✓
<i>Emerging Deficit</i>							
Brazil	✓		✓				
India	✓		✓				✓
Mexico	✓	✓	✓				✓
South Africa	✓	✓	✓				✓
Turkey	✓		✓		✓	✓	✓
Other EU (not in euro area)	✓	✓	✓	✓	✓	✓	✓
<i>Emerging Surplus</i>							
Argentina	✓		✓				✓
China	✓		✓				✓
Indonesia	✓	✓	✓				✓
<i>Major Oil Exporters</i>							
Russia	✓	✓	✓				✓
Saudi Arabia	✓	✓					✓

- **Global rebalancing reforms.** In *China*, additional reforms to education, healthcare, and pensions raise public consumption and reduce private saving by 2 percent of GDP over 5 years. Financial sector reforms eliminate implicit subsidies to capital, raising its cost by 50 basis points after 5 years. These policies are accompanied by a fully flexible exchange rate. In *Germany*, reforms are implemented that reduce the cost of capital by 85 basis points after 5 years. In the *United States*, reforms encourage an increase in the private saving by 1½ percent of GDP after 5 years.

G-20 Upside Scenario
(deviation from baseline)



Source: IMF staff estimates.
1/ Increase includes appreciation.



GROUP OF TWENTY

GLOBAL RISK ANALYSIS

Annex to Umbrella Report for G-20 Mutual Assessment Process



Prepared by Staff of the

INTERNATIONAL MONETARY FUND*

*Does not necessarily reflect the views of the IMF Executive Board.

ANNEX 1: GLOBAL RISK ANALYSIS¹

SUMMARY

Global risks have risen again. Notwithstanding exceptional actions that have been taken by European policymakers and have averted a systemic banking crisis, improvements in financial conditions are fragile and eroding quickly. Financial stress in Europe has reemerged—reminiscent of the conditions prevailing in the last quarter of 2011. Deleveraging by governments, financial institutions and households weighs on the recovery in advanced economies. Most emerging economies are expected to resume more robust growth.

Global growth momentum appears to be weakening and the global economy remains unusually vulnerable to key risks. The most immediate risk is a further escalation of financial stress in the euro area—gains following exceptional policy actions have been eroding until recently and the euro area crisis remains the most immediate threat to global growth. Should market participants' confidence in the ability or willingness of policymakers to implement needed policies diminish, the adverse feedback loops between weak sovereigns, banks and growth would resurface, hurting growth within and outside the euro area. Implementation of the euro area's five-point strategy for crisis response is essential for mitigating that risk.² Other key risks include the U.S. "fiscal cliff" in 2013 and, although market conditions and prices have eased, the possibility of a major spike in oil prices in an environment of limited spare oil capacity and geopolitical tensions.

Fragile conditions require further comprehensive and multilateral actions by policymakers to secure stability and support growth. In the *euro area*, recent strengthening of the firewall and steps toward external support for Spain are welcome but more is needed to secure stability and build a stronger monetary union: (i) continued emphasis on preserving bank capital buffers and resolving weak banks; (ii) reform of the euro area architecture via deeper fiscal and financial integration; and (iii) widespread product and labor market reform to improve cost competitiveness. In *advanced economies*, accommodative monetary policy and ample liquidity provision should continue. The pace of budgetary adjustment should be gradual but steady while allowing the automatic stabilizers to operate freely if growth weakens. *Japan* and *the United States* should urgently adopt ambitious and credible medium-term consolidation plans to anchor objectives. At the same time, the U.S. should avoid the excessive tightening scheduled to occur next year under current law. *Emerging economies* need to calibrate policies to address downside risks posed by advanced economies, while rebuilding policy space and managing volatile capital flows. Those with extended strong credit growth in past years need to ensure a soft landing.

¹Prepared by Vladimir Klyuev under the guidance of Hamid Faruqee, with the help of Min Kyu Song and Anne Lalramnghakhleli Moses.

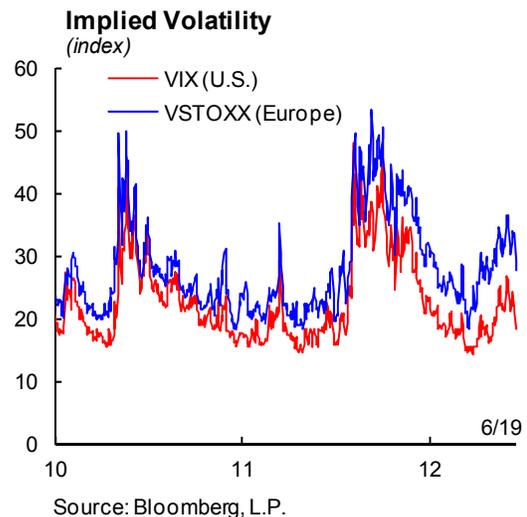
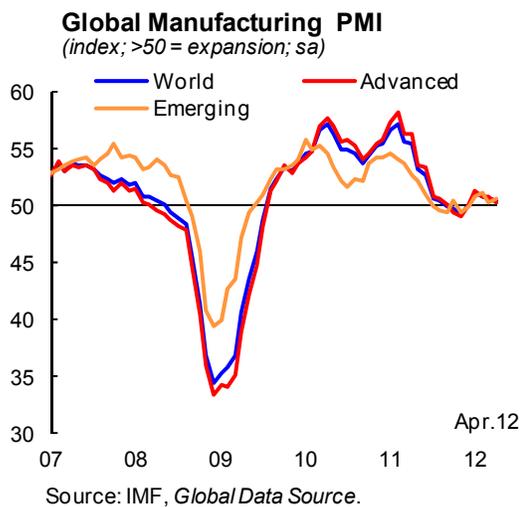
² The strategy's main elements comprise strengthening firewalls; funding and recapitalizing banks; strengthening euro area governance; supporting growth through structural reform; and differentiated and "growth-friendly" fiscal consolidation.

GLOBAL RISK ANALYSIS

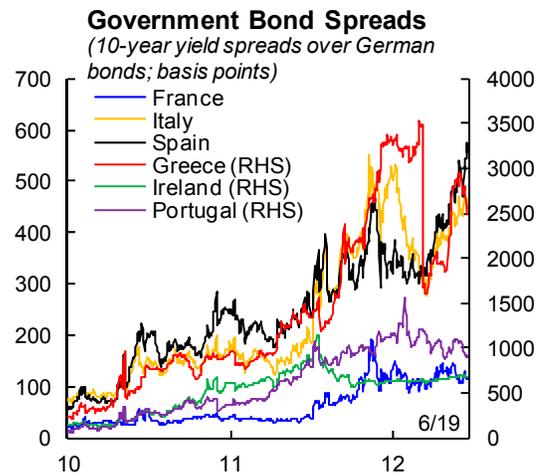
Global risks have risen again. Renewed concerns about disorderly adjustment in the euro area periphery have replaced the cautious optimism that followed exceptional ECB liquidity provision and strengthening of the firewall earlier in the year, prompting further actions. In the United States, a sharp fiscal contraction or “fiscal cliff” is set to occur under current law that—if not avoided—would jeopardize recovery, while a few other economies will also need to manage fiscal risks next year. A supply shock from a sharp increase in the oil prices remains a risk given geopolitical uncertainty and limited spare capacity in production. Extended credit booms in several emerging economies may come to an abrupt stop. Comprehensive policies—including the five-point strategy adopted by euro area leaders last October—are essential to contain and manage the euro area crisis to secure stability, while exercising a measured approach to fiscal consolidation and continuing very accommodative monetary policies to support growth. Credible and ambitious medium-term consolidation plans need to be adopted in Japan and the United States to anchor sustained and steady adjustment and minimize risks down the road. Policy implications in emerging economies are more differentiated—depending on policy space, inflation risks, and volatile capital flows.

A. Conjuncture and Outlook

1. **Global recovery is proceeding in fitful fashion.** After slowing in the second half of 2011, the global economy appeared to regain momentum early this year, but the latest news firmly suggests that momentum is weakening again. In the euro area, amid the intensification of the sovereign and banking crisis, GDP was stagnant in 2012Q1 but variation among the member countries was appreciable, with contraction in the periphery continuing, while key core economies expanded. Job creation has slowed in the United States. On the other hand, growth has generally held up well in Asia and Latin America, although there have been recent signs of slower growth in key emerging economies.



2. **Financial conditions stabilized in early 2012, but stress has reemerged.** After an intense bout of volatility in late 2011—including soaring government bond yields, frozen bank funding markets, and adverse self-fulfilling dynamics—exceptional liquidity provision by the ECB in December (and again in February 2012), as well as other policy actions,³ and a strengthened firewall (through the EFSF/ESM), restored some degree of stability to financial markets. Abundant central bank provision of three-year funding to a large set of euro area banks (covering much of their 2012 refinancing needs) eased funding strains and interbank spreads narrowed. Government bond yields in key euro area deficit economies also fell. At the same time, several major advanced and emerging economies undertook monetary policy easing (or postponed tightening). Robust policy response and brighter prospects supported confidence and equity markets and sparked a rebound in capital flows to emerging markets.

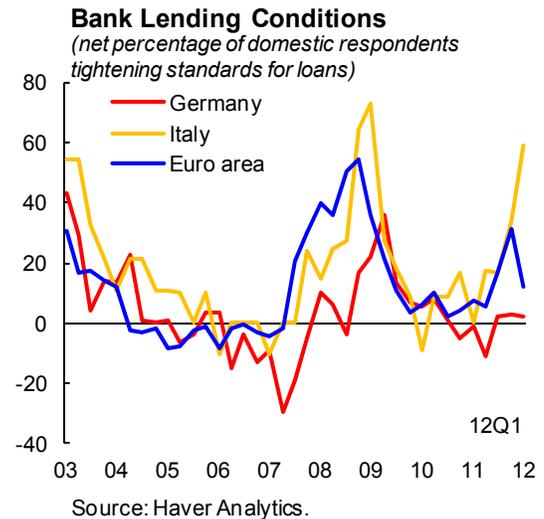


3. **The salutary effects from earlier exceptional policy actions have faded, prompting further action in Europe.** While euro area crisis management efforts continue, recent developments have been worrying and underscore the need for further action. Foreign investors continued to reduce exposures to periphery bond markets and market focus on weaker periphery banks has been intense—exacerbating adverse feedback loops between vulnerable sovereigns and banks reminiscent of events in 2011Q4. Bank funding costs and sovereign spreads in the periphery remain noticeably elevated, while market sentiment indicators and equity prices in certain markets are sharply lower. Market anxiety about Greece’s resolve to continue with fiscal and structural adjustment measures and possible euro exit, as well as concerns about the appropriateness of fiscal and banking policies in Spain unnerved investors—prompting renewed stress on financial markets. In response, Spain has sought external support (through the EFSF/ESM) to help recapitalize its banks—a welcome step. However, the difficulty in severing adverse feedback loops between weak banks and sovereigns in the periphery and wider challenges facing the euro area remain.

4. **Notwithstanding welcome improvements earlier, the latest developments demonstrate that the European crisis is far from over.** The situation remains fragile and susceptible to shocks. Past relief has proven only temporary before the crisis intensified again—a pattern which may repeat. Specific issues center on the following:

³ Such as further fiscal adjustment measures in Europe, structural reforms, debt restructuring in Greece, and longer-term steps for strengthening monetary union (e.g., the Fiscal Compact).

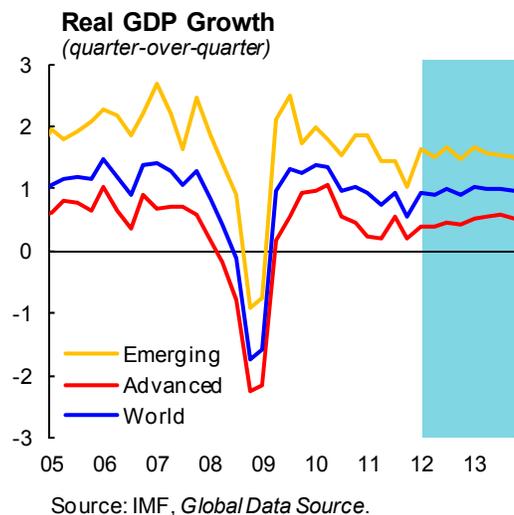
- Deleveraging by euro area banks is under way, both domestically and across borders.* Banks remain exposed to sovereign stress and the impact of weaker growth on asset quality. At the same time, high levels of leverage are no longer supported by private funding markets, while increased home bias (i.e., fragmentation along national lines) has reduced cross-border financing flows. The latest BIS data for 2011Q4 support this concern. While some balance sheet reduction is desirable, large-scale and synchronized deleveraging could be damaging for activity. Indeed, deleveraging pressures have led to tighter euro area lending standards and deceleration of credit growth, with considerable differentiation across countries. The ECB's recent actions have helped with a more orderly adjustment process and EBA guidance strives to ensure that capital-raising takes precedence over asset-shedding. Weakness in demand is also contributing to slow credit growth, particularly in some countries (e.g., Italy).



- Political and economic constraints on the size and speed of fiscal adjustment loom large, unsettling investors.* The narrow path between too much adjustment—which would hurt growth—and too little adjustment—which would hurt confidence—appears difficult to navigate. With adjustment fatigue setting in the political feasibility of planned consolidation in certain euro area members has been called into question, triggering adverse market reaction. Structural reforms and changes in relative wages required to regain competitiveness in deficit economies can be painful in the short term and may be resisted by large constituencies.

5. Assuming the euro area crisis is carefully contained, global growth should pick up gradually through the course of this year. Overall,

the WEO expects global growth to slow to 3½ percent at an annual rate in 2012 before reaccelerating again to about 4 percent next year—driven by emerging and developing economies, which are projected to expand by 5¾ percent in 2012 and 6 percent in 2013. Advanced economies are projected to grow only 1½ percent this year and 2 percent next year. Monetary policy remains very accommodative in advanced economies—with scope for further easing in some, but fiscal policy will tighten. As fiscal consolidation continues apace, a smooth hand-off from public to private sector demand is not assured.

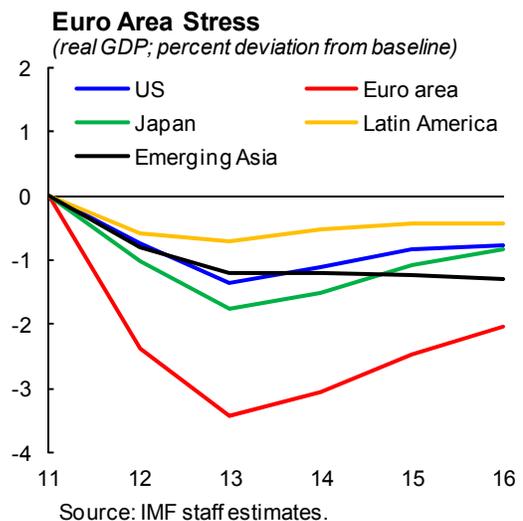


Thus, growth is likely to remain sluggish given legacies of the crisis. With slow growth, accommodative monetary policy in advanced economies, and swings in market risk perceptions, capital flows to emerging economies are likely to remain volatile.

6. **Inflation should remain subdued in general—though in emerging economies the picture is more differentiated.** Alongside considerable slack in advanced economies, headline inflation has eased; core inflation is low but positive; and inflation expectations are generally well anchored. Inflation behavior has been more diverse in emerging economies, given stronger growth and higher pass-through from recent past oil price increases. Given the impact of past policy tightening, some moderation in strong growth, lower non-oil commodity prices, and appreciating exchange rates, price pressures in emerging markets are expected to continue moderating (but with some exceptions). In a few economies, core inflation has remained elevated and some concerns over second-round effects from higher oil prices have emerged.

B. Global Risks

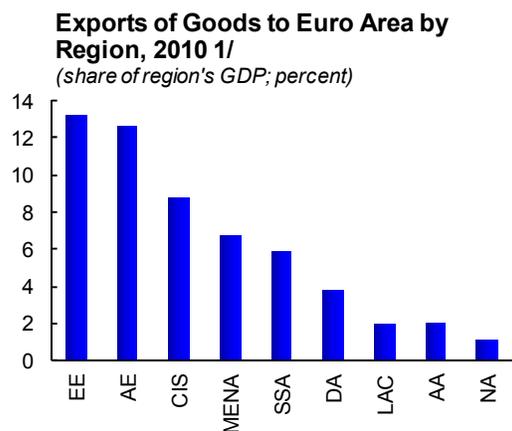
7. **The global economy remains highly vulnerable.** The most immediate threat is a further intensification of the euro area crisis. Other key near-term risks include an overly sharp fiscal tightening in the United States at the beginning of next year; and a large spike in oil prices triggered by fears over geopolitical tensions or supply disruptions. Over a longer term, unwinding of credit booms in some emerging economies may lead to a sharp slowdown and banking strains, particularly if potential growth rates have been overestimated. Given the absence of credible medium-term fiscal adjustment plans in Japan and the United States, one cannot discount completely risks of disruption in their bond markets. On the upside, stronger-than-assumed policy responses to the euro area crisis, and improved confidence could lead to faster growth.



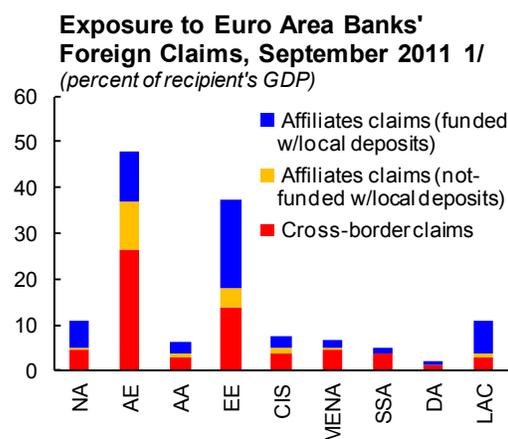
8. **Europe still remains in the danger zone amid elevated financial stress.** A key threat is a renewed escalation of adverse feedback loops between weak sovereigns, banks, and growth. Recent fragile gains have been eroding until recently due to these underlying dynamics. In a downside scenario, the pressures on sovereigns and banks would intensify and reinforce each other. Banks would jointly try to shore up their capital ratios by shedding more assets, which would lead to considerable credit contraction both

within and outside the euro area.⁴ Loss of confidence, heightened risk aversion, and an expected growth slowdown caused by deleveraging would push sovereign spreads up (by 100 basis points on average in the euro area) and force several euro area governments to front load fiscal consolidation (on average by an extra one percent of GDP in 2012 and 2013). While the impact of intensified stress would be felt most acutely in Europe, the rest of the world would also be affected via financial and trade linkages.⁵

9. **Cross-border spillovers depend on trade and financial exposures.** Naturally, other European countries—both advanced and emerging—have the largest trade and financial links to the euro area. CIS, MENA and SSA also depend significantly on exports to the euro area. Exposures through financial linkages are limited outside Europe, although euro area banks play an important role in certain specialized areas such as trade finance. U.S. financial institutions could be affected by derivative exposures to Europe. The impact on growth could be larger if political or market constraints preclude countercyclical fiscal response.



Sources: IMF, *Direction of Trade Statistics*; and IMF staff calculations.
1/ AA: Advanced Asia; AE: Advanced Europe excluding euro area countries; CIS: Commonwealth of Independent States; DA: Developing Asia; EE: Emerging Europe; LAC: Latin America and the Caribbean; MENA: Middle East and North Africa; NA: North America (Canada and US); SSA: Sub-Saharan Africa.



