CHAPTER 2

COUNTRY AND REGIONAL PERSPECTIVES

Global growth slowed again during the second quarter of 2012 after rebounding during the first. The slowing has been observed in all regions. This synchronicity suggests an important role for common factors, many of which reflected wide-ranging spillovers from large country-specific or regional shocks. A first shock was the ratcheting up of financial stress in the euro area periphery in the second quarter. Second, domestic demand in many economies in Asia and Latin America (notably Brazil, China, and India, but also others) slowed, owing not just to weaker external demand from Europe but also to domestic factors. Growth also decelerated in the United States.

The theme of spillovers runs throughout this chapter, because spillovers are important to both the baseline projections and the risks to the outlook. With respect to the former, near-term growth projections across most regions have been revised down relative to the April 2012 *World Economic Outlook* (Figure 2.1). Activity is projected to gradually gather speed beginning in late 2012, later than had been expected in April, led by a pickup in emerging market economies owing to recent policy easing. The relatively small revisions to global growth under the baseline are predicated on the assumption that there will be sufficient policy action for financial conditions in the euro area periphery to gradually ease and that the fiscal cliff will be avoided in the United States.

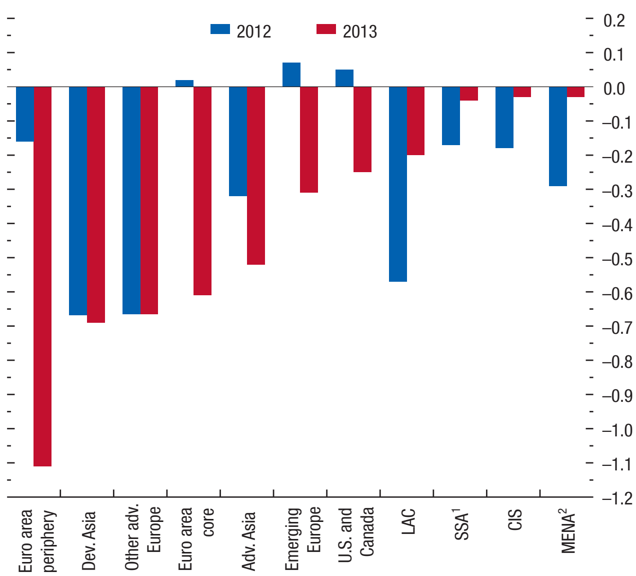
Downside risks have increased relative to the April 2012 WEO and also have important global spillover potential.[1] The most immediate downside risk—that delayed or insufficient policy action will further escalate the euro area crisis—remains in place. Other short-term risks are the looming U.S. "fiscal cliff" and delays in raising the U.S. debt ceiling.

[1]The *2012 Spillover Report* (IMF, 2012b) discusses policy-related spillover risks emanating from the five largest systemically important economies (China, euro area, Japan, United Kingdom, United States).

Figure 2.1. Revisions to WEO Growth Projections for 2012 and 2013

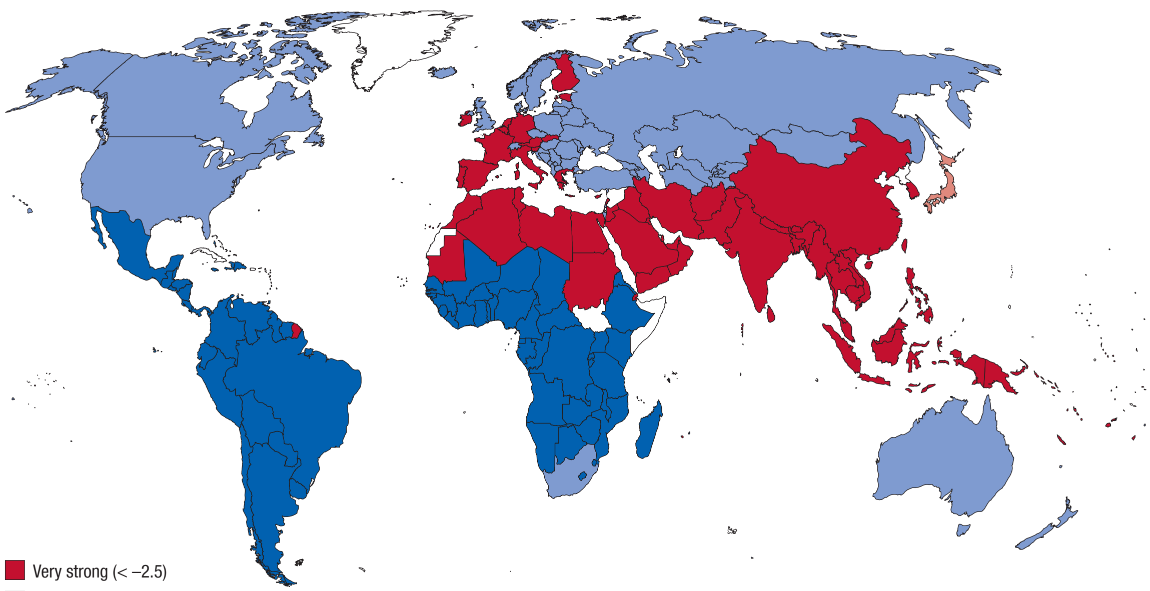
(Percentage point difference from April 2012 WEO projections)

Revisions to the outlook have generally been downward but to varying degrees. The largest revisions apply to Europe, Asia, and Latin America.



Source: IMF staff estimates.
Note: Adv. Asia = advanced Asia; CIS = Commonwealth of Independent States; Dev. Asia = developing Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SSA = sub-Saharan Africa. Emerging Europe (listed as central and eastern Europe in the Statistical Appendix): Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Kosovo, Latvia, Lithuania, FYR Macedonia, Montenegro, Poland, Romania, Serbia, Turkey; Euro area core: Austria, Belgium, Estonia, Finland, France, Germany, Luxembourg, Malta, Netherlands, Slovak Republic, Slovenia; Euro area periphery: Cyprus, Greece, Ireland, Italy, Portugal, Spain; other advanced Europe (Other adv. Europe): Czech Republic, Denmark, Iceland, Norway, Sweden, Switzerland, United Kingdom.
[1]Excludes South Sudan.
[2]Excludes Libya and Syria.

Figure 2.2. The Effects of Lower Potential Growth
(Peak deviation of real GDP growth from WEO baseline; percentage points)



Source: IMF staff estimates.
Note: Peak deviation of real GDP growth from the WEO baseline, under the "disappointing potential output and growing risk aversion" scenario described in Chapter 1. Simulations were conducted using the IMF's Global Economic Model, a six-region model (supplemented with satellite models) that does not explicitly model individual countries (except the United States and Japan).

A medium-term risk is the possibility of lower-than-expected growth in many major economies and regions, including China, because of lower medium-term growth potential and temporarily higher global risk aversion. As illustrated by the corresponding scenario analysis in Chapter 1, if this risk materializes, sharply lower growth will be experienced in all regions—including regions with no or only minor declines in potential growth, which underscores the large spillovers (Figure 2.2).

The Spillover Feature in this chapter assesses the potential transmission of financial stress in advanced economies via capital flows, sovereign yields, and equity prices. The analysis highlights the strong response of global capital flows and asset prices to increased financial stress in advanced economies during several recent episodes, pointing to important differences across episodes depending on the source of stress (Figure 2.3). It also shows that stress related to downswings in China's real activity has become a source of financial market contagion, particularly for commodity-exporting emerging market and developing economies. Because capital flows and asset prices affect domestic financial conditions and business and household confidence, the real effects can be important.

Europe: In the Orbit of the Euro Area Crisis

Financial stress in the euro area periphery has ratcheted up. The recession in most of the periphery is increasingly spilling into other economies in the region. The measures agreed to at the June 29, 2012, European Union (EU) summit and the European Central Bank's (ECB's) establishment of the Outright Monetary Transactions (OMT) program were steps in the right direction and have improved financial conditions, which nevertheless remain fragile. The baseline outlook for the region, weaker now than expected in the April 2012 WEO (Figure 2.4), is for further anemic growth or contraction in 2012 and a moderate pickup in growth in 2013. The possibility that the euro area crisis *will escalate remains a major downside risk to growth and financial sector stability until the underlying issues are resolved.*

Activity in Europe contracted by about ¼ percent during the first half of 2012. The main new development was a further escalation of financial stress during the second quarter in the euro area periphery, which, despite some easing, did not fully reverse in the third quarter through mid-September. The impact is most direct in these economies themselves, and all except Ireland are in recession now. But spillovers are increasingly reaching other economies in the region, given strong trade and financial linkages (Figure 2.5). Rising uncertainty about the viability of the Economic and Monetary Union (EMU) has been another drag on the region. Tellingly, there has been no contribution to growth from investment, in sharp contrast to other advanced economies and major emerging market economies. Finally, precrisis legacy issues, including high household debt following housing booms, have constrained private consumption, notably in Spain, but also in Denmark and the United Kingdom.

Another factor has been the diminishing offset from trade with faster-growing emerging market and advanced economies. Economies in the region with higher growth, including in the euro area core,[2] have benefited from stronger trade linkages with faster-growing economies outside the region. Still, robust growth in Russia has provided some offset to the weaker euro area external demand in emerging Europe. On the financial side, capital outflows from the periphery to perceived safe haven economies in the region (Germany, Switzerland, Scandinavian countries) have continued. These flows contributed to declining yields on government bonds and have fostered expanded domestic lending in recipient economies, including for housing.