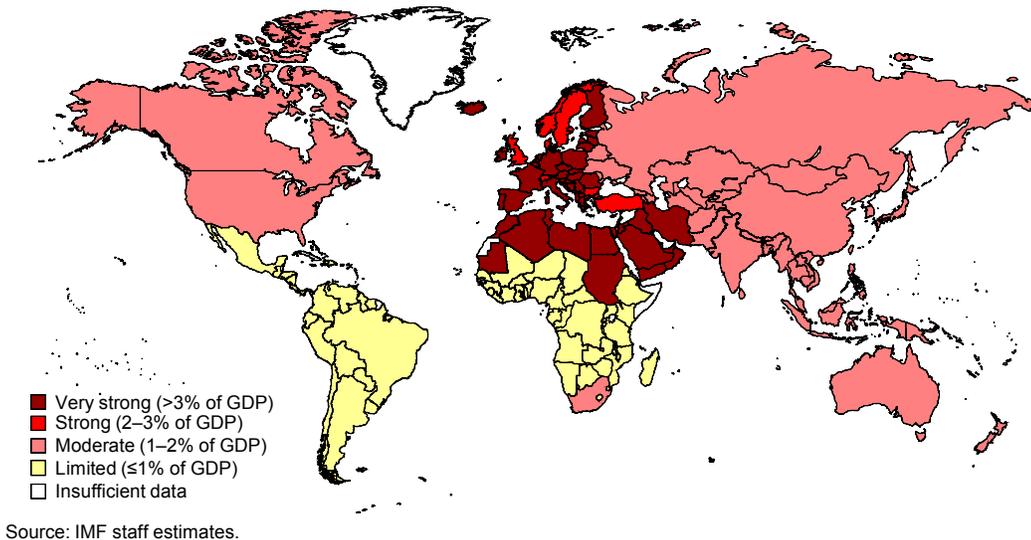
Sources: Bank for International Settlements (BIS); Cerutti (2011); and IMF staff estimates.
1/ AA: Advanced Asia; AE: Advanced Europe excluding euro area countries; CIS: Commonwealth of Independent States; DA: Developing Asia; EE: Emerging Europe; LAC: Latin America and the Caribbean; MENA: Middle East and North Africa; NA: North America (Canada and US); SSA: Sub-Saharan Africa.

⁴ Additional deleveraging is assumed to equal that in the April GFSR "weak policies" scenario relative to the baseline, translating into cutbacks of lending by EU banks of about \$0.7 trillion, with roughly half of that falling within the euro area.

⁵ Simulations of the adverse scenarios were performed using a 6-region Global Economic Model (GEM). Credit tightening was translated into higher corporate spreads for the purposes of simulation. In the map below, the stylized impact on the rest of the world was distributed by country using satellite models or in proportion to the weight of cross-border claims of euro area banks in their banking systems.

The Effects of an Intensified Euro Area Crisis on Various Regions

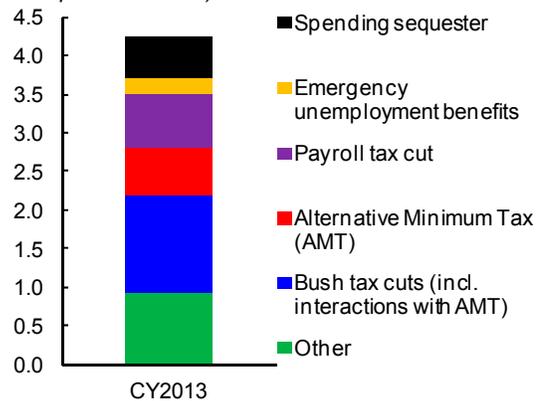
(peak deviation of output from WEO baseline)



10. **Near-term fiscal risks could jeopardize the recovery.** In the United States, fiscal policy is scheduled to contract markedly under current law, largely due to expiring tax provisions (e.g., the Bush tax cuts, alternative minimum tax threshold changes, payroll tax cut, and many others) and activation of automatic spending cuts (i.e., spending sequester). These measures amount to roughly 4 percent of GDP in 2013—a so-called “fiscal cliff.” For now, a lack of political agreement keeps uncertainty about the fiscal roadmap unresolved. Although bond yields remain low, when contentious political decisions—such as raising the debt ceiling—have come due in the past, uncertainty about the outcome led to unfavorable market reactions. In the euro area, while steady consolidation must continue, there are risks of overdoing fiscal tightening in a few countries next year in an environment of weak growth. Synchronized fiscal retrenchment poses risks of reinforcing dampening effects on global demand (via trade spillovers).

U.S.: The Risk of "Fiscal Cliff"

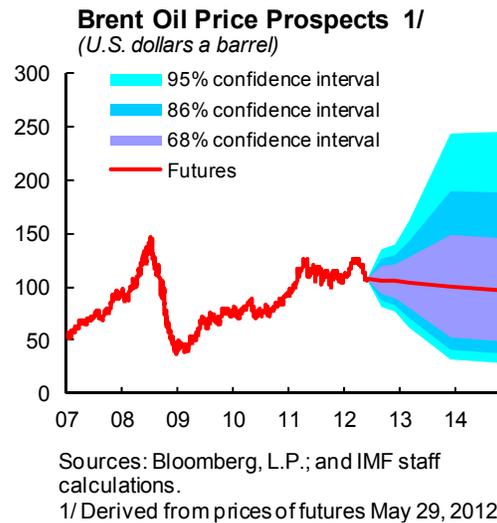
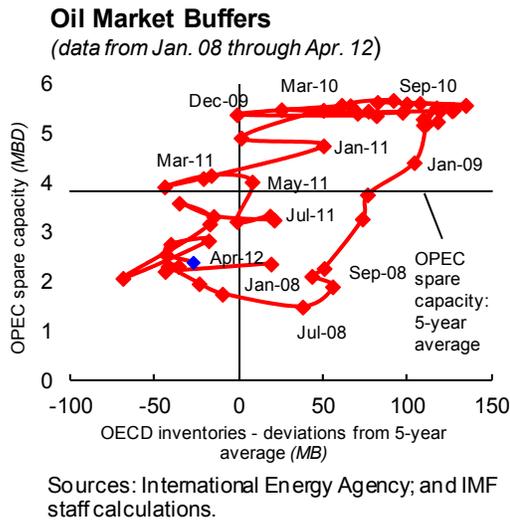
(impact on federal balance relative to CY2012; percent of GDP)



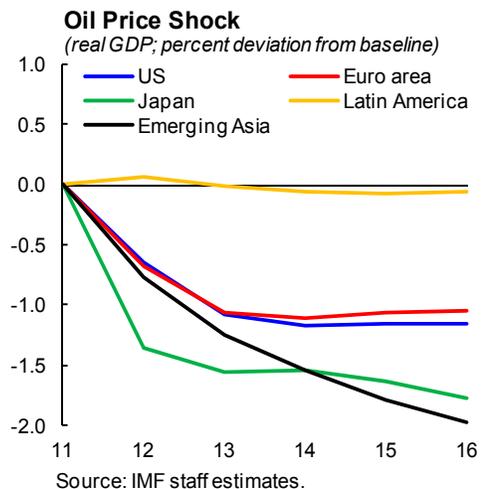
Source: IMF staff calculations.

11. **Another key risk is an oil supply shock given reduced policy space.** Although oil market risks appear to have eased recently, a major disruption in oil supply related to geopolitical tensions could have a large impact on oil prices and economic activity given limited spare capacity and lack of policy space. Traditional buffers against supply disruptions—OPEC spare capacity and OECD oil inventories—are *below* to historical averages. Precautionary oil demand appears to be part of these developments. While spot prices have eased some from

their recent peak in March 2012, option markets still show upside risks to oil prices despite weaker global growth (see fan chart), indicating inter alia that risks from a reduction in Iran's oil exports or closure of key transportation routes would be difficult to offset. Oil supply responses to rising prices have been stubbornly slow despite many years of higher prices, and bringing new oil capacity to markets remains a challenge for numerous technical reasons. Inelastic oil markets without large buffers are thus vulnerable to shocks.

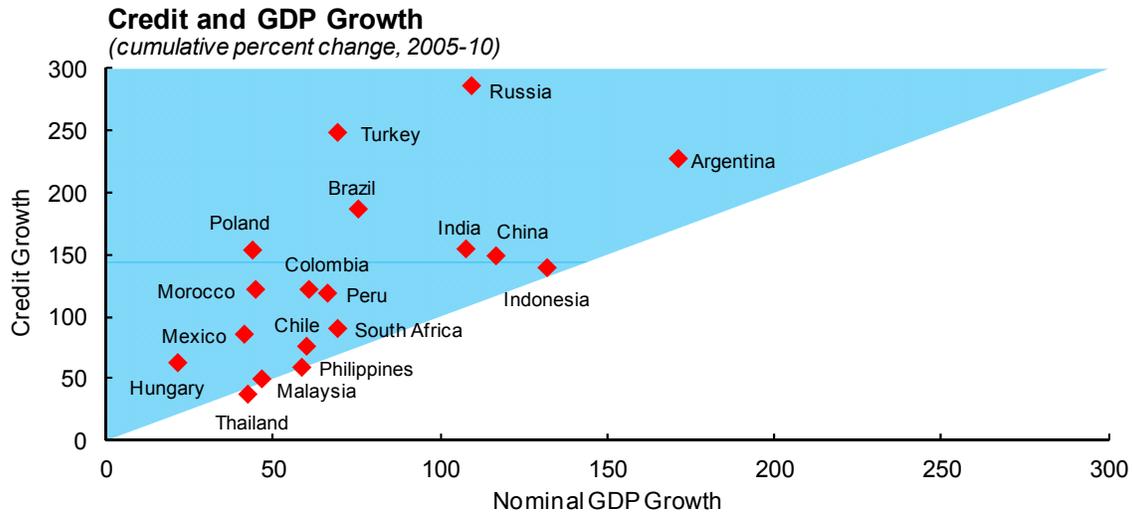


12. **A major shock would have a large impact on oil importers through prices and income.** In an adverse oil shock scenario, the real price of oil is assumed to rise 50 percent and then settle gradually at 40 percent above the baseline. This supply shock raises production costs, eroding profitability, and reduces the growth of real household income. But policies are constrained to support activity given monetary policy constraints and the lack of fiscal policy space to support demand. As a result, consumption and investment fall relative to the baseline, except in oil exporting countries, and global output is reduced by about 1 percent. It should be noted that the scenario does not consider the potential impact of an international conflict that might have added deleterious effects on consumer and business confidence, and stock prices.



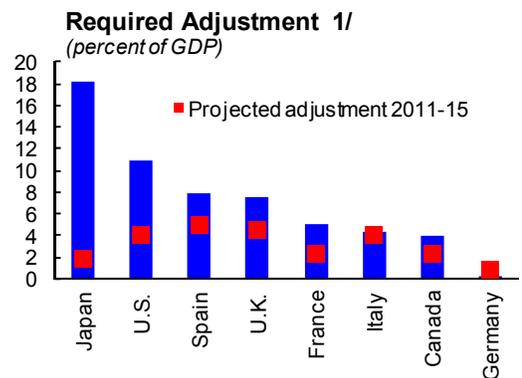
13. **Rapid credit expansion may have pushed output growth above sustainable rates in some emerging economies.** Benign financial deepening may well be part of the story, but historically episodes of high credit and GDP growth were usually followed by much lower growth. Credit quality tends to deteriorate during expansions, leading to a spike in nonperforming loans during subsequent downturns. In addition, a booming economy may lead to an overly optimistic assessment of the potential growth rate. An eventual reevaluation of growth may frustrate

expectations and amplify the boom-bust cycle. Bank loan growth has slowed in China and India, amid concerns about deteriorating loan quality. Elevated loan growth is, to varying degrees, raising concerns in other G-20 emerging economies as well (Argentina, Brazil, Indonesia, and Turkey).



Sources: IMF, *Global Data Source*; IMF, *International Financial Statistics*; and IMF staff estimates.

14. **A less proximate risk is linked to fiscal sustainability concerns in major advanced economies.** Investor confidence in rising sovereign debt in Japan and the United States cannot be taken for granted. Throughout the global crisis, these countries have retained their safe haven status. However, repeated failure to adopt credible and ambitious medium-term consolidation plans may eventually unnerve investors. Given the level of indebtedness, particularly in Japan, even a relatively minor increase in the interest rate would put substantial pressure on public finances. A disruption to Japan or U.S. sovereign bond markets, given their size and special role as benchmark and reserve assets, could affect stability in global financial and currency markets, with severe implications for economic activity.



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

1/ Blue bar reflects cyclically adjusted primary balance adjustment needed by 2020 and maintain through 2030 to bring the debt ratio to 60 percent of GDP by 2030. For Canada and Japan, the scenario assumes net debt targets (for Japan, a reduction in net debt to 80 percent of GDP, corresponding to a gross debt target of about 200 percent of GDP). These calculations, explained in the April 2012 *Fiscal Monitor*, adjust now also for the impact of debt levels on the interest-rate growth differential.

C. Policy Implications

15. **Euro area policies should secure financial stability, support economic growth, and lay the foundation for a stronger, more resilient monetary union.**

- *Containing and managing the crisis is an imperative.* Recent policy steps have opened a “window of opportunity” to get ahead of the crisis but the window may be closing. Providing ample liquidity to the financial system remains essential. A stronger firewall, as agreed by the euro area in March, is indispensable for containing the crisis—and prompt ratification of that agreement is needed to make it operational. In some cases, there will be need for official support using pan-European funds to help vulnerable banks to rebuild capital and for a mechanism at the central level to ensure that support does not jeopardize fiscal sustainability of national governments.
- *Appropriate macroeconomic policies are crucial to support economic and financial recovery.* To counter an expected decline in inflation below 2 percent and avoid deflation in periphery countries pursuing internal devaluation, monetary policy should be eased by using the remaining space for rate reduction and further embarking on unconventional measures. This would support activity (given appreciable slack) and the financial system (given stability risks). Sufficient fiscal adjustment is in train in most euro area economies. In case of small negative shocks, countries should adhere to their announced measures, but not necessarily to nominal targets (thus allowing automatic stabilizers to operate where financing allows). Thus consolidation paths should be defined in cyclically-adjusted terms. In a few countries, where the nominal deficit limit is binding in 2013, near-term adjustment plans appear overly ambitious. Euro area members under financial assistance must remain vigilant in fully implementing agreed reforms.
- *Stability-oriented financial policies should support bank restructuring.* While critical for relieving funding pressures, ECB actions (i.e., 3-year LTROs) can only be temporary. Keeping these policies in place too long can have undesirable side-effects—including support for non-viable banks and risks to the eurosystem balance sheets. Thus, efficient bank resolution mechanisms and maintaining a cooperative process of deleveraging (through EBA monitoring and macroprudential oversight) that avoids excessive credit tightening is important. The more the outlook deteriorates, the more important it will be to ensure that banks rebuild capital buffers via capital increases rather than via deleveraging.
- *Finally, governance and structural reform can help create a better functioning monetary union.* These reforms are discussed in Annex 2.

16. **Many other advanced economies are facing similar, if less acute, challenges.** An effective risk management approach to macroeconomic policies is important given the dangers.

- On fiscal policies, the pace of consolidation will depend on circumstances and getting the pace right is essential. The current pace of fiscal consolidation appears broadly appropriate, though there are a few exceptions. In case of negative shocks, automatic stabilizers should be allowed to operate freely. If conditions worsen substantially, policies might need to be recalibrated to be more supportive of growth. Near-term fiscal risks in the United States will need to be managed carefully by agreeing on tax and spending plans very soon, with the overarching objective of gradually stabilizing and reducing the public debt ratio. At the same time, *Japan and the United States* should urgently adopt credible and substantial medium-term consolidation plans. Stronger fiscal institutions and rules would support the adjustment in some economies.
- Monetary policy should be kept very accommodative, including through unconventional measures, in line with the objective of maintaining price stability. Some countries should consider additional easing given current conditions and fiscal policy constraints. Abundant liquidity should be readily available. At the same time, weaker banks need to be restructured or resolved and stronger financial institutions recapitalized. Financial regulation and supervision need to be improved, particularly over shadow banks, and cross-border cooperation of supervisory authorities must be strengthened.

17. **Emerging economies are generally in good shape, but facing a difficult balancing act.** While activity is generally strong, domestic demand is moderating with downside risks emanating from advanced economies. Volatile capital flows in the current environment complicate macroeconomic management. Appropriate policy responses will vary depending on key aspects.

- Where inflation pressures have eased, but fiscal fundamentals are weaker, monetary policy can be used to support activity if necessary, with macro-prudential measures employed as needed to prevent asset bubbles;
- Where inflation is under control, public debt is modest, and external surpluses are large (e.g., China), fiscal consolidation may be deferred in the near term, and poorer households could be supported through expanded social spending;
- Where inflation and public debt are high (e.g., India), focus should be on rebuilding policy space, with caution toward policy easing unless growth materially weakens.
- Should oil price risks materialize, central banks should take heed to avoid translating the shock into broader inflation pressure through “second-round” effects into wages and prices—a task made easier by lower food prices; using fiscal space to support activity may be an option though many are constrained; and budgetary pressures from higher oil prices (through fuel subsidies) create another complication in some economies.



GROUP OF TWENTY

EURO AREA IMBALANCES

Annex to Umbrella Report for G-20 Mutual Assessment Process



Prepared by Staff of the

INTERNATIONAL MONETARY FUND*

*Does not necessarily reflect the views of the IMF Executive Board.

ANNEX 2: EURO AREA IMBALANCES¹

SUMMARY

Large euro area imbalances have resulted in vulnerabilities exposed by the current crisis. While capital flows across the monetary union were part of convergence and anticipated, key imbalances resulted to a large extent from overly optimistic expectations, mispricing of risks, inadequate adjustment to shocks, insufficient oversight or governance in recent years as well as cyclical factors. Fundamentally, there was no effective constraint on borrowing in good times and no effective crisis management mechanism in place for bad times. With monetary policy and the exchange rate responding to area-wide conditions, adjustment to country-specific shocks proved inadequate.

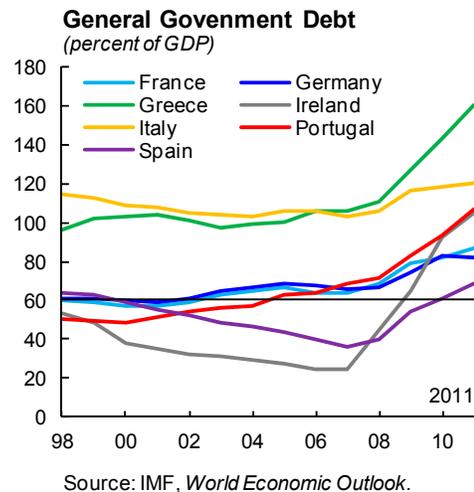
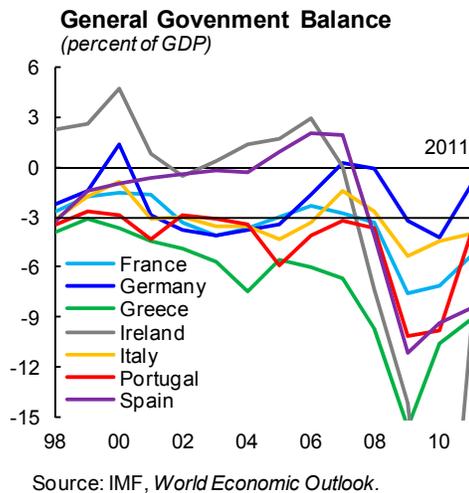
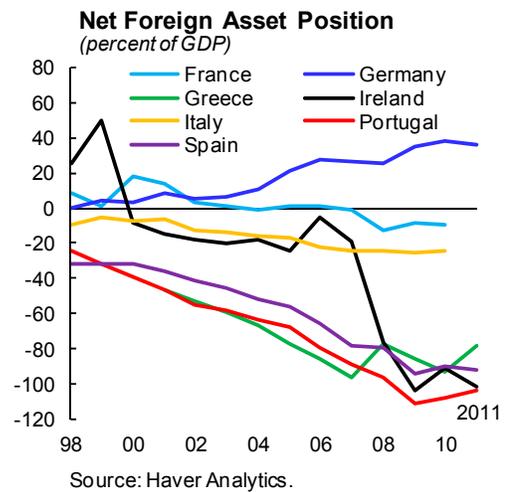
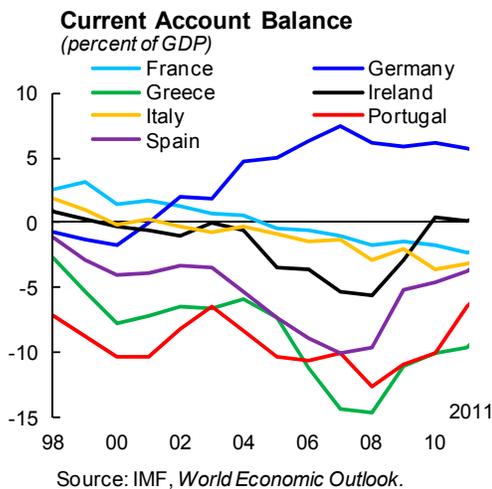
Imbalances have declined with the crisis and steps have been taken to reduce them further. Current account balances of deficit economies improved beyond that implied by standard cyclical effects. Many factors that contributed to the imbalances are not present anymore. Also, several steps have been taken to reduce external and fiscal imbalances further, such as fiscal and structural adjustment in the program countries, initiatives to improve competitiveness in the periphery, and strengthened economic and budgetary governance. Narrowing intra-area imbalances will require significant relative price adjustment, while it is important to avoid deflation in deficit countries in the periphery pursuing internal devaluation.

Efforts on several fronts are still needed to build a stronger monetary union. Specifically: (i) moving toward a *pan-euro-area financial stability framework*, which inter alia implies centralized powers in banking supervision and resolution, and common deposit insurance; (ii) *stronger fiscal integration*, including national fiscal rules, as envisaged by the Fiscal Compact, complemented by fiscal risk sharing to ensure that economic dislocation in one country does not develop into a costly fiscal and financial crisis for the entire region; (iii) *structural reform* to strengthen competitiveness and improve the ability to adjust to shocks, including by a wage-setting mechanism that is more responsive to firm-level economic conditions, reducing labor market duality and in general barriers to hiring and firing, and lowering barriers to domestic and foreign competitions in product markets. There is growing awareness among European policy makers to move along these lines and active efforts are underway to build the necessary consensus.

¹Prepared by Vladimir Klyuev under the guidance of Hamid Faruqee and Emil Stavrev, with the help of Min Kyu Song and Anne Lalramnghakhleli Moses.

I. EVOLUTION AND OUTLOOK OF IMBALANCES²

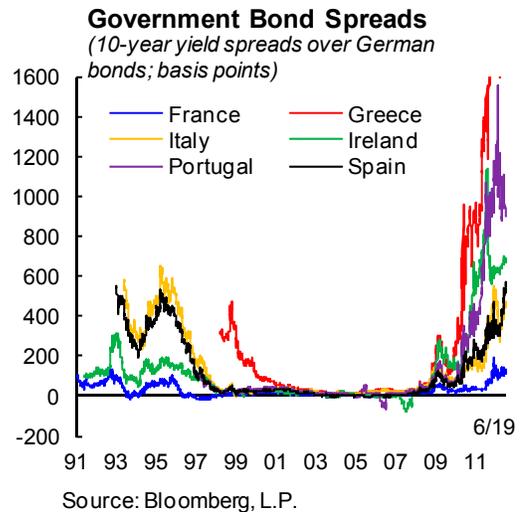
1. **External and fiscal imbalances in the euro area widened in the decade prior to the crisis, and fiscal balances deteriorated further during the crisis.** Intra-euro area external imbalances widened by about 4 percent of the euro area GDP during 1999–2007, with the current account balances of surplus and deficit countries each widening by about 2 percent of the euro area GDP. As a result, net foreign asset positions of the member countries have diverged significantly. Fiscal accounts did not strengthen sufficiently or even worsened in several members prior to the crisis despite generally favorable conditions and lower borrowing costs for most under the Economic and Monetary Union (EMU)—and deteriorated across the board during the crisis. With respect to the area’s fiscal governance framework, the Stability and Growth Pact (SGP) limits on public debt and deficits did not prove binding.



² The analysis on euro area imbalances draws in part on Jaumotte et al., 2012, “Making EMU Work”, forthcoming IMF Staff Discussion Note.

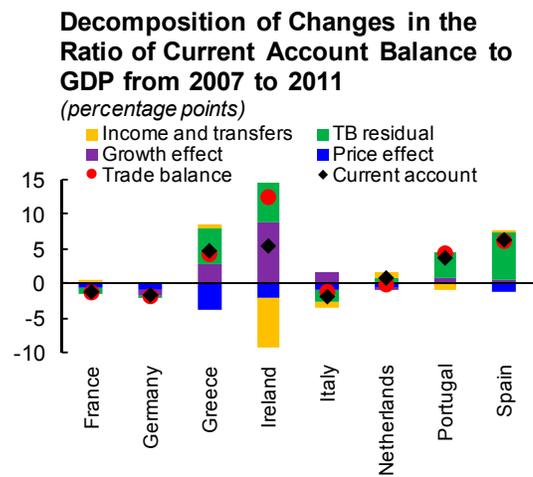
2. **Initially, growing imbalances did *not* cause much concern given diverse starting points of members, while the euro area as a whole remained close to balance externally.**

High borrowing on the part of lower income members was thought to be benign and natural in anticipation of efficiency gains and income convergence from joining monetary union. With the elimination of exchange rate risk, country risk premia also essentially vanished—providing easy private funding conditions for external deficits. The spreads on sovereign bonds virtually disappeared, indicating that markets viewed all euro area governments as equally creditworthy—or expected weaker members to be bailed out by stronger members as part of the EMU. However, during the global crisis, the convergence in spreads unraveled. Several economies—characterized by large current account deficits and/or weak fiscal positions—have come under intense market pressure, with spillovers felt in the rest of the euro area and beyond.



3. **The global financial crisis has triggered a noticeable narrowing of external imbalances.**

As world trade collapsed, current account balances of deficit economies improved substantially—well in excess of what would have been expected given the fall in output based on standard trade elasticities (i.e., “residual” changes are large), despite a significant increase in interest costs on their external debt.³ Substantial demand compression following the collapse of credit, asset and housing booms and a decline in confidence in periphery economies, reinforced by fiscal consolidation, played an important role in this wrenching adjustment. Many of the factors identified below as contributing to the imbalances—such as excessive optimism and easy financial conditions begetting consumption and construction booms—are out of the picture now. Hence, much of the adjustment observed so far is likely to be lasting.

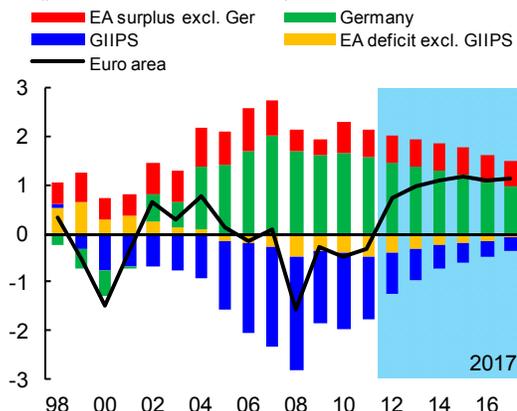


³ At the same time, the existence of the monetary union—with common payment mechanism and central bank lending facilities—helped avoid an even more abrupt adjustment.

4. **Several steps have been taken to reduce external and fiscal imbalances further.**

Going forward, EU/IMF programs with Greece, Ireland and Portugal envisage substantial fiscal and structural adjustment. Initiatives to improve competitiveness and boost jobs and growth in the periphery have been announced. Economic and budgetary governance has been strengthened in a series of legislative acts, directives, and treaties. At the same time, the difficulty of regaining competitiveness in the context of a monetary union should not be underestimated, particularly given the low tradable base in the southern economies. Moreover, for deficit economies requiring relative price adjustment to help narrow imbalances, it will be important to avoid deflation in the periphery alongside the needed internal devaluation.

Euro Area Current Account Balance
(percent of euro area GDP)



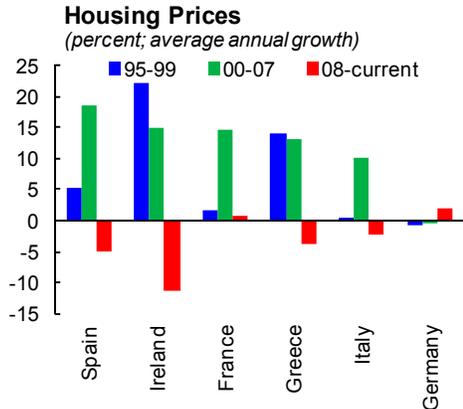
Source: IMF, *World Economic Outlook*.

II. CONTEXT AND DRIVING FORCES OF IMBALANCES

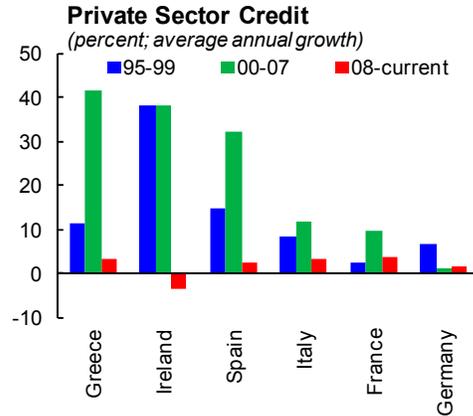
5. **The euro area included countries with diverse income levels and economic structures.** The more salient differences were in income levels, labor market institutions, industrial specialization, and financial development. Differences in product specialization were felt not only in the high-level division into services, industry, construction and agriculture, but more in specialization within those broad areas. For example, financial services played a prominent role in some members, while some others had large tourism sectors.

6. **The advent of the euro gave rise to anticipation of integration and convergence.** Income and productivity levels differed considerably across members at the inception of the monetary union. Optimistic expectations of faster catch-up generated consumption and housing booms in several countries, facilitated by easy financial conditions. The resulting current account deficits led to accumulation of foreign liabilities, even though the capacity to service those obligations was not growing commensurately.

7. **As interest rates converged, domestic demand, housing and credit boomed in the periphery.** In the context of significant trade and financial integration between members since the inception of the euro, the compression of the risk premium represented a dramatic improvement in borrowing conditions for economies with large deficits and made it easy for them to finance fiscal and external imbalances. Construction activity expanded significantly, particularly in Spain. Housing prices soared in many euro area economies, including in some core members, like France—but Germany was a notable exception. Stock markets experienced a bull run between early-2003 and mid-2007, with indices rising on average considerably more in deficit than in surplus economies. At the same time, leverage in the financial system increased throughout the euro area.



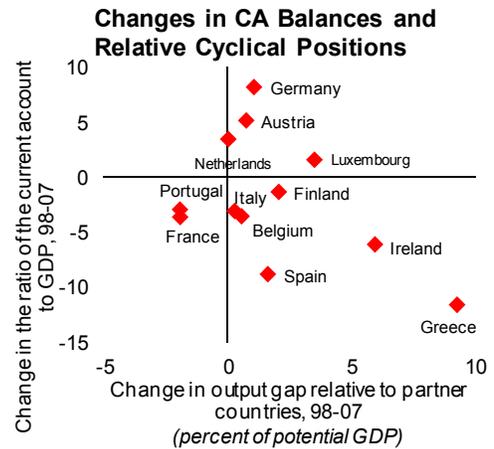
Sources: Bank for International Settlements (BIS); and Organization for Economic Cooperation and Development.



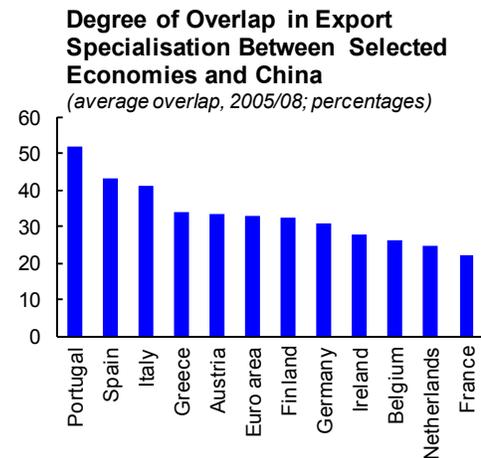
Sources: IMF, *International Financial Statistics*; and IMF staff estimates.

8. **Divergent cyclical positions also contributed to the accumulation of external imbalances.** Growth rates differed considerably in the euro area during the upswing—both in absolute terms and relative to potential—and faster-growing countries tended to accumulate larger current account deficits, reflecting demand expansion in excess of productive capacity.

9. **External shocks affected euro area economies differently, as global trade and specialization proceeded.** Paramount among them was the rapid growth of emerging Asia, particularly China, and its increasing role in international trade. Many periphery economies lost market share to low-cost competition, while Germany benefited from growing external demand for capital goods from these same trading partners.⁴ In a somewhat similar fashion, German manufacturing firms were at the forefront of establishing assembly lines in neighboring Central European economies, taking advantage of relatively cheap, skilled labor and rapidly growing productivity. Many of those assembled goods were sold to other euro area economies, worsening their trade deficits with Emerging Europe (as well as overall deficits).



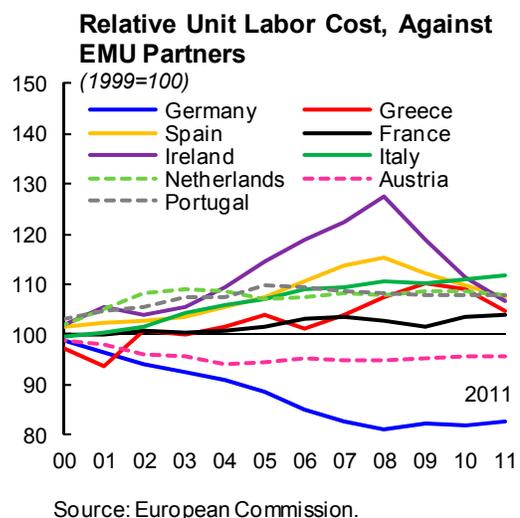
Sources: IMF, *Global Economic Environment*; and IMF, *World Economic Outlook*.



Source: Mauro, Forster, and Lima (2010).

⁴ Chen, R., G-M. Milesi-Ferretti, and T. Tressel, 2012. *External Imbalances in the Euro Area*, forthcoming IMF Working Paper.

10. **Competitive positions diverged considerably, reflecting disparate wage and price developments—partly due to underlying structural factors.** Booming domestic demand kept inflation considerably above the euro area average in several members, even though the productivity gap declined only slowly. As a result, unit labor costs rose substantially in those economies, while Germany experienced a dramatic decline in its relative unit labor costs thanks to wage moderation.⁵ In contrast, rigidities in wage and price setting in the periphery kept inflation relatively high on a persistent basis.



11. **Adjustment to asymmetric shocks was insufficient, partly as mechanisms were not well developed.** Country-specific shocks or common shocks that affected countries unevenly because of structural differences could not be offset by area-wide monetary policy or exchange-rate movements. The alternative mechanisms for dealing with asymmetric shocks were not sufficiently developed. Prices and wages did not react to developments in external competitiveness—in fact, external deficit countries persistently ran higher inflation than surplus economies. Even where a domestic demand boom had weakened (e.g., in Portugal before its entry into EMU), wage and price growth remained above the euro-area average. Labor mobility across borders remained low.

III. ROLE OF POLICIES AND FRAMEWORKS

12. **Many failed to use good times to build up needed fiscal space.** In high-debt economies, the public debt-to-GDP ratio continued to rise (Greece) or declined only slowly (Italy), despite debt servicing relief coming from much lower interest rates. Asset booms made fiscal positions appear sounder than they were. In some booming economies (e.g., Ireland and Spain), debt ratios declined, but given the extent to which ample fiscal revenues had been linked to unsustainable asset market developments, structural balances remained fundamentally weak. That weakness was unmasked by the crisis. In addition, Spain and particularly Ireland had allowed their banks to overextend credit, necessitating costly public bailouts when the crisis hit. In Portugal, growth was sluggish after its entry into the euro area following an earlier credit boom, while fiscal balances were generally weak.

⁵ Of course, differential movements in relative ULC indices do not by themselves allow one to distinguish between divergence and convergence in the *level* of competitiveness. However, given concurrent developments in the trade balances, one can be fairly confident that the competitiveness gap between Germany and southern euro area economies increased over the course of the 2000s.

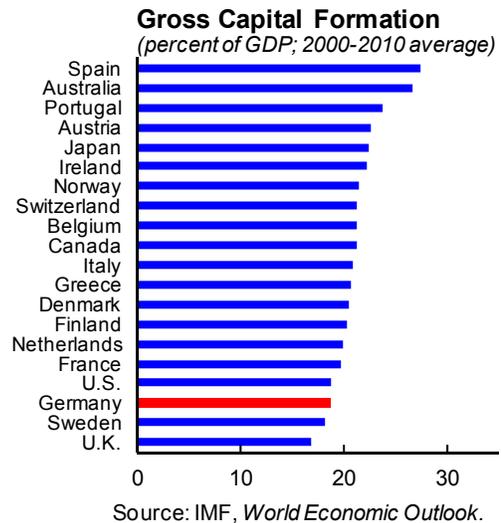
13. **Financial oversight was lacking—as was market discipline.** With a common currency and undifferentiated interest rates, there was no appreciable market or policy pressure on deficit members losing external competitiveness. Easy access to credit continued despite persistent budget and external deficits and deteriorating net foreign assets positions. Market assessment of convergence prospects may have been overly optimistic. Relatedly, investors failed to see that fiscal positions in several countries were distorted by unsustainable asset booms. In addition, moral hazard may have been a factor given possible perceptions that, despite the absence of explicit arrangements, a government or a large financial institution would not be allowed to fail. As a result, easy credit from core country banks enabled wider deficits in the periphery.⁶ Rapid credit expansion was also due to the loosening of underwriting standards and the lack of systemic oversight at the national level. This was compounded by poor quality of bank capital; the varied application of risk weights, and high leverage embedded in instruments in ways that were not transparent. Financial sector supervisors and sometimes even banks failed to understand where risks were located.

14. **While financial integration proceeded rapidly in key areas, the institutional framework lagged behind.** Fast integration of wholesale and bond markets provided ample financing to the private and public sectors of the periphery countries. However, despite growing financial linkages between countries, regulation and supervision remained under national purview with limited cross-border frameworks (e.g., memoranda of understanding). With respect to fiscal governance, the SGP limits on government deficits and debt were not stringently enforced, with their enforcement undermined by the fact that on occasion it was the largest and most influential members that exceeded the limits. Institutional reasons for SGP's relatively weak bite included the absence of an operational benchmark for the debt criterion, the absence of a procedure for addressing imbalances, and the absence of a credible enforcement mechanism.