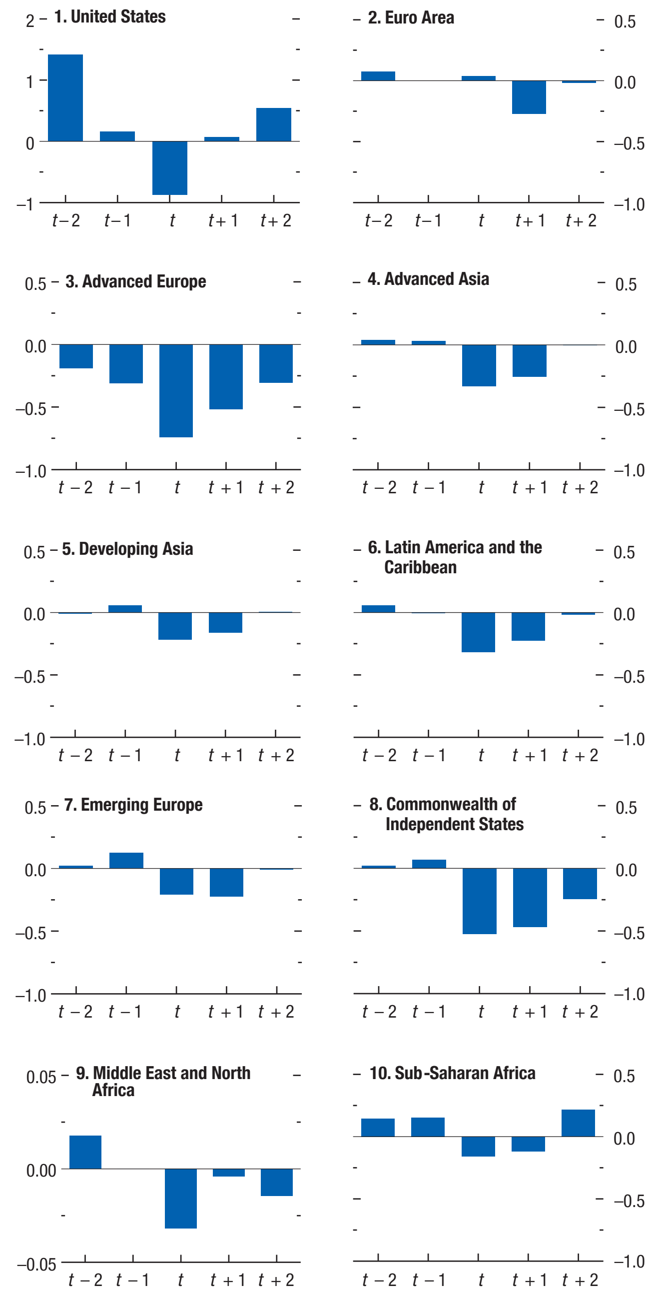
Monetary policy remains accommodative across the region. But with increasing financial market segmentation due to country risk premiums in the euro area, the transmission of conventional monetary policy impulses to the periphery is impaired. The fiscal policy stance has been contractionary overall, especially in the euro area periphery, where the structural fiscal

[2]Austria, Belgium, Estonia, Finland, France, Germany, Luxembourg, Malta, Netherlands, Slovak Republic, and Slovenia.

Figure 2.3. Weekly Equity and Bond Fund Flows during Financial Stress in Advanced Economies

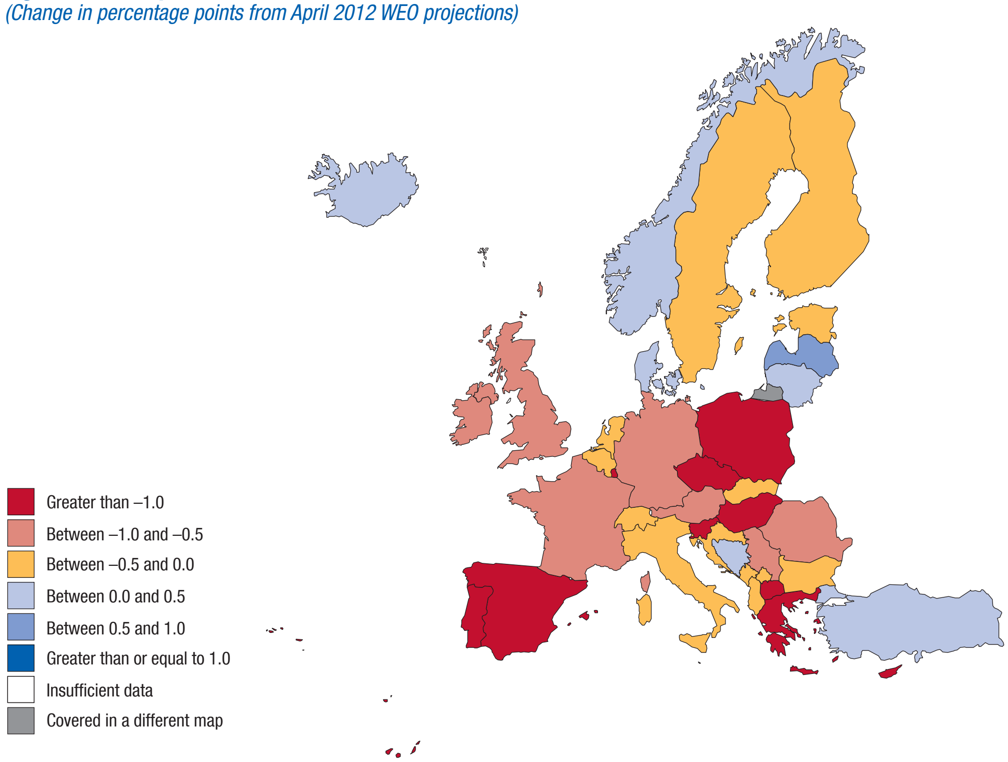
(Percent of 2011 weekly GDP, two weeks before and after stress)

Financial stress in advanced economies tends to be associated with swings in global capital flows. Flows are lower during the weeks following stress than during the weeks before.



Sources: Emerging Portfolio Fund Research; and IMF staff calculations.
Note: Stress events are during January 2010–June 2012. See the Spillover Feature for details. See Table 2.SF.2 for the country composition of each group.

Figure 2.4. Europe: Revisions to 2013 GDP Growth Forecasts
(Change in percentage points from April 2012 WEO projections)



Source: IMF staff estimates.

deficit as a share of GDP is expected to decline by about 2½ percentage points in 2012, compared with a decline of about ½ percentage point in 2011.

Near-term prospects for Europe are weaker now than they were at the time of the April 2012 WEO. The forecast assumes that policymakers in the euro area succeed in containing the crisis through a combination of continued crisis management (including implementation of reforms agreed to at the June summit), supportive demand management, and further advancement of measures to deepen fiscal integration and create a full-fledged banking union. Still, uncertainty will constrain confidence and activity for some time, and downside risks loom large.

The baseline projects that economic activity will pick up gradually, primarily in 2013 (Table 2.1). This increasing activity reflects a number of factors, including improving external demand due to the pickup in growth in some major emerging market economies, a moderating pace of fiscal consolidation throughout much of the region—Spain is an exception given that consolidation must accelerate to meet deficit targets in 2012–13—and a gradual further easing of financial stress in the euro area periphery as fiscal adjustment advances, policy support increases, and policy credibility and confidence improve. There are broad differences among European economies.

- In the euro area, real GDP is projected to contract at a rate of ½ percent in 2012 and to increase by ¼ percent in 2013. In the core economies, growth will broadly stall in 2012, except in the Netherlands, where intensified fiscal consolidation is expected to contribute to contraction. Except for Ireland, which is in a bumpy recovery, the recessions in the economies of the euro area periphery have been deeper, and recovery is generally expected to begin only in 2013, once adjustment moderates.
- Growth in other advanced economies in Europe is projected to moderate to ¼ percent in 2012 before picking up in 2013. Domestic demand has generally remained stronger in many economies, reflecting lower precrisis imbalances and balance sheet pressure, which, together with declining yields from safe haven inflows, have helped cushion the spillovers from the euro area crisis. One exception is the United Kingdom, where the financial sector

was hit hard by the global financial crisis and where ongoing repair of overstretched private and public balance sheets weighs on domestic demand.

- Emerging Europe was significantly affected by the euro area crisis during the past year, including through the deleveraging of western European banks and declining capital inflows (see Chapter 2 of the October 2012 *Global Financial Stability Report*). Credit growth, in turn, decreased significantly. Trade with the euro area also decelerated rapidly, and growth slowed sharply from late 2011. Nevertheless, unlike in 2008, risk contagion from the euro area crisis has remained limited, and credit default swap spreads for most countries in the region remain well below those for the economies of the euro area periphery. Growth is projected to strengthen from 2 percent in 2012 to about 2½ percent in 2013, largely owing to improving conditions elsewhere in Europe.

Headline inflation generally moderated in 2012 and is projected to decline further in the remainder of 2012–13. In fact, where inflation either increased or remained above target recently, the causes were primarily one-time factors such as increases in energy prices and indirect taxes. Although core inflation has remained relatively stable over the past year, it is expected to decrease as well, given the slowdown in activity and large output gaps. With large downside risks to the near-term growth outlook, there is a risk of core inflation undershooting targets, especially in other advanced Europe.

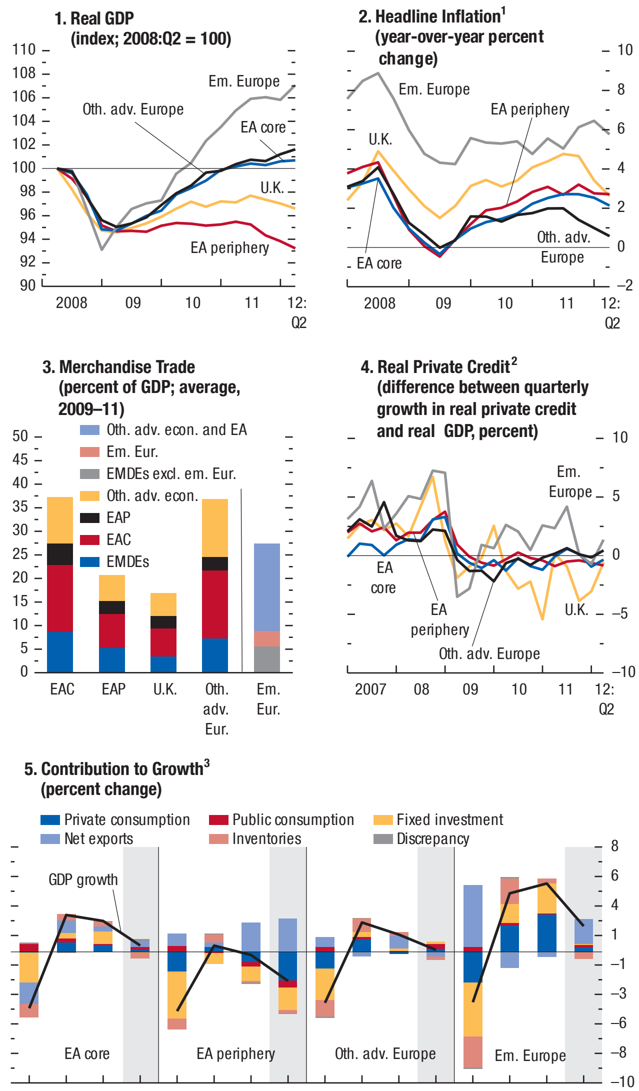
Downside risks predominate in Europe's near-term growth prospects. The most immediate risk remains that delayed or insufficient policy action will lead to further escalation of the euro area crisis. Until the crisis is resolved, the situation remains precarious, and the broad interconnections among most economies in the region point to larger spillovers in Europe than in other regions.