15. **The weakness of EMU's institutional framework was particularly manifest during the crisis.** Area-wide financial stability risks—given the degree of integration and leverage—had been underestimated. Once the sustainability of fiscal and external positions of several member countries had been called into question, response mechanisms had to be improvised. There was no formal *ex ante* arrangement for fiscal risk sharing that would allow stronger members to support weaker ones. The ECB was explicitly prohibited from playing the role of a lender of last resort to governments directly in any significant way. Increases in deposit insurance required difficult coordination to prevent bank runs, while maintaining a level playing field. Resolution of troubled financial institutions with large cross-border activities posed serious challenges. Moreover, nationally-based supervision permitted strong linkages between sovereigns and banks to develop.

⁶ As mentioned in the IMF's *Sustainability Report on Germany* (<http://www.imf.org/external/np/country/2011/mapgermany.pdf>), deeper issues with the business model of publicly-owned German *Landesbanken* may have made them particularly susceptible to such investments.

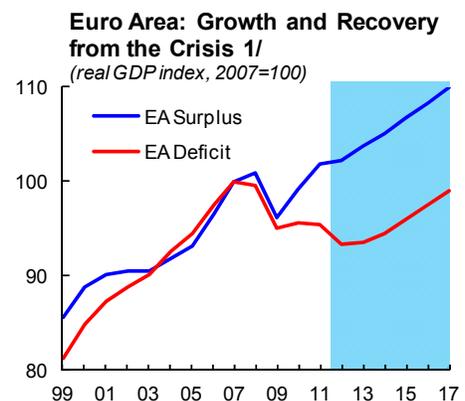
16. **Finally, persistently large current account surpluses—while not posing sustainability concerns—also need some policy attention.** In Germany, several proximate reasons were identified for large and persistent surpluses, including *favorable product specialization* helping Germany benefit from a cyclical upswing in global demand while being relatively insulated from low-cost competition from emerging Asian producers; *moderate wage growth* helping it maintain competitiveness; *fiscal consolidation* in the mid-2000s; *high household and corporate saving* and *low private investment*.⁷ These factors reflected a combination of deeper causes, such as an overhang from the reunification boom; doubts about the durability of the expansion; uncertainty about income prospects arising as a result of labor market and pension reforms; unfavorable demographics; and certain financial sector distortions. It should be noted that the reasons for Germany's high saving and low investment rates are not fully understood. Given that the euro area is open to external trade, one cannot assert that German surpluses directly "caused" deficits in the periphery. Strong trade surpluses in Germany were largely *not* driven by intra-area trade balances. At the same time, stronger domestic demand in Germany would be beneficial both for the country itself and for its trading partners.



IV. HOW TO BUILD A STRONGER UNION

17. **The euro area faces the challenge of simultaneously dealing with the crisis and laying the foundation for a stronger and more resilient union.** In the near term, resolving the euro area crisis will require, among other things, a combination of measured fiscal adjustment with ample liquidity support and financing for banks from the ECB and, if necessary, from official creditors. Requisite steps in the near term are discussed in Annex I. To anchor these crisis management efforts, however, further action over time is also needed to lend clarity and confidence in the future of a healthy and resilient EMU by addressing deeper-seated issues.

18. **While some compression in imbalances has already occurred, deeper fundamental adjustment is**



Source: IMF staff estimates.

1/ Euro area external surplus countries: Austria, Belgium, Finland, Germany, Luxembourg, and Netherlands.

Euro area external deficit countries: Greece, Ireland, Italy, Portugal, and Spain.

⁷ Ibid.

still also required. With the crisis, considerable current account adjustment has primarily reflected painful demand compression in deficit economies, alongside the fall in output. This shift relative to the pre-crisis trend in the periphery is likely to persist (see graph). Further improvement in imbalances depends on a restoration, over time, of underlying competitiveness in current account deficit economies through a combination of wage adjustment and accelerated productivity growth, both of which require structural reform. It is important to avoid deflation in deficit economies as part of the relative price adjustment process—a responsibility for the ECB consistent with its price stability mandate. Stronger demand from surplus countries would support a further narrowing of the imbalances. Inflation in surplus countries could be temporarily higher relative to deficit economies to help restore the latter’s wage and price competitiveness without jeopardizing area-wide inflation objectives.

19. **Efforts on several fronts are needed to build a better functioning monetary union:**

- *Moving toward a pan-euro-area financial stability framework.* The monetary union will function effectively only if the financial system is well integrated, which inter alia implies centralized powers in banking supervision and resolution, and common deposit insurance.
- *Stronger fiscal integration.* Stronger national fiscal rules, as envisaged by the Fiscal Compact, and greater national coordination of fiscal policies will help maintain fiscal sustainability—provided stringent enforcement. But rules need to be carefully designed and implemented, complemented by fiscal risk sharing to ensure that economic dislocation in one country does not develop into a costly fiscal and financial crisis for the entire region.
- *Institutional monitoring and constraints on excessive imbalances.* The European Union’s new Macroeconomic Imbalances Procedure is a useful step in extending surveillance over national policies beyond the fiscal realm. For the framework to be effective in containing problem imbalances, proper diagnosis and *enforcement* will be essential.
- *Structural reform to strengthen competitiveness and improve the ability to adjust to shocks.* The collective bargaining process should be made more responsive to firm-level economic conditions. Public wage restraint would not only facilitate fiscal adjustment, but also help contain economy-wide wage growth. Differences in employment protection for different categories of workers should be reduced, and in general barriers to hiring and firing should be lowered. Better targeted social safety nets would provide more efficient protection for vulnerable groups. In product markets, barriers to domestic and foreign competitions should be reduced.



GROUP OF TWENTY

ENHANCED ACCOUNTABILITY ASSESSMENTS

Annex to Umbrella Report for G-20 Mutual Assessment Process



Prepared by Staff of the

INTERNATIONAL MONETARY FUND*

*Does not necessarily reflect the views of the IMF Executive Board.

ANNEX 3: ENHANCED ACCOUNTABILITY ASSESSMENTS¹

SUMMARY

Overall, members have made progress towards meeting their policy commitments in the Cannes Action Plan. Specifically:

- **Financial policy.** Members have advanced the global regulatory reform agenda and implementation of the new capital and liquidity framework is underway, bearing in mind the need to avoid intensifying the headwinds to growth from ongoing bank deleveraging.
- **Fiscal policy.** The pace of near-term fiscal consolidation is broadly managing a delicate balance between supporting recovery while rebuilding confidence. Most members also have credible medium-term consolidation plans to restore sustainability and/or rebuild policy space.
- **Monetary and exchange rate policies.** Price stability has been maintained in advanced economies. Some progress has also been made toward increasing exchange-rate flexibility and reducing the pace of reserve accumulation in major emerging surplus economies.
- **Structural reform.** Advanced economies have taken action to raise labor force participation and to strengthen fiscal frameworks, while emerging economies have been improving social inclusion.

However, further action will be needed to meet commitments and to achieve the shared growth objectives. In particular:

- **Financial sector reform.** Regulatory reforms need to be implemented on a consistent and steady basis across countries. Further work is needed in a number of key areas—including cross-border resolution and supervision, reform of financial derivatives, and closing critical data and information gaps. Macroprudential frameworks and instruments are needed.
- **Sound public finances.** Japan and the United States need to promptly adopt credible and more ambitious medium-term consolidation plans to reduce high public debt. Reforms to address longer-term fiscal pressures from ageing and health care costs are also needed in many economies.
- **Global demand rebalancing.** To complement steady consolidation in deficit economies, more action is needed in emerging surplus economies to facilitate demand rebalancing by addressing domestic distortions—notably, reducing high saving in China and boosting investment in other surplus economies, complemented with further exchange rate appreciation.
- **Employment and growth.** In advanced economies, more attention is needed to address persistently high unemployment—focusing more on *demand-side* measures (where possible). Scope to enhance potential growth and employment includes strengthening competition in services.

¹ Prepared by Florence Jaumotte and Samya Beidas-Strom under the guidance of Hamid Faruqee and Emil Stavrev, with the help of David Reichsfeld, Min Kyu Song, and Anne Lalramnghakhlili Moses.

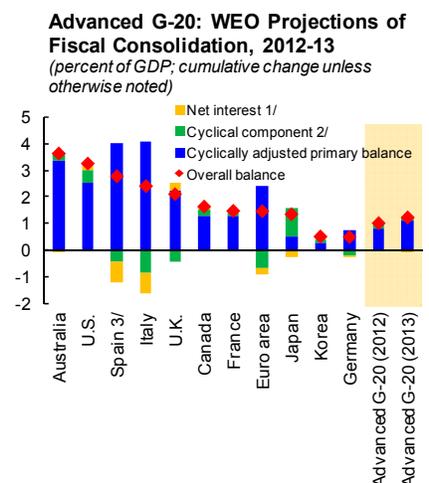
I. FISCAL POLICY

Members committed to securing economic recovery and fiscal sustainability. Near-term consolidation is mostly managing a delicate balance between supporting recovery while rebuilding confidence. Progress has been achieved in reducing deficits in most advanced economies. However, credible and more ambitious medium-term consolidation plans are urgently needed in Japan and the United States, including to guard against risks of future market instability. Fiscal vulnerabilities in India, Russia, and Turkey should also be addressed. Structural fiscal reforms need to be deepened across the membership to address demographic challenges and rising health care costs, encourage demand rebalancing, and strengthen fiscal institutions.

A. Advanced Economies

1. **In the short run, advanced economies appropriately committed to sustaining recovery, while progressing toward fiscal sustainability, considering national circumstances.** Based on Fund staff's projections (which assume likely policies, not authorities' official plans), the pace of near-term fiscal consolidation is generally proceeding in steady fashion (Box 1 explains how to measure the fiscal stance). Overall, the projected increase in the cyclically-adjusted primary balance of about 1 percent of GDP in 2012 is appropriate, further lowering deficits while avoiding an excessive tightening that could worsen economic conditions. From a collective perspective, the projected fiscal consolidation should contribute to global demand rebalancing, as consolidation efforts are larger in advanced deficit economies than surplus economies.

- Japan and the United States* are delivering on their commitments to implement in a timely manner a package of near-term measures to sustain growth and, in the case of Japan, to aid reconstruction after the earthquake. In Japan, a series of supplementary budgets were passed for reconstruction spending, totaling 4 percent of GDP. In February 2012, the U.S. Congress approved a full-year extension of the payroll tax cuts and emergency unemployment benefits, thereby preventing a sharper tightening of fiscal policy.
- Concerns remain, however, regarding excessive tightening in the *United States* over next two years ("fiscal cliff"). Under current U.S. laws, many tax provisions begin to expire in 2013, just when deep automatic spending cuts kick in. The President's latest Budget proposal also implies a large consolidation in 2013 (3 percent of GDP). If either of these were to materialize, it would significantly undermine the recovery. To minimize attendant uncertainties, policymakers should agree as soon as possible on fiscal plans involving a more moderate adjustment for next year, as well as sustained and steady adjustment over the medium term.



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

1/ Difference between overall balance and primary balance.

2/ Difference between primary balance and cyclically adjusted primary balance.

3/ WEO projections for Spain preceded the 2012 budget announcement by the new government.

Box 1: Computing Cyclically Adjusted Primary Balances

The change in the cyclically-adjusted primary balance (CAPB) as a share of potential output is a standard measure of the fiscal stance, although the concept is not without drawbacks.

Calculating the CAPB entails decomposing the primary balance into two parts: a cyclical component, representing the fiscal response to fluctuations in the business cycle, and a discretionary part, reflecting the policy stance net of the impact of the cycle. Net interest payments are excluded from this concept since they are not directly under the control of the government. Changes in the cyclical component reflect the impact of automatic stabilizers.

Calculating the CAPB involves three steps:

Step 1: Estimating the cyclical position of the economy, or the output gap—that is, the percentage deviation of actual Y from potential output Y^* : $gap = (Y - Y^*) / Y^*$

Step 2: Estimating the response of budgetary aggregates, or in other words the sensitivity of government expenditure, $\varepsilon_{G,Y}$, and revenue, $\varepsilon_{R,Y}$, to changes in the output gap.

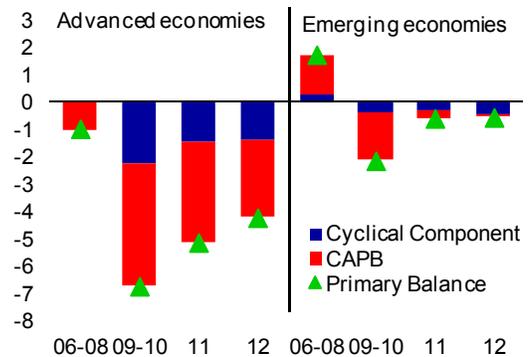
Step 3: Calculating the CAPB as the difference between cyclically-adjusted revenue and expenditure:

$$CAPB = Revenue / (1 + Outputgap)^{\varepsilon_{R,Y}} - Expenditure / (1 + Outputgap)^{\varepsilon_{G,Y}}$$

Headline primary deficits in G-20 economies reflect, to a large extent, the discretionary measures adopted in support of the economy (Figure 1). The CAPBs narrow as these discretionary measures are gradually unwound; since output gaps remain negative, the cyclical component of the primary balance accounts for a growing share of the deficit, particularly in advanced economies.

Caution is needed, however, when interpreting CAPBs. First, the output gap is not an observable but an estimated variable. The estimates vary depending on the methodology used to calculate potential GDP. It is often revised backward over time as the assessment of the trend or potential output of an economy changes. Second, cyclically-adjusted revenues may still embed the effect of asset or commodity price fluctuations. These could distort measures of the fiscal stance, especially if they are sizable and temporary (examples are pre-crisis revenue booms associated with financial profits in Spain and the United Kingdom; and the high sensitivity of revenue to commodity prices in oil- or commodity-producing countries). And third, failure to account for changes in the composition of output as well as one-off or temporary revenue and expenditure items can also contribute to over/underestimating the CAPB. The concept of structural primary balance attempts to address the latter two caveats, i.e. adjusting the primary balance beyond the cycle.

Figure 1: Decomposition of Primary Balance, G-20 Countries, 2006-2012 1/
(percent of potential GDP)



Source: IMF, *World Economic Outlook*.
1/ For the United States, excluding financial sector support.

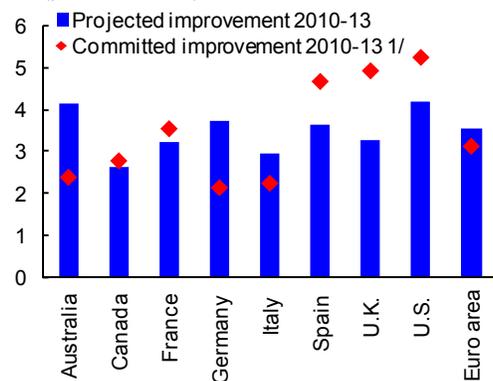
- In the *euro area*, economies under market scrutiny committed to improve confidence by proceeding with fiscal consolidation and strengthening fiscal frameworks, but market pressures remain elevated for some economies. A few economies, though, should take care to avoid over-tightening in 2013 given a fragile recovery. In *Italy*, an ambitious and frontloaded consolidation is underway, including a significant pension reform. *France* reiterated its commitment to comply with the Toronto deficit target despite a downward revision to growth and passed two fiscal packages in 2011. There is a concern that the nominal targets under the Excessive Deficit Procedure, set some time ago, are proving increasingly tight for some countries as real GDP growth falls short of projections. Countries should let automatic stabilizers work as long as they can comfortably finance deficits, instead of offsetting cyclical revenue losses with additional structural consolidation.
- Given the weak near-term growth outlook, *the United Kingdom* has allowed the pace of structural fiscal adjustment to slow in response to lower estimates of near-term potential growth.

2. **In the medium term, all countries committed to consolidation and returning to sustainability.**

Specifically, all advanced economies have reaffirmed their Toronto commitments to halve the general government deficit by 2013 from its 2010 level and to stabilize or reduce government debt-to-GDP ratios by 2016.² Many advanced countries have also specified additional medium-term fiscal targets for deficit or debt, which are in some cases more demanding than the Toronto commitments. The commitments appear sufficiently ambitious and are on track to being met by most economies with a few notable exceptions.

- *Most advanced economies have made significant progress toward achieving their 2013 Toronto deficit targets, although several will miss them by some margin. Australia, Canada, France, Germany, Italy, and the euro area as a whole will achieve their targets.*³ In most other cases, the miss is relatively

Achievement of Toronto Deficit Commitment
(percent of GDP)



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

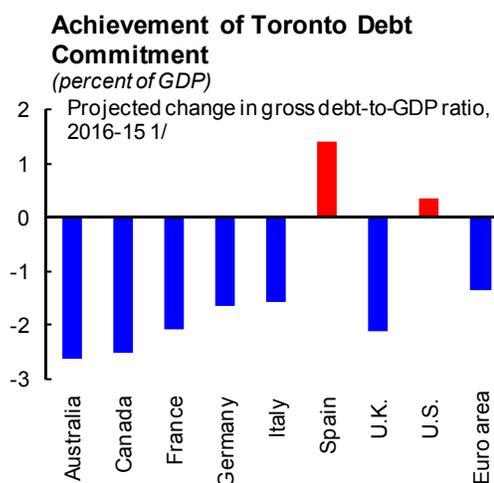
1/ ".....advanced economies have committed to fiscal plans that will at least halve deficits by 2013.....". In order to track more closely policy efforts, staff compares the projected 2013 deficit to the 2010 deficit outturn (instead of the 2010 deficit projection at the time of the Toronto summit). The deficit refers to the general government.

² For the United States, the authorities' commitment is understood in terms of halving the federal government deficit. Japan was exempted from the Toronto commitments but has a medium-term plan that consists of (i) reducing the primary deficit (in percent of GDP) by half by FY2015 relative to its FY2010 level; (ii) achieving a primary surplus by FY2020; and (iii) reducing the debt-to-GDP ratio from FY2021 onwards.

³ In order to track more closely policy efforts, staff compare the projected 2013 deficit to the 2010 deficit *outturn* (instead of the 2010 projection at the time of the Toronto summit). However, a tolerance margin of $\pm 1/2$ percentage point of GDP is allowed in assessing whether the projected 2013 deficit will be reduced by half from its 2010 level. The deficit refers to the general government.

small—at least relative to the achieved efforts—and is in part explained by the short-term Cannes commitment to let automatic stabilizers work and/or take discretionary fiscal measures to support near-term growth. For most countries, deviations from the deficit targets do not threaten the achievement of the longer-term Toronto debt targets.

- Achieving the Toronto debt target also seems within reach for most countries, with some notable exceptions. The United States and Spain are exceptions, with general government debt projected to continue rising in 2016. While the United States meets technically the 2016 debt target for the federal government, debt is increasing again thereafter, highlighting the need for a credible medium-term plan. Japan, which was exempted from the Toronto commitment, is on track to meet its own medium-term target of halving the primary deficit by 2015 from its 2010 level, provided the government can pass the proposed tax reform bill to raise the consumption tax rate from 5 percent to 10 percent by 2015.*



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

1/ The gross debt refers to the general government.

Fiscal Projections versus Toronto Commitment

(percent of GDP)

	Halving deficit by 2013 1/	Stabilizing debt by 2015 2/
Australia	✓	✓
Canada	✓	✓
France	✓	✓
Germany	✓	✓
Italy	✓	✓
Spain		
United Kingdom		✓
United States		
United States (federal deficit) 3/		✓
Euro area	✓	✓

Source: IMF, *World Economic Outlook*.

1/ Toronto Declaration of at least halving the 2010 deficit by 2013; in order to track more closely policy efforts, staff compares the projected 2013 deficit to the 2010 deficit outturn (instead of the 2010 deficit projection at the time of the Toronto summit). However, a projection error margin of +/- 1/2 percentage point of GDP is allowed in assessing whether the 2013 deficit will be reduced in half from its 2010 level. The average current year forecast error in Fund staff projections of the 2010 headline fiscal balance was 0.5 percent of GDP. The deficit refers to the general government. A thick green checkmark is used for countries which over-perform on the Toronto Commitment by more than 1/2 percentage point of GDP. A light green checkmark refers to countries that satisfy the Toronto Commitment within an error margin of +/- 1/2 percentage point of GDP.

2/ Stabilized debt defined to be debt ratio not rising over 2015-2016.

3/ According to the United States authorities, their Toronto deficit commitment refers to the federal deficit, not the general government deficit.

3. **Sustained and substantial fiscal adjustment over time should be anchored in credible medium-term plans, where the pace of headline consolidation can adjust to economic conditions while maintaining the pace of underlying consolidation (unless growth weakens substantially).** Leaving aside specific numerical commitments or targets, desirable fiscal adjustment will need to navigate along a narrow *path*—neither too slow (which could undermine credibility) nor too fast (which could undermine growth). Where financing conditions permit, automatic stabilizers should be allowed to operate fully. In terms of the *destination*, the scale of adjustment in the long term must be sufficient to restore sustainability and soundness to public finances. This supports the following:

- Additional fiscal adjustment over the medium term (beyond what has already been proposed) will be needed, notably in *Japan* and the *United States*. In Fund staff's estimates, the fiscal adjustment needed to return general government debt of Japan and the United States to more sustainable levels by 2030 are among the largest in the G-20 membership. Thus, it is crucial that Japan and the United States promptly adopt credible and more ambitious medium-term consolidation plans. The goal in Japan should be to stabilize the net debt ratio around 2016 and reduce it thereafter. In the United States, the objective should be to stabilize the gross debt ratio by mid-decade and subsequently put it firmly on a downward path. In *Canada*, stronger consolidation plans are needed at the provincial level to help with medium-term fiscal consolidation.
- The *euro area* as a whole is projected to reduce its fiscal deficit to below 3 percent of GDP by 2013. The new Fiscal Compact and "six-pack" reform package will provide a stronger anchor for fiscal discipline in the euro area, though the challenge will be to allow for sufficient flexibility in its application.
- Looking further ahead, in most *advanced economies* further consolidation efforts beyond current plans, as well as entitlement reforms, will be needed to return debt to more sustainable levels by 2030 and address age-related spending (Box 2).

Box 2. Calculating Fiscal Adjustment Needs

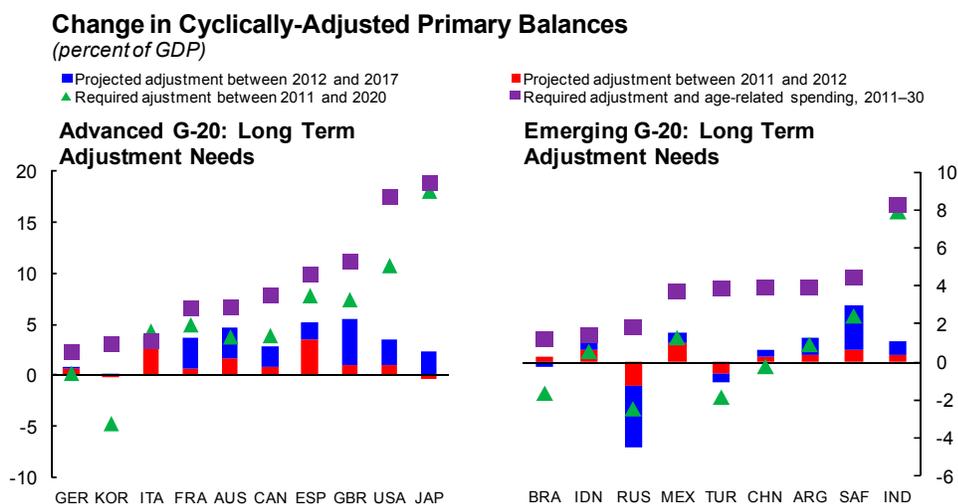
The economic crisis that began in 2008 affected the fiscal positions of most G-20 economies adversely, but its impact was not uniform. As of 2011, three fifths of G-20 economies had general government debt ratios that exceeded, in some cases substantially, their long-term historical averages; most, especially advanced economies, were running primary deficits, suggesting that without fiscal adjustment they would not be able to stabilize the debt ratio, yet alone reduce it, for any positive level of the interest-growth differential. Additional pressures can also be expected to arise from demands for pension and health care spending over the medium term. So, for most G-20 economies, a substantial fiscal adjustment is called for in the decades to come to return debt to sustainable levels.

The medium-term adjustment needs calculations presented in this box follow the standard IMF *Fiscal Monitor* methodology. Adjustment needs are equal to the distance between the current cyclically adjusted primary balance (CAPB) and that needed to reduce the general government debt ratio to 60 percent of GDP in advanced economies (40 percent in emerging economies) by 2030, or to stabilize debt at end-2012 level if it is lower than the above targets. Intuitively, adjustment needs are expected to be larger for countries with a higher initial debt ratio and a lower initial CAPB.

Among advanced G-20 economies, CAPBs must increase on average by a challenging 8.6 percent of GDP to meet the debt targets (i.e., they must move from an average deficit of 3.3 percent of GDP to an average surplus of 5.4 percent). Ambitious and credible medium-term strategies are urgently needed in Japan and the United States to put their public finances on a more sustainable path, given their high debt ratios and large primary deficits. Most other advanced G-20 economies need to improve their primary balance by 4 to 8 percentage points of GDP. Germany and Korea are outliers, thanks to their primary surpluses (and relatively low debt in the case of Korea).

Average adjustment needs are lower for emerging G-20 economies (1.0/0.8 percent of GDP to reach 40/60 percent of GDP debt levels, respectively). Most have relatively low debt and their fiscal accounts are in surplus or close to balance, facilitating achievement of their medium-term debt targets. In contrast India, with a high initial level of debt and a large primary deficit, faces steep adjustment needs. South Africa's primary deficit pushes its adjustment needs up in spite of its reasonably low level of debt, while Brazil's sizeable primary surplus would allow it to meet its debt target despite its relatively high current debt ratio.

For advanced as well as emerging countries, age-related spending is projected to lift adjustment needs significantly (by an average of 3.1 percent of GDP for emerging G-20 economies, and 4.3 percent for advanced G-20 countries). To confront these pressures, several advanced economies are aggressively tackling pension reform, including through accelerating already-legislated increases in retirement ages (France, Italy, and the United Kingdom) and increasing taxation of high pensions (Italy). Adjustment needs become even larger when health-related additional spending is taken into account.

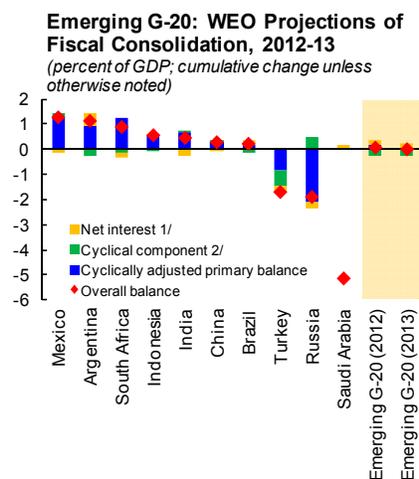


4. **The composition of fiscal adjustment is broadly appropriate in most advanced economies.** About two-thirds of planned fiscal adjustment comes from expenditure reduction and one-third from revenue increases. However, the composition could be improved in *France* and *Italy*, with less recourse to revenues given their already high revenue ratios, and in *Japan* and the *United States*, with more action on entitlement spending. There is also room to raise the consumption tax further in *Japan*.

5. **Advanced economies have made progress on their commitments to structural fiscal reforms, but more is needed.** Commitments in the Cannes Action Plan targeted strengthened *fiscal frameworks* (euro area, France, Italy, Japan, and Spain), *pension reform* (France and the United Kingdom), and *reform of tax systems* (France and Japan). The adoption of the “six-pack” and the Fiscal Compact in the euro area marks important progress in strengthening fiscal governance; careful design of the new national fiscal rules, implementation and enforcement, while retaining sufficient flexibility of fiscal policy, will be key to realizing its potential. Italy is preparing the implementation of balanced-budget rules, following recent parliament approval, whereas a revision of the already existing one in Spain is underway. France and the United Kingdom have delivered on their pension reform commitments. France has made progress toward reducing tax expenditures, but the vote to incorporate existing fiscal rules into the Constitution has been delayed. However, further structural reform is needed or desirable, including tax reform (Australia and the United States), reform of public pensions and further health care reform (the United States), reform of federal system, including the mechanisms to ensure compliance with fiscal rule at state level (Germany), creation of a formal institution/mechanism to consolidate information on the fiscal plans of different levels of government and coordinate their actions (Canada), and, more generally, reforms to address longer-term fiscal pressures from ageing and health costs.

B. Emerging Economies

6. **In the short run, emerging economies with relatively strong public finances also committed to support growth.** The pace of short-term consolidation is slower than in 2011 and than previously planned, especially in *China* and the Middle East. Collectively, the cyclically-adjusted primary balance of emerging economies is projected to improve by a very small amount (about 0.2 percent of GDP over 2012–13). This is broadly appropriate for most emerging economies, given the context of somewhat weaker growth, stronger initial fiscal positions relative to advanced economies, and the need to help with global demand rebalancing in the case of surplus economies. Nevertheless, there are a few exceptions. Fiscal policy is clearly pro-cyclical in *Russia*, which envisages an increase in the non-oil deficit of about 2 percent of GDP despite the closing of the output gap. Tight fiscal policy is also needed in *India*, where the economy is operating close to potential, while in *Turkey* fiscal policy should be supportive of the efforts to reign in the large current account deficit, the main source of vulnerabilities in the



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

1/ Difference between overall balance and primary balance.
2/ Difference between primary balance and cyclically adjusted primary balance.

short run. *China* could act quickly to loosen fiscal policy in the near term should domestic growth slow too much, which would also have positive spillovers for global demand.

7. **Most emerging economies are broadly on track to reach their medium-term targets, with the goal of rebuilding fiscal space eroded during the crisis.** Nevertheless, there are a number of concerns.

- Notwithstanding general guiding principles in its Twelfth Five-year Plan, there is no clear medium-term fiscal target in *China*. Staff recommend that China publish annually well-defined quantitative commitments beyond the current one-year horizon. A transparent medium-term fiscal plan would help clarify the government's macro-fiscal objectives, which is important for multilateral policy coordination given the large size of the Chinese economy.
- The medium-term targets are not sufficiently ambitious in *Russia* and *Turkey*. While the 2012–14 medium-term budget plans would leave the overall deficit by 2014 even better than the objective committed to at the Cannes summit, the relevant fiscal variable for an oil producer like Russia, given the volatility of oil prices and the nonrenewable nature of oil reserves, is the non-oil deficit. Unfortunately, the 2012–14 medium-term budget envisages essentially no consolidation in the non-oil deficit, which remains well above its sustainable level and a major concern, despite the low debt-to-GDP ratio. In Turkey, to reduce dependence on foreign saving while maintaining the positive growth trajectory, greater emphasis should be placed over the medium term on the structural fiscal position, and, in particular, on targeting a structural surplus to accumulate fiscal buffers and allow monetary policy to focus on inflation targeting. This is particularly important given the large rigidities in Turkey's spending.
- *India* may miss its medium-term deficit target and Fund staff estimate a higher deficit over the medium-term under current policies. To achieve its own medium-term deficit target, India would need to take measures to better control subsidies and to restore revenue to pre-crisis levels.
- Looking further ahead, age-related spending is projected to lift adjustment needs significantly, on average by 3.1 percent of GDP between 2011 and 2030. This will require further consolidation efforts beyond current plans and entitlement reforms in most countries (Box 2).

8. **The composition of fiscal adjustment is broadly appropriate in emerging economies.** On average, adjustment relies mostly on expenditures, which is broadly appropriate. The reallocation of spending from health, education and infrastructure programs to defense spending is a concern in Russia. Subsidies should be reformed in India, Indonesia, and Saudi Arabia. In order to improve longer-term fiscal prospects, Mexico, Russia, and Saudi Arabia should improve non-oil revenues, including through improved administration and broadening tax bases, and increased efficiency of expenditures.

9. **Further progress is needed in the area of structural fiscal reforms to facilitate global rebalancing.** A number of countries with current account surpluses committed to increasing spending on social expenditures such as safety nets/health/education (*China*, *Indonesia*, and *Saudi Arabia*) and

on infrastructure (Indonesia and Saudi Arabia). There has been some reallocation or increase in spending toward social expenditures (China and Saudi Arabia) and infrastructure (Indonesia and Saudi Arabia). For instance, in Saudi Arabia, a new unemployment benefit scheme began payments in November 2011 and there are large public investment programs. In China, expenditures on social protection (health, education, and social security and employment) have increased from 5½ percent of GDP in 2007 to just over 7 percent of GDP, but there is further space to increase allocations to these sectors to facilitate a reduction in household precautionary saving and an increase in private consumption. In Fund staff's view, this should also be accompanied by a shift of the tax burden away from households to support private-consumption-led growth and by further improvements in the portability of pensions.

10. **Other important structural fiscal reforms include strengthening fiscal frameworks and management, and tax reform.** Several countries have made a commitment to improve fiscal frameworks and management (China, Indonesia, and South Africa) and in Fund staff's view better fiscal frameworks are also needed in other countries (e.g., Brazil and Saudi Arabia). In Indonesia, the implementation of a medium-term expenditure framework and of performance-based budgeting is ongoing. South Africa has developed fiscal guidelines and will prepare its first long-term fiscal report in late 2012. Overall needs for reform remain large in several countries. In the area of tax reform, China is taking some measures, especially tax cuts for micro enterprises and a VAT reform initiative to replace the sales tax and expand coverage to manufacturing and services, while tax reform is moving slowly in India. In staff's view, proceeding with tax reform is important in Brazil, China, India, Indonesia, and Turkey.

II. MONETARY AND EXCHANGE RATE POLICIES

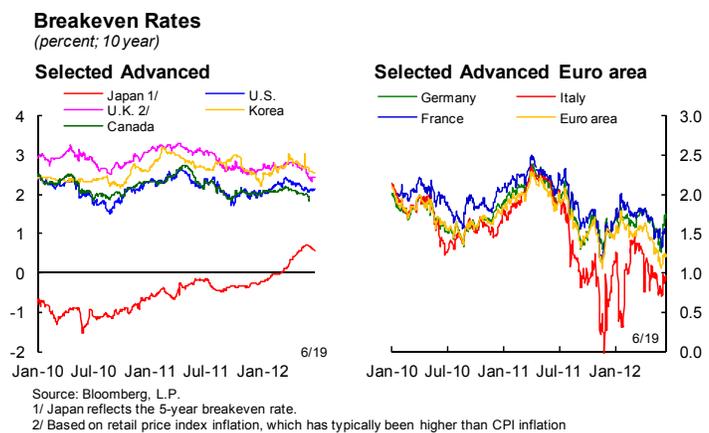
Member commitments center on preserving price stability, moving toward greater exchange rate flexibility, and reducing “excessive” reserve accumulation. In advanced economies, price stability is being maintained as growth remains tepid, and monetary policy remains very accommodative—with scope for further easing in some (including through unconventional measures). In emerging economies, inflation behavior and the monetary policy stance are more differentiated, with the possible need for further tightening in some to safeguard credibility. Against this policy setting and swings in global risk aversion, market pressures on exchange rates, reserves, and capital flows have been volatile. Since Cannes there has been modest change in the degree of exchange rate flexibility, and more ambitious steps in key surplus members would provide more support for global rebalancing. The pace of reserve accumulation has slowed in major surplus economies, while a broad range of policy responses to capital inflows have been taken in several emerging economies.

11. **Members have committed to price stability and exchange rate flexibility.** Main commitments on monetary and exchange rate policies in the Cannes Action Plan include: (i) supporting the economic recovery while maintaining *price stability* over the medium term; and (ii) moving more rapidly toward market-determined exchange rate systems and enhancing *exchange rate flexibility*, as appropriate, to reflect underlying economic fundamentals, while refraining from competitive devaluation of currencies. The latter commitment was intended to facilitate further progress on exchange rate reform and to *reduce excessive reserve accumulation*. The Fund also gives clear guidance to its members to avoid exchange rate policies that secure fundamental misalignments to increase net exports, but does not advocate for any one particular fixed or flexible regime across the membership. This section evaluates member progress with respect to maintaining price stability (including mitigating deflation risks); moves toward greater exchange rate flexibility; and changes in the pace of reserve accumulation.

A. Price Stability and Monetary Policy

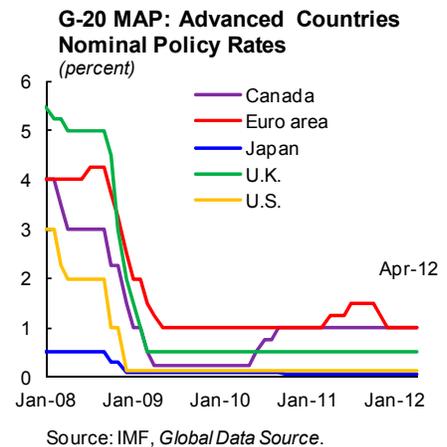
12. **In advanced economies, price stability has been maintained alongside appreciable economic slack and inflation expectations have remained well-anchored.**

- Measures of inflation expectations (e.g., breakeven rates) have been broadly stable. Deflation has been avoided (except in Japan). However, in euro area economies closest to the recent market turmoil—suffering from falling confidence, contracting activity or weak growth and heightened financial stress—inflation expectations have moved down.