The growth implications and spillovers from any further escalation of the crisis will depend on the scale and reach of the deterioration in confidence and the response of capital flows.[3] If the deterio-

[3]Chapter 2 of the April 2012 *World Economic Outlook* provides an in-depth analysis of these linkages. It highlights the important role of adverse feedback loops between rising funding pressure in the banking system, increasing fiscal vulnerability, and slowing aggregate demand and growth.

Figure 2.5. Europe: In the Midst of Economic and Financial Stress

Activity has slowed throughout Europe, with recession in the euro area periphery and the United Kingdom. Increased uncertainty about policy and prospects has weighed on confidence and investment throughout the region. Growth in real private credit has fallen below that of GDP in some economies, highlighting pressure from bank balance sheet deleveraging and funding problems.



Sources: IMF, Direction of Trade Statistics database; IMF, International Financial Statistics database; and IMF staff estimates.
Note: EA = euro area; EAC = euro area core; EAP = euro area periphery; EMDEs = emerging market and developing economies; Em. Eur. = emerging Europe; U.K. = United Kingdom. See Figure 2.1 for regional country compositions, except other advanced Europe (Oth. adv. Eur.): Czech Republic, Denmark, Iceland, Norway, Sweden, Switzerland; and other advanced economies (Oth. adv. econ.): advanced economies excluding euro area, other advanced Europe, and United Kingdom.
[1]Emerging Europe excludes Albania, Kosovo, FYR Macedonia, and Montenegro.
[2]Real GDP and private credit data are seasonally adjusted.
[3]Due to data limitations, Kosovo and FYR Macedonia are excluded from emerging Europe. Other advanced Europe includes the United Kingdom.

Table 2.1. Selected European Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment

(Annual percent change unless noted otherwise)