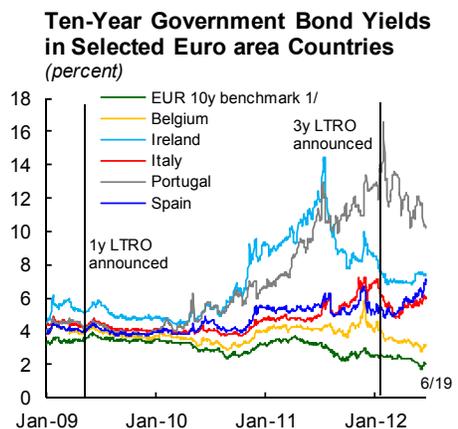


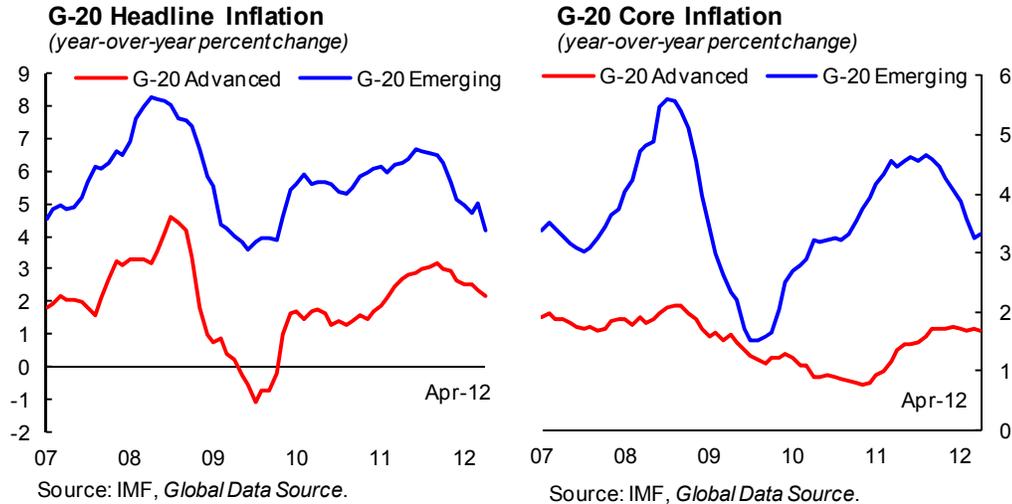
- *Against a setting of sizeable output gaps and high unemployment, headline inflation has either eased or is expected to ease while core inflation and wage gains have remained low but positive. In the euro area and the United Kingdom unit labor costs have continued to recede or stagnate and wage settlements remain modest, and in the United States the employment cost index remains subdued.*

13. **Monetary policy rates have been very low in advanced economies, though more easing should be considered in some—including through unconventional measures.** Real policy rates have remained low or somewhat negative at end March-2012. But with sluggish growth, high unemployment, and downside risks, more easing could be considered going forward—with the possible exception of *Canada* and *Korea*—if expectations are well anchored and projections show underlying inflation remaining subdued or likely to fall. For example, although headline inflation in the *United Kingdom* is currently elevated, it is falling and risks modestly undershooting in the medium term given a large output gap and weak wage growth. In *Canada* a more rapid improvement in economic activity and a reduction in the output gap are keeping policy rates on hold at present, while in *Korea* still-elevated inflation expectations limit the room to ease. In the *United States*, more easing could be considered if activity threatens to disappoint.



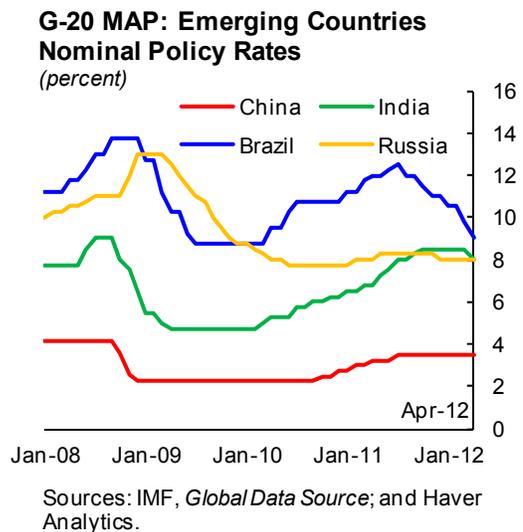
- *Unconventional measures have been used to support growth or reduce financial instability to help mitigate deflation risks.* In some advanced economies (Japan and the United States) with policy rates close to the zero bound, unconventional measures have taken place and/or very low rates have been signaled for the foreseeable future. The Bank of Japan announced in February 2012 a 1 percent medium- to long-term price stability objective, and in late April delivered further easing—with a net increase in its asset purchase plan of ¥5 trillion (1 percent of GDP), increasing its total asset purchase program to ¥70 trillion, an extension of the maturity to be purchased, and an unexpected increase in equity purchases. In the *euro area*, the ECB conducted 3-year long-term refinancing operations (LTROs) in December 2011 and February 2012 to reduce funding pressures. The ECB should continue providing ample liquidity and stay engaged in securities' purchases to ensure the orderly functioning of financial markets and hence monetary transmission. In the *United Kingdom*, monetary policy has remained appropriately accommodative, including the launch of another round of government bond purchases in February 2012. However, further easing, including through unconventional measures, may be needed given weak growth, contained underlying inflation, and downside risks.





14. **In contrast to advanced economies, inflation behavior has been more diverse in emerging economies.** More recently, strong economic activity has slowed thus easing inflation pressures, partly as a result of lower non-oil commodity prices and past policy tightening. Despite slower growth in emerging economies, inflationary and overheating pressures remain high in a few, with some concern of second-round effects, including from higher oil prices. Headline inflation remained high or above target, particularly in *Brazil, India, South Africa, and Turkey*. In a few economies (India and Turkey), declines in core inflation have been rather limited.

15. **Correspondingly, monetary policy responses have been more differentiated in emerging economies and further tightening should be considered by some.** Real policy rates have been on average negative, but with variation. Some economies (Brazil, India, Indonesia and Turkey) cut rates to support growth or to help manage capital inflows, while others tightened monetary conditions to cool activity (Russia). To keep expectations anchored, more tightening may be needed in several economies (Argentina, India, Indonesia, Russia, Saudi Arabia, and Turkey) should price pressures increase, as they continue to operate close to full capacity. Others (Brazil, China, and South Africa) could stay on hold provided that inflation expectations remain well anchored and lending to certain sectors (e.g., real estate, household credit) is brought under control or continues to expand at a rate consistent with financial stability. In particular, deficit countries should remain vigilant to overheating risks and rebuild buffers to guard against less favorable external financing conditions and commodity price volatility over the medium term. The objectives or stance of monetary policy have become less predictable or more difficult to judge for various reasons in some (Turkey and China).



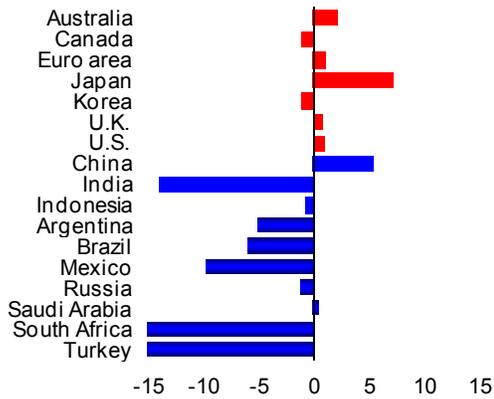
B. Exchange Rates and Reserves

16. **Against this setting of different policy stances, return differentials, and swings in risk perception, emerging market currencies and capital flows have been volatile.** With changes in global financial conditions and risk aversion, there has been a flight to safety away from emerging markets in 2011, resulting in an overall depreciation trend in their currencies in both nominal and real effective terms (see chart). Changes in multilateral exchange rate measures (Box 3) can have meaningful implications for external positions and competitiveness. Amongst emerging economies, only *China* (with a relatively closed capital account) and *Saudi Arabia* (with a U.S. dollar peg) saw appreciation during 2011. Following actions to stabilize the euro area crisis, this trend reversed as market sentiment and risk perceptions improved in early 2012, though risk appetite appears to be receding again. A flight into riskier assets and the resumption of capital flows to emerging markets has been accompanied by many currency appreciations (year to date). In contrast, *China* and *Saudi Arabia*'s effective exchange rates again continued to buck the trend, reflecting their greater fixity to the U.S. dollar—a safe haven currency.

Nominal Effective Exchange Rate Movements

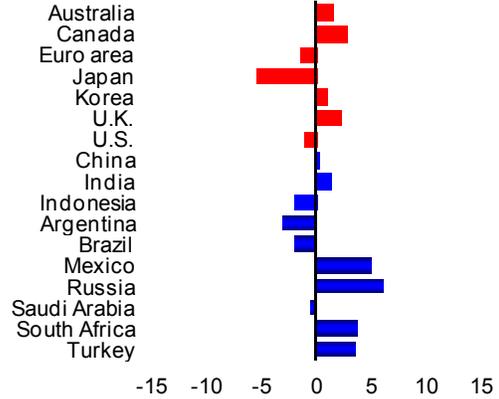
2011

(percent change; per local currency; Dec 2010 - Dec 2011)



2012

(percent change; per local currency; Dec 2011 - Apr 2012)

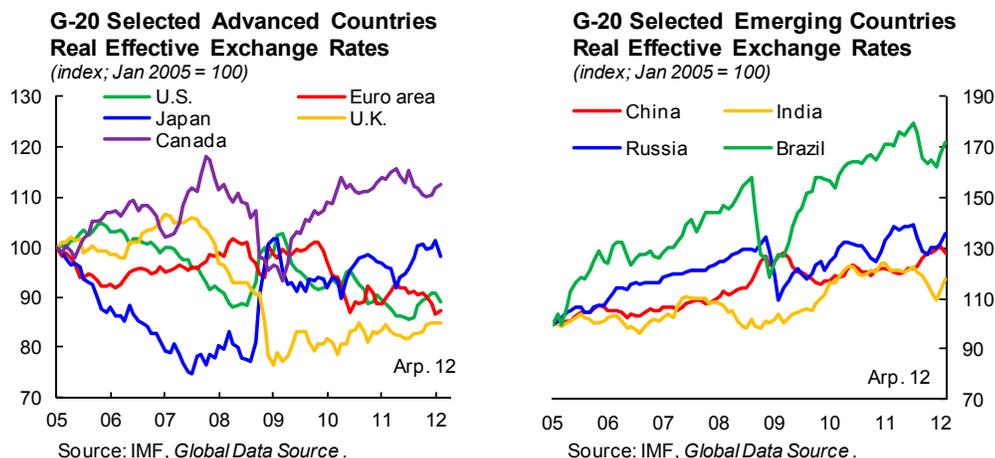


Source: IMF, *Global Data Source*.

Box 3. Multilateral Exchange Rates

Multilateral exchange rates. IMF staff traditionally assess exchange rates in multilateral (rather than bilateral) terms. Changes in multilateral real exchange rates can affect a country's external position (e.g., trade balance and current account) and are often used to understand the behavior of trade flows (e.g., elasticities approach).¹ Notions such as *external balance* as a benchmark to understand medium-term equilibrium exchange rates and consistency with fundamentals are most naturally understood as multilateral concepts (i.e., for a given country vis-à-vis all trading partners).² Economic theory such as whether purchasing power parity (PPP) holds between countries (extending the "law of one price" to a basket of goods) also usually examines exchange rates in effective terms. Correspondingly, IMF staff have favored using real effective exchange rates to best measure international relative prices. Effective exchange rate indices aggregate and summarize information contained in a set of bilateral exchange rates. Real effective exchange rates (REERs) are nominal effective exchange rates (NEERs) adjusted by some measure of relative prices or costs, to take into account both nominal exchange rate developments and inflation differential vis-à-vis trading partners. REER indices serve a variety of purposes. These include assessing a country's overall international competitiveness (e.g., relative price of domestic tradable goods in terms of foreign tradables), the equilibrium value of a currency against various benchmarks, as a gauge of the transmission of external shocks (e.g., terms of trade), and as a consideration for monetary policy, among other uses. Under PPP, for example, there should be broad constancy of REERs over time if currencies and prices are broadly in equilibrium. But consumption patterns can change faster than the market baskets are updated—as can trade policies, tariffs and transportation costs—thus deviations from such benchmarks do not necessarily indicate fundamental misalignment in the REER.

Determination of effective rates. To construct useful measures of effective exchange rates, the weights assigned to the exchange rates of different trading partners in the index is thus an important consideration. The IMF calculates REERs and NEERs through a uniform methodology, using geometric weighted-averages of the seasonally adjusted consumer prices (CPI) or unit labor costs (ULC) and the exchange rate index (U.S. dollar per national currency, period average). To reflect the pattern of trade, trade partner weights are composed of bilateral trade shares of manufactures, non-energy commodities, and tourism in the total. The manufacturing component is adjusted to reflect the overall importance of manufacturing and non-tourism service trade, rather than manufacturing alone. Commodity weights are considered unrelated to bilateral trade, and they are determined by the country's share (per commodity category) in the global market. Weights for manufacturing, non-tourism service trade, and tourism take into consideration *third-market* effects, or the direct competition between trading partners in third-country markets. In manufacturing, for example, the importance of third-market effects is determined by the relative importance of imports of manufactures versus sales of home products of the destination country. Hence the weight is smaller the more closed the country is to foreign trade.³ The chart below shows REERs for select G-20 economies.



¹IMF, 1998, Exchange Rate Assessments: Extensions of the Macroeconomic Balance Approach, Washington, DC: IMF Occasional Paper 167.

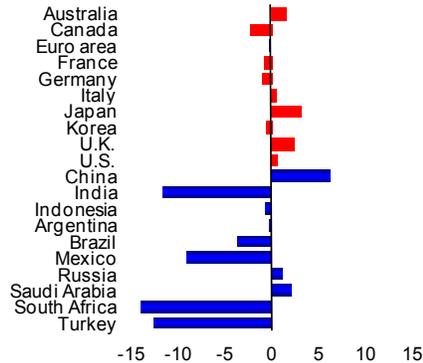
²IMF, 2008, Exchange Rate Assessments: CGER Methodologies, Washington, DC: IMF Occasional Paper 261.

³IMF, 2006b, New Rates from New Weights, Washington, DC: IMF Staff Papers, Vol. 53, No.2.

Real Effective Exchange Rate Movements 1/ 2/

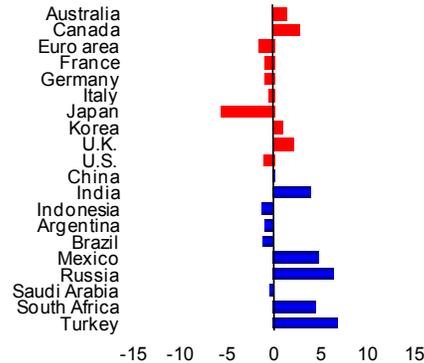
2011

(percent change; per local currency; Dec 2010 - Dec 2011)



2012

(percent change; per local currency; Dec 2011 - Apr 2012)



Source: IMF, *Global Data Source*.

1/ The estimates of the REER for the G-20 countries that have trade linkages with Argentina, particularly Brazil, are adversely affected by the inaccurate reporting of Argentina CPI.

2/ Based on Argentina's official CPI data (CPI-GBA). The Fund has called on Argentina to adopt remedial measures to address the quality of their CPI data. IMF staff is also using alternative measures of inflation for macroeconomic surveillance, including data produced by provincial statistical offices and private analysts, which have shown considerably higher inflation figures than the official data since 2007.

17. **G-20 economies, by and large, have operated flexible exchange rate regimes combined with inflation targeting.** Based on updated IMF classifications, the table below shows the classification of both monetary policy frameworks and exchange rate regimes. More flexible currencies tend to be associated with inflation targeting—comprised of both surplus (green) and deficit (red) members. Members with less flexible regimes have tended to place greater weight on money and the exchange rate as the nominal anchor. Among the G-20, only emerging surplus economies fall into these categories. Deficit emerging economies have *de facto* floating currencies that have been appreciating of late, with foreign exchange intervention mostly aimed at smoothing volatility. Advanced economies have largely avoided intervening in currency markets to limit volatility with some exceptions (Japan and Korea).

G-20s Monetary and Exchange Rate Regimes

De facto Classification of G-20 Exchange Rate Arrangements 1/ 2/							
(provisional; as of end - April 2012)							
Exchange rate arrangement (number of countries)	Exchange rate anchor				Monetary aggregate target (29)	Other 3/ (33)	Inflation-targeting framework (31)
	Euro (27)	U.S. dollar (48)	Composite (14)	Other (8)			
No separate legal tender (13)							
Currency board (12)							
Conventional peg (43)		Saudi Arabia					
Stabilized arrangement (23)							
Crawling peg (3)							
Crawl-like arrangement (12)					Argentina China		
Other managed arrangement (17)						Russia	
Floating (36)							Brazil South Africa India Korea Indonesia Turkey
Free floating (30)							Japan Mexico United States Australia Euro area Canada United Kingdom

Source: IMF, 2010 and 2011 Annual Report on Exchange Arrangements and Exchange Restrictions.

1/ Colors represent G-20 countries selected as current account surplus and deficit economies.

2/ Number in brackets indicates number of IMF members within exchange rate classification, as of end-April 2011.

3/ Includes countries that have no explicitly stated nominal anchor, but rather monitor various indicators in conducting monetary policy.

18. **While there have been welcome *de jure* moves toward greater exchange rate flexibility, changes in *de facto* flexibility in the membership since Cannes have been modest.** Based on the IMF's *de facto* exchange rate classification methodology, very few G-20 members changed with respect to moving to more (or less) flexible regimes. How staff assess exchange rate flexibility is described in Box 4. While exchange rates may have been volatile during this period, members' currency flexibility vis-à-vis their reference basket or anchor currency (where applicable) did *not* appreciably change. One exception is Mexico, which has been reclassified as "free floating". In April 2012, China announced a widening of the trading band for the *renminbi* from 0.5 to 1 percent (Box 5). Staff is monitoring developments to ascertain if a change to a more flexible regime classification is warranted, but no increase in market flexibility has yet been observed. Bilateral appreciation of the currency against the U.S. dollar and in effective terms has been minimal in 2012. In previous years, there have been changes in exchange regimes. During 2009–10, amid turbulent financial markets, a few G-20 countries moved toward more fixed arrangements (e.g., Argentina from a floating to a crawl-like arrangement in early 2010, Indonesia from floating to stabilized arrangement in mid-2010, and Turkey to a float from free floating in late 2010). Some members have reversed course in favor of greater exchange flexibility. *China* moved towards greater flexibility in mid-2010 and *Indonesia* shifted back in early 2011 to a *de facto* floating regime (see table).

- *Reforms among a few surplus emerging economies could eventually lead to further flexibility.* In Russia, the operational moving band for the ruble widened further (from 5 to 6 rubles) and intervention amounts were reduced. In China, appreciation (in effective terms) has been allowed—enhanced flexibility may reduce the risks of liberalizing the financial system and opening the capital account.⁴ In both China and Russia, further continued increases in flexibility are warranted. Finally, in Saudi Arabia, the combination of the longstanding peg to the U.S. dollar and the increased risk of divergence of the U.S. business cycle from the oil price cycle (with the rising influence of emerging Asia), as suggested by preliminary staff analysis, have the potential to create policy tensions.

⁴ The use of China's RMB for cross-border trade has expanded and become more symmetric across imports and exports. A new scheme allows RMB funds raised in Hong Kong to be channeled into direct and portfolio investment in the Mainland, subject to a quota. For the RMB internationalization process to continue smoothly, steadily opening up more channels that allow RMB funds to flow back into the Mainland will be needed. An unofficial roadmap to open up the capital account was released in February this year laying out the stages for reform over the next 10 years.