	Real GDP			Consumer Prices[1]			Current Account Balance[2]			Unemployment[3]		
		Projections			Projections			Projections			Projections	
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Europe	**2.0**	**0.1**	**0.8**	**3.3**	**2.8**	**2.1**	**0.4**	**0.8**	**1.0**	**. . .**	**. . .**	**. . .**
Advanced Europe	**1.4**	**–0.3**	**0.4**	**2.9**	**2.3**	**1.7**	**1.1**	**1.5**	**1.7**	**9.4**	**10.2**	**10.4**
Euro Area[4,5]	1.4	–0.4	0.2	2.7	2.3	1.6	0.0	1.1	1.3	10.2	11.2	11.5
Germany	3.1	0.9	0.9	2.5	2.2	1.9	5.7	5.4	4.7	6.0	5.2	5.3
France	1.7	0.1	0.4	2.1	1.9	1.0	–1.9	–1.7	–1.7	9.6	10.1	10.5
Italy	0.4	–2.3	–0.7	2.9	3.0	1.8	–3.3	–1.5	–1.4	8.4	10.6	11.1
Spain	0.4	–1.5	–1.3	3.1	2.4	2.4	–3.5	–2.0	–0.1	21.7	24.9	25.1
Netherlands	1.1	–0.5	0.4	2.5	2.2	1.8	8.5	8.2	8.2	4.4	5.2	5.7
Belgium	1.8	0.0	0.3	3.5	2.8	1.9	–1.0	–0.1	0.3	7.2	7.4	7.9
Austria	2.7	0.9	1.1	3.6	2.3	1.9	1.9	1.9	1.6	4.2	4.3	4.5
Greece	–6.9	–6.0	–4.0	3.3	0.9	–1.1	–9.8	–5.8	–2.9	17.3	23.8	25.4
Portugal	–1.7	–3.0	–1.0	3.6	2.8	0.7	–6.4	–2.9	–1.7	12.7	15.5	16.0
Finland	2.7	0.2	1.3	3.3	2.9	2.3	–1.2	–1.6	–1.7	7.8	7.6	7.8
Ireland	1.4	0.4	1.4	1.2	1.4	1.0	1.1	1.8	2.7	14.4	14.8	14.4
Slovak Republic	3.3	2.6	2.8	4.1	3.6	2.3	0.1	0.8	0.3	13.5	13.7	13.5
Slovenia	0.6	–2.2	–0.4	1.8	2.2	1.5	0.0	1.1	1.0	8.2	8.8	9.0
Luxembourg	1.6	0.2	0.7	3.7	2.5	2.3	7.1	7.3	7.1	5.7	6.2	6.1
Estonia	7.6	2.4	3.5	5.1	4.4	3.2	2.1	0.7	–0.1	12.5	10.1	9.1
Cyprus	0.5	–2.3	–1.0	3.5	3.1	2.2	–10.4	–3.5	–2.0	7.8	11.7	12.5
Malta	2.1	1.2	2.0	2.5	3.5	2.2	–1.3	–1.5	–1.6	6.5	6.0	5.8
United Kingdom[5]	0.8	–0.4	1.1	4.5	2.7	1.9	–1.9	–3.3	–2.7	8.0	8.1	8.1
Sweden	4.0	1.2	2.2	3.0	1.4	2.0	6.9	7.2	7.8	7.5	7.5	7.7
Switzerland	1.9	0.8	1.4	0.2	–0.5	0.5	10.5	10.1	10.0	2.8	3.4	3.6
Czech Republic	1.7	–1.0	0.8	1.9	3.4	2.1	–3.0	–2.4	–2.2	6.7	7.0	8.0
Norway	1.5	3.1	2.3	1.3	1.0	2.2	14.5	15.2	15.6	3.3	3.1	3.1
Denmark	0.8	0.5	1.2	2.8	2.6	2.0	6.7	5.0	4.6	6.1	5.6	5.3
Iceland	3.1	2.9	2.6	4.0	5.6	4.4	–6.2	–2.7	–2.1	7.4	6.1	5.7
San Marino	–2.6	–2.6	0.5	2.0	3.0	2.1	. . .	. . .	. . .	5.5	6.6	6.1
Emerging Europe[6]	**5.3**	**2.0**	**2.6**	**5.3**	**5.6**	**4.4**	**–6.1**	**–5.0**	**–4.9**	**. . .**	**. . .**	**. . .**
Turkey	8.5	3.0	3.5	6.5	8.7	6.5	–10.0	–7.5	–7.1	9.8	9.4	9.9
Poland	4.3	2.4	2.1	4.3	3.9	2.7	–4.3	–3.7	–3.8	9.6	10.0	10.2
Romania	2.5	0.9	2.5	5.8	2.9	3.2	–4.4	–3.7	–3.8	7.4	7.2	7.0
Hungary	1.7	–1.0	0.8	3.9	5.6	3.5	1.4	2.6	2.7	11.0	10.9	10.5
Bulgaria	1.7	1.0	1.5	3.4	1.9	2.3	0.9	–0.3	–1.5	11.3	11.5	11.0
Serbia	1.6	–0.5	2.0	11.1	5.9	7.5	–9.5	–11.5	–12.6	24.4	25.6	25.6
Croatia	0.0	–1.1	1.0	2.3	3.0	3.0	–1.0	–1.2	–1.3	13.7	14.2	13.3
Lithuania	5.9	2.7	3.0	4.1	3.2	2.4	–1.5	–1.1	–1.4	15.4	13.5	12.5
Latvia	5.5	4.5	3.5	4.2	2.4	2.2	–1.2	–1.6	–2.8	16.2	15.3	13.9

[1]Movements in consumer prices are shown as annual averages. December–December changes can be found in Tables A6 and A7 in the Statistical Appendix.

[2]Percent of GDP.

[3]Percent. National definitions of unemployment may differ.

[4]Current account position corrected for reporting discrepancies in intra-area transactions.

[5]Based on Eurostat's harmonized index of consumer prices.

[6]Also includes Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, and Montenegro.

ration is confined to the periphery economies—broadly mirroring developments during the past two years—private capital outflows from crisis to core economies will increase. The direct negative impact on the periphery through external current accounts and domestic demand would remain limited, however, because the euro system provides for automatic, offsetting inflows. Still, financial conditions would tighten as prospective bank losses increase; banks in the periphery and, to a lesser extent, in the core economies (largely because of cross-border asset holdings in the periphery) would increase provisions and precautionary cash holdings; and lending rates would rise.

In contrast, if the euro area core economies were hit by contagion—for example, resulting from rapidly intensifying concerns about the integrity of the EMU and its ability to manage the crisis—the loss of investor confidence would also hit the core. Sovereign risk premiums and yields would increase in the periphery and the core, requiring additional fiscal adjustment everywhere. Increased capital outflows from the euro area as a whole would cause depreciation of the euro by more than in the case of limited contagion. Current accounts throughout the euro area would adjust. Obviously, the output losses in Europe and also outside the region would be larger under this scenario.

The highest policy priority in Europe is to resolve the crisis in the euro area. All other economies in the region need a policy mix that supports their recoveries in a weak global growth environment, and many also need to address fiscal sustainability challenges and financial sector vulnerabilities.

Resolving the euro area crisis requires progress toward banking and fiscal union in combination with short-term demand support and crisis management at the euro area level.[4]

- The agreements reached at the June 29, 2012, EU summit, if fully implemented, will create a banking union and help break the adverse feedback loops between sovereigns and banks—once an effective single supervisory mechanism for euro area banks is established, the ESM, which will be operational beginning in October 2012, could be able to recapitalize banks directly. But implementation hurdles are a concern, and additional steps are needed. Banking union also requires a pan-European deposit insurance guarantee program and a bank resolution mechanism with common backstops.
- Regarding demand support, the ECB should keep its policy rate low for the foreseeable future or reduce it even further. OMTs, which the ECB will consider for countries under a macroeconomic adjustment or precautionary program with the European Financial Stability Facility and its successor, the European Stability Mechanism (ESM), should help ensure that low policy rates transmit to borrowing costs in countries in the periphery with a program. The ECB should also continue to provide ample liquidity to banks.
- The viability of the EMU must be supported by wide-ranging structural reforms throughout the euro area to raise growth and competitiveness, thereby helping the resolution of intra-euro-area current account imbalances.
- Fiscal consolidation plans in the euro area must be implemented. In general, attention should be paid to meeting structural fiscal targets, rather than nominal targets that will likely be affected by economic conditions. Automatic stabilizers should thus be allowed to operate fully in economies not subject to market pressure. Considering the large downside risks, economies with limited fiscal vulnerability should stand ready to implement fiscal contingency measures if such risks materialize.

In other advanced economies in the region, monetary policy needs to respond effectively to a much weaker near-term environment that will dampen price pressures, including through the use of further unconventional measures. In the United Kingdom, further monetary easing through unconventional measures may be necessary, depending on the effects of the easing measures implemented recently. With the prospect of somewhat weaker global growth, automatic stabilizers should be allowed to operate fully, and economies with limited fiscal vulnerability (see the October 2012 *Fiscal Monitor*) should stand ready to implement fiscal contingency measures if large downside risks materialize.

[4]See also the discussion in Chapter 1 and in IMF (2012c).

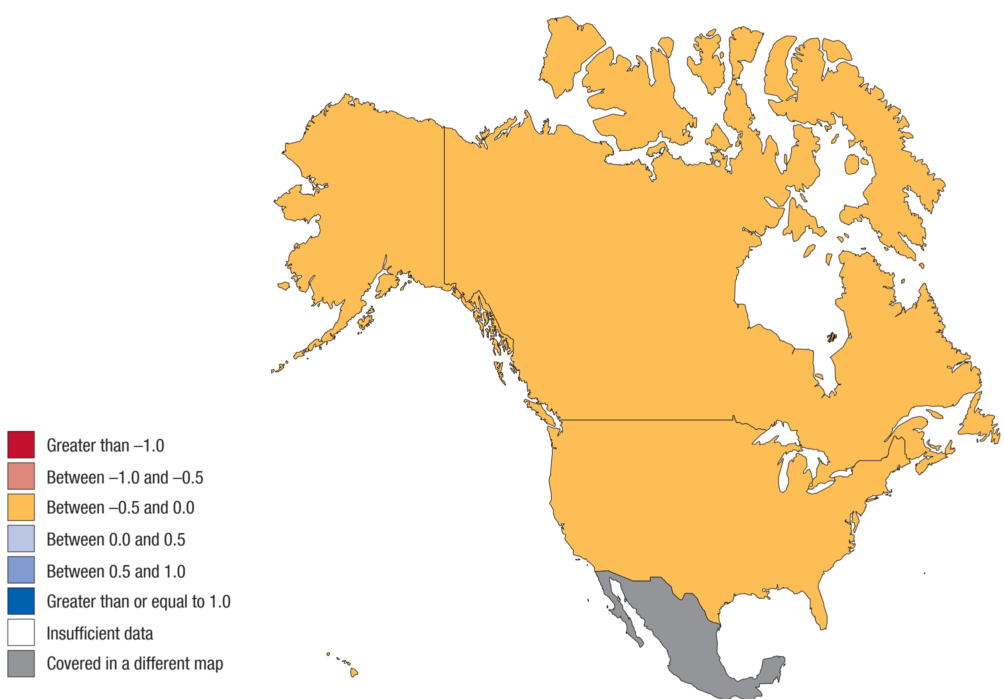
In emerging Europe, the need for fiscal consolidation varies widely; economies with a high public debt burden and exposed to market volatility must continue with steady consolidation (Hungary). Inflation pressure is set to decline rapidly in many countries, giving central banks new room for easing.

The United States and Canada: Growth Continues, but Slack Remains

In the United States, a modest recovery with weak job creation continues amid a weak global environment, although the housing market is stabilizing. In Canada, the recovery has been more robust, reflecting partly the effects of favorable financing conditions with less pressure for balance sheet adjustment and the commodity boom. The expansion is expected to remain modest throughout 2012–13 (Figure 2.6). Both external and domestic downside risks to the outlook remain elevated. In the United States, it is imperative to avoid excessive fiscal consolidation (the fiscal cliff) in 2013, to raise the debt ceiling promptly, and to agree on a credible medium-term fiscal consolidation plan. In Canada, a priority is to limit risks related to elevated house prices and household debt levels.