Box 4. Assessing Exchange Rate Flexibility

To assess G-20 members' exchange rate flexibility, staff has relied on changes in de facto exchange rate regime classifications to make this determination. While countries announce an official exchange rate regime, IMF staff monitors at high frequency each member's actual, *de facto*, arrangements, which may differ from the de jure announced regime.^{1/2/3/}

De facto classifications. Regimes are classified into four broad types, with increasing degrees of flexibility as follows:

- **Hard pegs arrangements:** (i) *No separate legal tender* is when the currency of another country circulates as the sole legal tender (formal dollarization), implying complete surrender of domestic monetary policy; and (ii) *Currency board* is an explicit legislative commitment to exchange domestic currency for a specified foreign currency at a fixed exchange rate, combined with the assurance of fulfillment. This implies that the domestic currency is usually fully backed by foreign assets, eliminating traditional functions such as monetary control and lender of last resort, and leaving little room for discretionary monetary policy. Some flexibility may still be afforded, depending on the strictness of the banking rules of the arrangement.
- **Soft pegs arrangements:** (i) *Conventional peg* is a formal pegging at a fixed rate to another currency or a basket of currencies and involves standing ready to maintain the fixed parity through direct or indirect intervention. No commitment to irrevocably keep the parity is needed, but the exchange rate may fluctuate within narrow margins of less than $\pm 1\%$ around a central rate—or the maximum and minimum values of the spot market exchange rate must remain within a narrow margin of 2% for at least six months; (ii) *Stabilized arrangement* entails a spot market exchange rate that remains within a margin of 2% for six months or more—with respect to a single currency or a basket of currencies, where the anchor currency or the basket is ascertained or confirmed using statistical techniques—and is not floating; (iii) *Crawling peg* involves the currency being adjusted in small amounts at a fixed rate or in response to changes in selected quantitative indicators, with the rate of crawl set to generate inflation-adjusted changes (backward looking) or set at a predetermined fixed rate and/or below the projected inflation differentials (forward looking), with the rules and parameters being public or notified to the IMF; (iv) *Crawl-like* is when the exchange rate remains within a narrow margin of 2% relative to its six month or more trend and is not considered as floating—or when the annualized rate of change is at least 1%, provided it appreciates or depreciates in a sufficiently monotonic and continuous manner; and (v) *Pegged exchange rate within horizontal bands* involves maintenance of the currency within certain margins of fluctuation of at least $\pm 1\%$ around a fixed central rate, or a margin between the maximum and minimum value of the exchange rate that exceeds 2%, with the central rate and width of the band being public or notified to the IMF.
- **Residual arrangements:** *Other managed arrangement* is used when the exchange rate does not meet the criteria for any other category. Arrangements characterized by frequent shifts in policies may fall into this category.
- **Floating regimes:** (i) *Floating* is when the exchange rate is largely market determined, without an ascertainable or predictable path. Foreign exchange market intervention may be either direct or indirect and serves to moderate volatility without targeting a specific level incompatible with floating; and (ii) *Free floating* is if intervention occurs only exceptionally and aims to address disorderly market conditions and if the data confirm that intervention has been limited to at most three instances in the previous six months, each lasting no more than three business days.

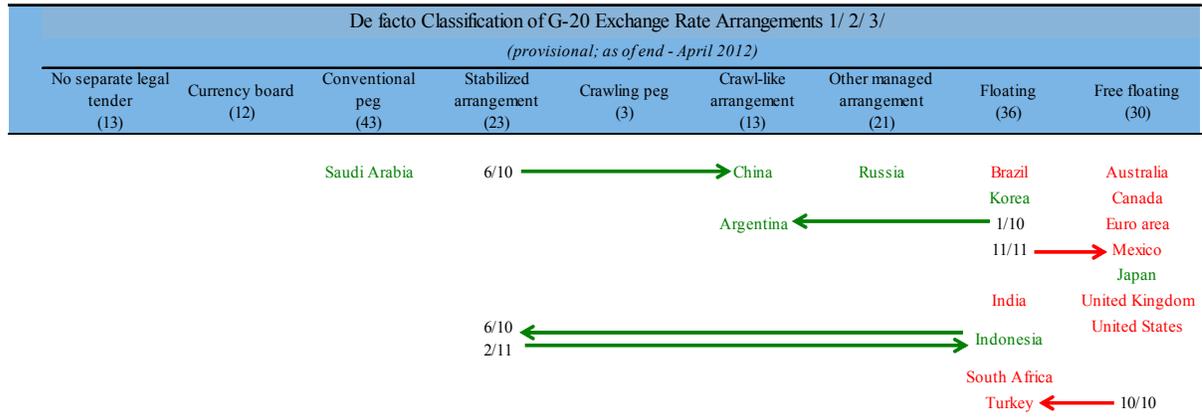
Monitoring. Staff monitors de facto regimes on a routine basis, in the context of review of country briefing papers and staff reports. An annual review of all classifications is *externally* published in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER), covering 187 countries. The staff's assessment primarily is based on the degree to which the exchange rate is *market-determined*—rather than officially determined (e.g. through intervention in foreign exchange markets). This is determined by observing the behavior of the exchange rate (daily spot rates), complemented by information on the monetary and foreign exchange policy actions taken by country authorities (notably intervention).

1/ The description and effective dates of the de jure exchange rate arrangements are provided by each IMF member as an obligation under Article IV, Section 2(a), of the IMF's Articles of Agreement and Paragraph 16 of 2007 Surveillance Decision No. 13919-(07/51).

2/ International Monetary Fund, 2011, Annual report on Exchange Rate Arrangements and Exchange Rate Restrictions, Washington, DC (Sept.).

3/ Wherever the de jure arrangement can be empirically confirmed by the staff over at least the previous six months, the exchange rate arrangement is classified in the same way on a de facto basis. Because the *de facto* methodology for classification of exchange rate regimes is based on a backward-looking approach that relies on past exchange rate movement and historical data, some countries have been reclassified retroactively to the date the behavior of the exchange rate changed and matched the criteria for reclassification to the appropriate category.

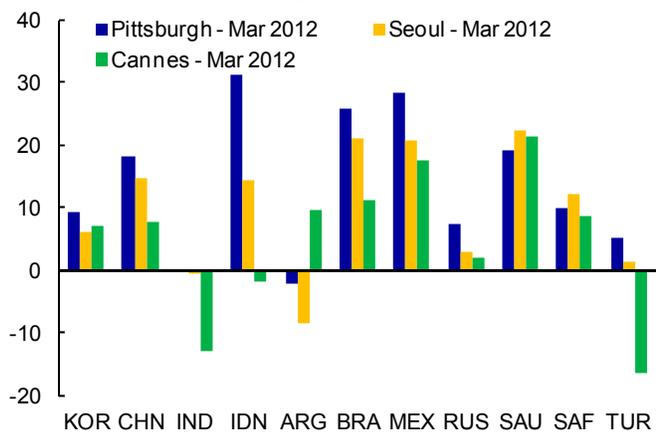
Classification of Exchange Rate Regime



Sources: IMF, 2010 and 2011 Annual Report on Exchange Arrangements and Exchange Restrictions; and IMF staff estimates.
 1/ Colors represent G-20 countries selected as current account surplus and deficit economies.
 2/ Number in brackets indicates number of IMF members within exchange rate classification, as of end-April 2011.
 3/ Arrows indicate change in regime classification; date indicates timing of the change (i.e. 6/10 stands for June 2010)

19. **Reserve accumulation appears to have generally slowed since mid-2011 in key surplus economies.** Notably in China, Russia and, to a lesser degree, Saudi Arabia, the pace of reserve build-up has slowed (or stopped)—although levels remain relatively high and often exceed simple measures of reserve adequacy (e.g., ratio to short-term liabilities, 3-months coverage of imports, etc.). Some deficit economies have also seen reserve losses over the past six to eight months (India, Indonesia, and Turkey). Since November 2011, reserve accumulation picked up in Argentina due to a wide range of administrative measures and restrictions that have been instituted to address the narrowing current account surplus, and in Mexico due to receipts from the oil company Pemex in light of higher oil prices.

Reserves for G-20 Selected Countries 1/
(annualized percent change)

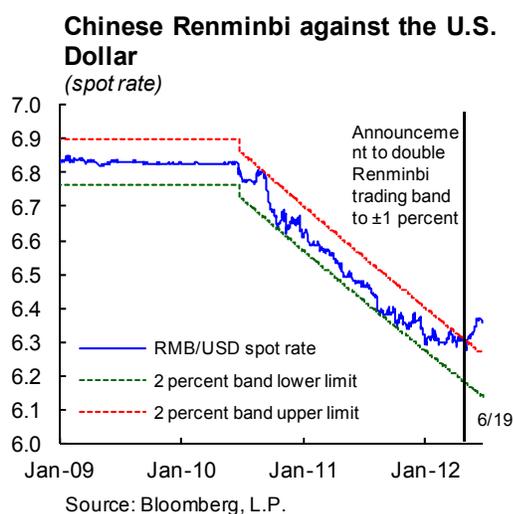


Source: IMF, *International Financial Statistics*.
 1/ Valuation effects (arising from difference between cross exchange rates and book/market values of reserve assets) are not taken into account.

Box 5. Announced Changes in China's Exchange Rate Policy

The People's Bank of China (PBC) announced on the 14th of April 2012 that the RMB daily trading band was being widened against the U.S. dollar in the interbank spot foreign exchange market. A wider band of ± 1 percent replaces the previous band of ± 0.5 percent, effective 16th of April 2012. The PBC noted that the move is intended to promote price discovery of the RMB exchange rate and enhance the currency's two-way flexibility. It intends to keep the exchange rate stable around a reasonable central parity, based on market conditions and with reference to a basket of currencies.

From 21st of June 2010, the RMB was classified as a *de facto* crawl-like arrangement (previously it was classified as a stabilized arrangement). The exchange rate has followed an appreciating trend within a narrow margin of 2 percent (see figure), and official actions continued to have an important influence on the exchange rate.



Implications for IMF *de facto* classification for China

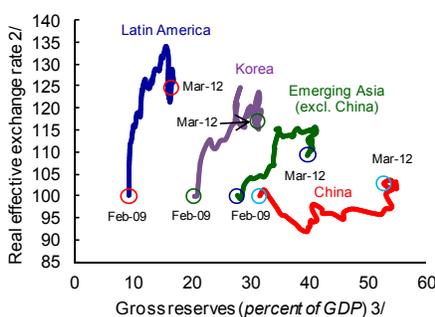
- As of 30th of April 2012, the cutoff date for the classification of China's *de facto* exchange rate arrangement for the 2012 AREAER, an increased flexibility in the RMB had not yet been observed. Notwithstanding the PBC's 14th of April announcement, the RMB continued to meet the criteria for a crawl-like arrangement. The approach to the *de facto* classification is purely backward looking (on a six-month rolling basis) and largely statistical, looking at the actual behavior of the exchange rate only. It does not take account of future or intended policies.
- Based on the role of official actions in influencing the exchange rate and the actual stability of the RMB vis-à-vis the dollar (see the chart above), the exchange rate is not "largely market determined," as required by the definition of "floating" in the classification methodology. If the RMB shows sufficient flexibility in the course of time (i.e. the exchange rate exhibits volatility, beyond the present 2 percent band, without an ascertainable or predictable path and official foreign exchange intervention only serves to moderate volatility without targeting a specific level), it could in the future be reclassified as floating in accordance with the classification methodology.¹ By contrast, if the exchange rate were to remain for at least 6 months within a 2 percent level band, as it has since the beginning of 2012, a classification as "stabilized" would need to be considered.

¹ See K. Habermeier et al., 2009, "Revised System for the Classification of Exchange rate Arrangements" <http://www.imf.org/external/pubs/cat/longres.aspx?sk=23311.0>

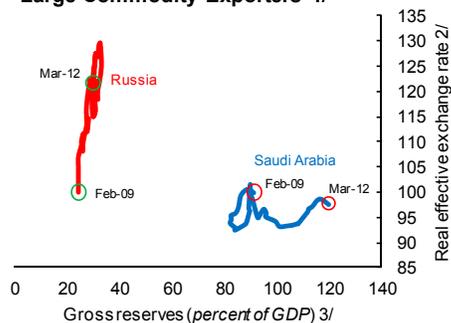
20. **Exchange rate appreciation has typically accompanied a slower pace of reserve accumulation—though country experiences vary widely.** As shown in the chart below, several countries or regions have experienced relatively large exchange rate movements (steeper line) over the past two years, while countries with larger reserve ratios have tended to continue accumulating reserves to a greater degree (flatter line) over this period. Specifically, since early 2009, *Korea*, emerging Asia (excluding China), and Latin America have allowed exchange rates to fluctuate—intervening only to smooth excessive volatility—with broadly appreciating trends in real effective terms. Reserve accumulation has slowed or even stopped in these countries. *China* was a notable exception until recently, as reserves grew at fast clip while the effective exchange rate appreciated relatively modestly. For major oil exporters, *Russia* and *Saudi Arabia's* experiences were quite different—with the former experiencing relatively large appreciation and minimal reserve accumulation. The recent slower pace of reserve accumulation may reflect some easing of balance of payments pressure and/or some willingness to allow greater exchange rate flexibility at the margin in some G-20 members.

Real Exchange Rates and Reserves
(Feb. 2009=100)

Emerging Asia and Latin America 1/



Large Commodity Exporters 1/



Sources: IMF, *World Economic Outlook*; and *International Financial Statistics*.

1/ Valuation effects (arising from differences between cross exchange rates and book or market values of reserve assets) are not taken into account.

2/ Index Feb. 2009=100. Weighted average using market GDP.

3/ Gross international reserves as a share of 2009–11 average GDP. Weighted average using market GDP.

Sources: IMF, *World Economic Outlook*; and *International Financial Statistics*.

1/ Valuation effects (arising from differences between cross exchange rates and book or market values of reserve assets) are not taken into account.

2/ Index Feb. 2009=100. Weighted average using market GDP.

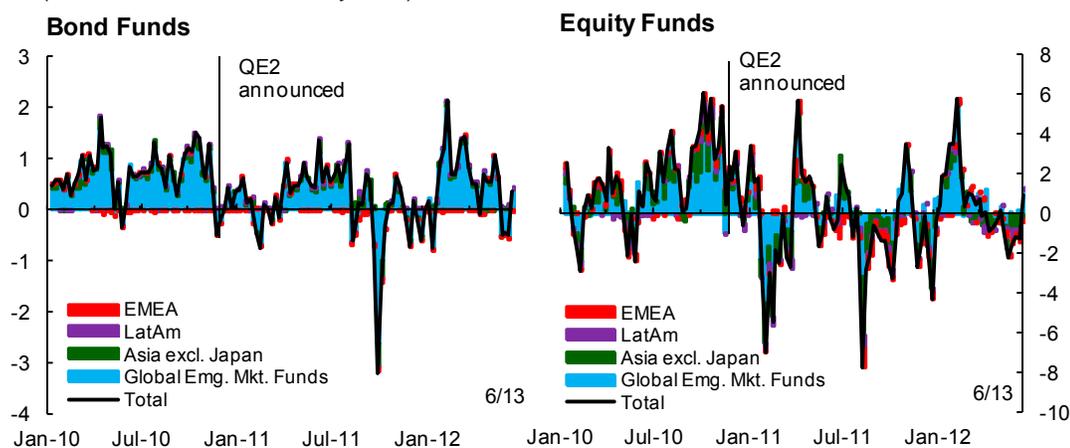
3/ Gross international reserves as a share of 2009–11 average GDP. Weighted average using market GDP.

21. **Managing volatile capital inflows is another challenge for monetary and exchange rate policies in emerging economies in the present setting.** As shown in the chart, high frequency indicators of portfolio flows suggest that inflows to emerging markets resumed after the end of last year, following some stabilization of the euro area crisis. Unconventional monetary policy actions by the U.S. Federal Reserve and, more recently, by the ECB likely contributed to inflows *indirectly* through an improvement in risk perceptions. Evidence on direct effects linking (say) quantitative easing in advanced economies to emerging market capital inflows, however, has been decidedly mixed. As shown in the chart, there was no apparent generalized surge in emerging economies' inflows following U.S. quantitative easing in 2010 (QE2).⁵ More recently, inflows to emerging markets appear to have declined again (particularly, to debt markets) as risk perceptions appear to be rising again.

⁵ Staff analysis finds that while U.S. financial spillovers to the rest of the world can be very large, U.S. quantitative easing (QE2) during 2010 and 2011 had very limited spillover effects. See IMF, 2011, U.S. Spillover Report; and 2011 Article IV consultation for the United States.

Volatile Capital Flows to Emerging Economies

(billions of U.S. dollars; weekly flows)



Source: EPFR Global.

22. **Several economies have responded through a range of measures to manage inflows over the past year—but more could rely on macroeconomic instruments.** Macroeconomic tools for responding to capital inflows remain as options in many emerging economies—for example, allowing the exchange rate to respond, adjusting foreign reserve levels, and calibrating monetary and fiscal policies. Better macroprudential policies and frameworks, as well as building absorptive capacity, could also play an important role in ameliorating the impact of volatile capital flows on financial stability. A wide range of tools were utilized by some to manage persistently large capital inflows given floating regimes of deficit economies, with a strategy to use a combination of policies, including allowing the exchange rate to appreciate and fiscal adjustment. Some have relied more on (sterilized) intervention and reserve accumulation.

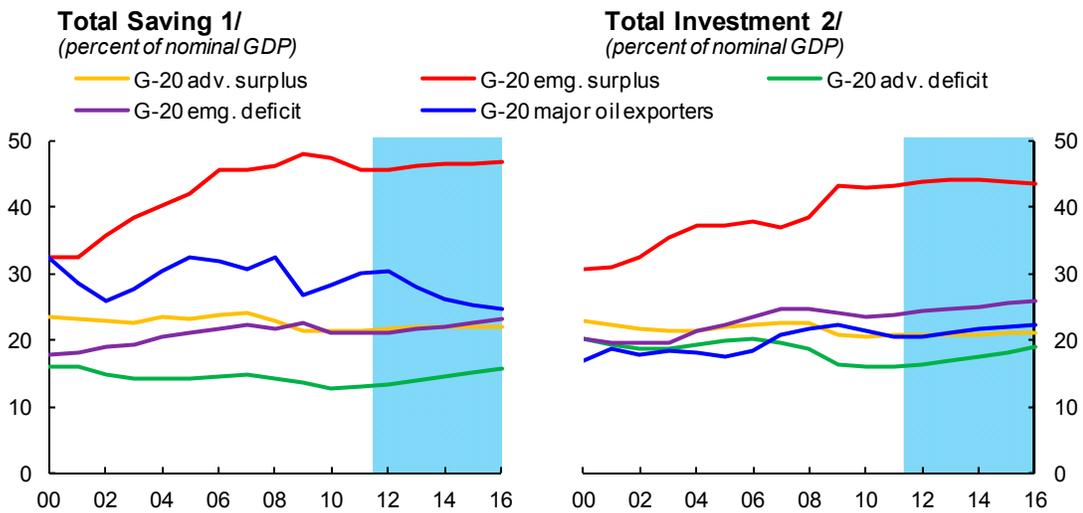
23. **Several members, however, deployed more direct or restrictive measures to either slow capital inflows or shore up reserves, while others removed restrictions to encourage inflows.** More direct measures to slow or reduce inflows included taxes on certain inflows, minimum holding periods, changes in repatriation requirements of export proceeds, and raising currency-specific or differentiating residency-specific reserve requirements (e.g., Brazil, China, Indonesia, Korea, Russia, and Turkey).⁶ Some measures were appropriately aimed at overheating domestic sectors or cooling demand more generally. A few members have imposed export repatriation requirements to shore up reserves (Argentina and Indonesia), while others eased such requirements. Measures have been used flexibly—for example, Brazil and India rolled back the level of such taxes and restrictions when capital flows slackened earlier, while Turkey decreased them. Other members relaxed controls or administrative measures as part of their capital account liberalization plans, including easing

⁶ In *Russia*, following the reintroduction of differentiated reserve requirements in February 2011, capital outflows intensified and the measure appears to have had at best limited impact. *Turkey* increased/decreased currency-specific reserve requirements depending on inflow/outflow episodes.

restrictions on deposits and bonds held by foreigners, and easing restrictions on residents' foreign investments, among others (e.g. China, India, and South Africa).

24. Staff's collective assessment of G-20 policies suggests that global imbalances have narrowed but significant demand rebalancing has not occurred, leaving growth weaker.

Current account imbalances have been reduced with the crisis, reflecting both cyclical and structural factors. The adjustment has been largely driven by demand *compression* rather than *rebalancing*. As saving has rebounded in deficit economies against an insufficient pick up domestic demand in surplus economies, global growth has slowed. The April 2012 WEO projections suggest that global imbalances are not expected to narrow further. Relative to previous projections, weaker contributions from consumption growth in advanced deficit economies is not expected to be offset by stronger domestic demand growth in surplus economies, resulting in slower global demand growth. Furthermore, some rebalancing in key surplus economies (e.g., China) has been driven by increases in (already-high) investment rates, while private consumption shares remain low as distortions keep saving rates high.



Source: IMF, *World Economic Outlook*.

1/ Saving = fixed investment share + current account balance; both in percent of GDP.

2/ Fixed investment excluding change in inventories.

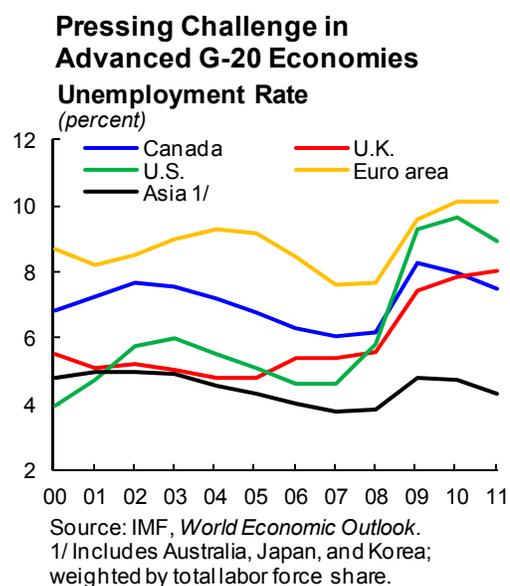
III. STRUCTURAL REFORMS

Structural reform commitments by members appropriately aim to raise employment and growth, and facilitate rebalancing over the medium term. Progress on reforms, though, has been uneven. In advanced economies, more policy effort or reform to tackle stubbornly high unemployment and advancing service sector reforms would be beneficial. In emerging economies, reform objectives appropriately aim at boosting and rebalancing growth, improving social inclusion, and increasing competition. However, more ambition and progress is needed on reforms to facilitate demand rebalancing and enhance potential growth.

A. Advanced G-20 Members

25. **Most structural commitments are focused on raising medium-term employment and growth, and some on fostering global rebalancing.** Key commitments included (i) *reforms to raise employment*, essentially by increasing labor supply and, in some instances, by improving the functioning of the labor market; (ii) *productivity-enhancing reforms*, especially product market reforms to promote competition, in some cases increases in R&D, improvement in education or labor skills, and increased investment in infrastructure; and (iii) *reforms to advance global rebalancing* through fostering private saving in deficit countries and through strengthening domestic demand, in particular for services, and alleviating inefficiencies that underpin low investment and high private saving in surplus countries. Finally, a few countries made commitments to reform the energy sector and/or progress toward a green economy.

26. **The commitments are broadly appropriate, but more focus is needed on reducing stubbornly high unemployment and implementing reforms in the service sector.** Commitments are broadly aligned with the medium-term strategic priorities identified by the OECD and Fund staff. Raising labor force participation is an important objective to address population ageing and the risk of lower growth prospects as the labor force declines. Total factor productivity growth also needs to be lifted from its weak or negative level in many member countries, especially in the services sector. However, greater attention should also be given to the persistently high level of unemployment in many member economies to avoid a large rise in long-term unemployment, and, more generally, to improving the functioning of the labor market. Progress has been uneven across reform areas. Members are beginning to take action, particularly in the areas of labor force participation and the green economy. But there has been less action in the area of reforming product markets, especially services. Reforms of the service sector should be accelerated in several members to lift total factor productivity, potential output and employment.



27. **Cannes commitments on labor market reforms are, by and large, being set in motion, although efforts should be broadened, including to address commitments made in previous summits.**⁷

- *Members are delivering on their Cannes commitments*, in particular those to raise labor force participation in *Australia, France, Germany, Japan, and Korea*. *Korea* has also made some reforms of its labor market, introducing multiple labor unions and taking measures to promote employment of part-time workers and flex time arrangements. In *Canada*, the rise in employment insurance premium paid by firms has been limited to protect employment. Finally, there has been some reform momentum in the EU, in particular in program countries and in economies under market scrutiny, although implementation will be key. In *Italy*, the Cabinet recently approved a wide-ranging proposal for labor market reform, tackling high dismissal costs and duality, but it needs to be strengthened further. The package is still to be approved by Parliament. *Spain* is implementing a major labor market reform which, if implemented properly, will help foster wage flexibility, facilitate negotiations at the firm level, and address the key problem of excessive protection of insider workers. Within the context of the EU governance framework, other EU countries introduced reforms of pension systems and early retirement schemes, enhanced the incentives to work, and stepped up efforts to facilitate transition from school to work and combat youth unemployment.
- *In the short run, greater attention should be given in many advanced countries to reducing high unemployment to avoid hysteresis effects*. While demand policies (when there is policy space) are a main driver of employment growth, some supply-side policies can also help reabsorb the unemployed into the workforce in the short run. These include improving the efficiency of government employment services as well as active labor market policies—and, in particular, workers' retraining in countries that have undergone sector-specific shocks such as *Spain* and the *United States* (e.g., real estate, financial sectors). Scope for further policy action in advanced members also includes unemployment benefits reform, lowering labor-tax wedges, and wage flexibility to promote employment prospects.
- *More specific commitments and resolute action are also needed to boost employment and job creation in the medium term, especially in the European Union*. Overall, the EU countries should do more to enact measures to mobilize labor markets, while commitments under the Euro Plus Pact are not sufficiently ambitious, concrete or binding.

28. **Overall, there has been less action on Cannes commitments on product market reform.** Efforts could be accelerated, including in some surplus economies. *Korea* has lowered entry barriers for qualified professionals and is envisaging further steps for deregulation within five years under Korea-US FTA and Korea-EU FTA. *Japan* has announced its intention to join negotiations for Trans-

⁷ For a broader assessment of the implementation of commitments made in all summits, see "Pursuing Strong, Sustainable and Balanced Growth: A Note on Implementation of G20 Structural Reform Commitments" by the OECD.

Pacific Partnership (TPP) and engaged in preliminary discussions with other TPP countries. In *Germany*, reforms to raise productivity in services are still to be identified. In *France*, a law to reinforce competition in consumer services was not adopted as committed and the reform of the services sector should be broadened to include professional services. *Italy* has approved several key measures in the area of product market reform in March, but commitments to reduce public ownership and pursue privatization could be more specific. Projects in the *European Union* to further deepen the single market integration are also lagging. In particular, the implementation of the Services Directive is lagging in some countries; disagreements remain in the discussions of the Single Market Act proposals; and progress has been mixed in completing the Digital Single Market, with significant delays in some areas. In the *United States*, a more aggressive approach to improving the situation in the housing market is needed. In contrast, more progress is being made on commitments toward a green economy and/or to reform the energy sector (*Australia, Japan, and Korea*).

29. **There is also scope to advance progress on rebalancing.** In the *United States*, the latest President's Budget has maintained the commitment to boost private saving through an automatic enrollment in the individual retirement accounts and offered a new tax break for businesses to help ease transition costs. However, Congress has not acted on any of these proposals so far. In *Germany, Japan, and Korea*, reform of the service sector could be accelerated to help rebalancing growth toward domestic sources. Fund staff also recommends removing inefficiencies that maintain investment low in *Germany*, such as the local trade tax and the debt bias in corporate financing.

B. Emerging G-20 Members

30. **Most structural reform commitments by emerging members focused on strengthening growth, social inclusion, and the functioning of markets and cross-border trade.** Key plans included: (i) *rebalancing and enhancing growth potential* through reforming and increasing investment in infrastructure and energy sectors, with increased private sector involvement and ability to absorb capital inflows; (ii) *stimulating social inclusion* through raising education levels, reforming labor markets (to increase participation and formal sector jobs), raising minimum wages, expanding or better targeting social safety nets to lower poverty, increasing access to credit and housing finance, and introducing or broadening health insurance; and (iii) *strengthening competition and trade* through reform aimed at deregulation, reducing wasteful subsidies to households, industry, corporates, and banks alike, increasing regional trade integration, unilateral reduction in trade barriers, and improving the business and investment environment through better regulation, taxation and governance.

31. **Overall, reform objectives appear broadly appropriate except in the areas of rebalancing and growth, although more time is needed to fully assess progress.** According to staff, some plans appear lacking in ambition in important areas. To help rebalance growth, more specific policies are needed to tackle bottlenecks that obstruct investment or consumption as well as to enhance productivity and potential output in key sectors. Tangible progress in certain areas has been made or initiated since Cannes. However, more time is needed to fully assess whether implementation is robust enough and whether reforms being implemented are having the intended effects.

32. **Specifically, more ambition and steady implementation is needed to facilitate demand rebalancing and enhance potential growth.**

- *More reform or progress to tackle key domestic distortions affecting high saving and rent seeking is needed to facilitate rebalancing.* In the case of *China*, rebalancing is centered on reducing incentives to overinvest/save and increasing incentives to consume. However, rebalancing is hindered by implicit subsidies and a low cost of capital (and other factors: water, land and energy) that are not yet fully addressed, and limited progress in corporate and financial sector reform and liberalization. It is either too soon to assess the impact of reforms on consumption or investment in members or progress overall has been relatively limited (*China, Indonesia, and Russia*).
- *Almost all members committed to boosting growth through investment in infrastructure and energy sectors, with increased private sector involvement, and these reforms have by and large been set into motion.* In several members, what is absent so far are clear policies, beyond Cannes commitments, to improve certain critical shortcomings of the business and investment environment (*Brazil, Russia, and Turkey*); ensure that investment incentives and fiscal revenue mobilization objectives are not inconsistent (*Turkey*); reduce implicit subsidies to energy or other factors (*China and Saudi Arabia*); improve governance and reducing rent seeking (e.g., *China and Russia*); reduce state dominance—including by deepening reform of state-owned enterprises (*China and Russia*); and continue to address labor market shortcomings or ensure new labor reforms are designed or implemented in a market-friendly manner to avoid distortions and preserve competitiveness (*Indonesia, Mexico, Saudi Arabia, and Turkey*). In *Russia*, commitments appear focused on the labor market and unemployment, but improving the ailing investment climate is missing. Reviving investment is also a key issue in *India*.

33. **Stimulating social inclusion appears broadly ambitious and well specified, and progress has been most notable in this area.** Reform has the potential to generate more inclusive growth that could create more formal sector jobs, lift income and education levels, and raise consumption—thus possibly contributing to rebalancing.

- While this commitment appears appropriately ambitious and well set out, the risk is weak implementation, given the enormity of the task. In *Indonesia*, the challenge is to design and implement a proper safety net, which could take time; the new mortgage law in *Saudi Arabia* has been in the pipeline for years and still awaits final approval; in *South Africa* reducing the unemployment rate by 10 percentage points is a mammoth task that hinges on auxiliary reforms in labor and product markets that so far have not been articulated; and in *Turkey*, there is no consensus yet between the government, employers, and employees that may be holding up key reforms in the labor market.

34. **Strengthening competition and trade appears sufficiently ambitious, but strong implementation is needed to see tangible results.** This could raise potential output and stimulate aggregate demand over the medium term (indirectly, through the trade channel).

- *Most members have ambitious, detailed policies here (albeit with some gaps)—but immediate and steadfast implementation will be critical to see a tangible impact on potential output over the medium term.* For example, in *Mexico*, despite a wide range of reforms, initiatives could be bolder given underperforming growth and very high concentration in key sectors. Finally, trade integration plans in *South Africa* and *Saudi Arabia* are ambitious but require concerted efforts to expedite an otherwise lengthy and difficult process given the multiple parties involved.

IV. FINANCIAL POLICY

With regards to financial sector policies, members have advanced the global regulatory reform agenda, but important implementation risks should be addressed to better support shared growth objectives. Key areas of attention for further progress include cross-border resolution and supervision, reform of over-the-counter financial derivatives, and closing critical data and information gaps.

35. **Progress is being made to reshape the financial system and enhance its institutional underpinnings and regulation to safeguard stability—which is critical for growth.** Although work on national regulatory reform agendas has advanced and continues, the international community is sharpening its focus on consistent and steady implementation of the G-20 regulatory initiatives to assure national and global financial stability.

36. **Despite progress to date, implementation and coordination risks are significant.** Strong national and multilateral determination to enact the necessary legal amendments and regulations and see through the reforms is essential to ensure the credibility of the reform agenda, and to maintain momentum and avoid regulatory arbitrage. Risks related to delayed or inconsistent implementation across regimes could create overlaps, gaps or conflicts in regulation—which could be harmful to members' growth objectives.

37. **Speed and sequencing of financial reform can also matter for growth.** More stringent lending standards, for example, could affect the cost and availability of bank credit. Thus, it is crucial to strike a proper balance between the necessary strengthening of the resilience of the financial system via robust implementation and the need to cushion the impact of the adjustment on economic activity with policies, backed up by direct interventions and financial support, including public recapitalization geared toward supporting growth. The long implementation timetables envisaged for the Basel III capital and liquidity rules, combined with appropriate direct measures on the short-term, are designed, in part, to provide time for implementation without undermining the global recovery.

38. **Implementation of the reform agenda is being closely monitored and supported by the FSB.**⁸ Specifically, the newly developed Coordination Framework for Implementation Monitoring

⁸ See, for example, "Identifying the Effects of Regulatory Reforms on Emerging Market and Developing Economies," Report to the G-20 Finance Ministers and Central Bank Governors by FSB with inputs from the IMF and World Bank.

(CFIM), established by the FSB in collaboration with the relevant standard-setting bodies (SSBs), aims to foster discipline through more structured monitoring and reporting on individual countries' progress. This will be more intensive for priority areas, such as Basel II, 2.5, and III, OTC derivatives markets, and global systematically important financial institutions (G-SIFIs). SSBs will be responsible for monitoring those reforms that fall under their competencies, while the FSB will monitor those reforms that do not fall within the purview of a single SSB. Separately, the Fund will review progress realized by its members via its Article IV surveillance and FSAP assessments.

39. Implementation of the Basel III capital and liquidity framework is underway in many jurisdictions. In November 2011, G-20 leaders in Cannes called on jurisdictions to implement fully and consistently Basel II and 2.5 by end-2011, and Basel III starting in 2013. In April 2012, the BCBS published its second progress report on the implementation that showed that most FSB members had implemented Basel II and 2.5 (with a few exceptions), while implementation of Basel III is still at an early stage and is taking place at varying speeds: only two of the 27 FSB member authorities have published final rules, while a third have not yet published a draft regulation. Bearing in mind the need to avoid intensifying the headwinds to growth from ongoing bank deleveraging, many jurisdictions are pursuing an implementation timeline that is in line with the internationally agreed timeframe, while others are contemplating early adoption. Some advanced countries, though, are falling behind their own time tables. Countries are generally awaiting the finalization of liquidity standards, which are being fine-tuned by the BCBS, but some jurisdictions have already introduced domestic regulations that are likely to require eventual revision in order to safeguard the level playing field.

40. Efforts to address the risks posed by systemically important financial institutions (SIFI) have been fruitful, but the work is not yet complete. Some critical elements have been agreed within the four major areas of the SIFI framework, notably: (i) the development of a new international standard for resolution regimes ("Key Attributes of Effective Resolution Regimes for Financial Institutions"); (ii) the finalization of requirements for resolvability assessments and recovery and resolution plans (RRPs); (iii) the completion of the methodology for identifying global SIFIs and the accompanying loss absorption requirements; and (iv) more intensive and effective supervision of G-SIFIs. The development of a policy framework for G-SIFI banks is now completed and the development of an assessment methodology for the Key Attributes is ongoing, together with efforts to extend the G-SIFI framework to domestic systemically important banks and non-bank entities.

41. Key areas of policy reform where further national implementation work is needed include:

- **Implementation of macroprudential frameworks.** The current regulatory framework and its direction have focused too much on the risk of individual financial institutions. Financial regulation has to become more macro-oriented, focusing on systemic risks. While there is broad recognition for a paradigm shift, the design and implementation of effective macroprudential tools is still ongoing. To be effective, macroprudential regulations should apply comprehensively to avoid incentives to shift activities and risks to less regulated institutions, which is an important implementation risk associated with macroprudential

policies. Finally, macroprudential frameworks will need to be designed in a way that supports existing monetary policy frameworks.

- **More effective resolution tools.** The design of effective domestic and cross-border resolution regimes is not yet completed. Many countries have yet to adopt resolution regimes that will help address weak national financial institutions and G-SIFIs. Strong political commitment is needed to finalize the necessary legislative changes for implementing the missing elements of resolution framework, cross-border cooperation and information sharing.
- **Strengthening of prudential supervision.** Supervisors' powers, resources and early intervention capabilities must be enhanced to curb excessive risk-taking, allow intervention in weak financial institutions, and address markets disruptions. Questions remain in some countries about the independence of supervisory agencies. Strong implementation of the commitments to supervise G-SIFIs more intensively, particularly in risk management and governance, is crucial. The revised Basel Core Principles for Effective Banking Supervision, scheduled to be issued in mid-2012, will apply more scrutiny to the intensity of SIFI supervision.
- **OTC derivatives reform.** The international standard setting bodies have intensified work on developing policy and standards in this area, including publishing reports on the trading and clearing obligations (IOSCO) and reporting requirements (CPSS-IOSCO). The FSB committed in October 2011 to step up its own coordination of international policy work. At the same time, national implementation is proceeding across the globe, albeit at varying paces. Several FSB member jurisdictions have reached important milestones in their own legislative and regulatory processes. However, it is likely that some jurisdictions will not meet the end-2012 deadline for implementation of all G-20 commitments. Important questions remain on the international consistency on entities (and markets) exempted from clearing. Also, given the asymmetry in accounting rules for Risk Weighted Assets (RWA), uncleared trades are likely to seek regulatory arbitrage within RWA and capital surcharge rules. Also, there is no uniformity on collateral segregation rules across central counter parties (CCPs), and additional steps are needed to ensure sufficient consistency among the various regimes.
- **Addressing data and information gaps.** This is paramount to enhance the monitoring of emerging risks and vulnerabilities that might threaten financial stability and, ultimately, economic growth. Key decisions on data requirements, following the publication of a consultation paper on a common data template for G-SIBs, are due this year. Cross-border cooperation in this area is essential, especially between the main global financial centers.
- **Reduced regulatory reliance on credit ratings.** Further efforts are necessary by national authorities, starting with concrete plans of action.
- **Strengthen oversight and regulation of shadow banking.** The FSB is conducting an annual monitoring exercise to assess global trends and risks. Further work is ongoing to develop policy recommendations regarding: (i) banks' interactions with shadow banking entities

(report due July 2012), (ii) money market funds (due July 2012); (iii) other shadow banking entities (due September 2012); (iv) securitization (due July 2012); and (v) securities lending and repo (due end-2012). However, regulatory proposals to enhance the stability of the traditional banking system (such as increased capital requirements and limits on proprietary trading) will likely shift activities to non-banks and increase the shadow banking system, and the regulatory perimeter will have to adapt to an increasingly complex and interconnected financial system.