Output in the United States rose above the precrisis peak in the second half of 2011, sooner than in many other advanced economies (Figure 2.7, panels 1 and 2). Still, compared with earlier recoveries, growth remains sluggish, consistent with the broad evidence of significant legacy effects of financial crises and housing busts. Job creation, which accelerated in the second half of 2011, slowed again in 2012. Weaker external conditions and the confluence of global spillovers discussed above explain much of the slowing, with a payback from the unusually warm winter weather also temporarily weighing on growth in the second quarter. On the demand side, growth in business investment lost some momentum, in part due to the partial expiration of bonus depreciation allowances, although uncertainty related to the fiscal and economic outlook may have also played a role. Private consumption has also moderated since early 2012. The

Figure 2.6. United States and Canada: Revisions to 2013 GDP Growth Forecasts
(Change in percentage points from April 2012 WEO projections)



Source: IMF staff estimates.

housing market is showing signs of stabilizing after a sharp correction (Figure 2.7, panels 3 and 4).

In Canada, growth has been constrained by the sluggish expansion in the United States—a result of the two economies' deep economic and financial linkages—and the ongoing fiscal consolidation. Still, activity has recovered at a faster pace than in the United States. Domestic demand—both business investment and private consumption—has been supported by exceptionally favorable financing conditions, including low interest rates and credit availability. These factors, along with the commodity boom, have also boosted the housing sector, especially in provinces with strong mining activity. However, housing-related credit and household leverage have risen markedly since the Great Recession, despite measures to limit mortgage growth (Figure 2.7, panels 4 and 5).

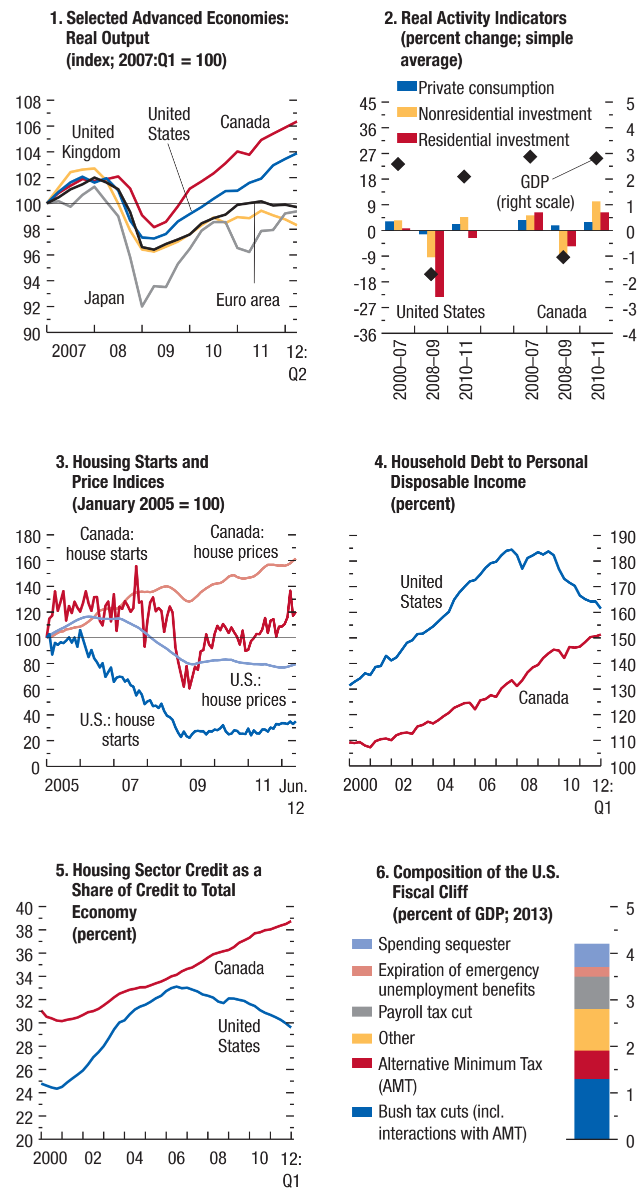
The U.S. and Canadian economies are both projected to grow at about 2 percent during 2012–13 under the baseline, with uncertainty and weaker external demand weighing on aggregate demand (Table 2.2). U.S. inflation will stay subdued, given lower commodity prices and persistent economic slack, averaging 2 percent this year and declining to 1¾ percent in 2013.

The near-term growth outlook is subject to large downside risks from both external and domestic factors. The main external risk pertains to a further escalation of the euro area crisis. Although safe haven capital flows into the United States could help to lower bond yields, supporting interest-sensitive components of aggregate demand, they also have been associated with real appreciation pressures, which dampen exports. As noted above, U.S. growth will also fall sharply if potential output in the United States and its major trading partners disappoints and risk aversion increases (Figure 2.2).

A major U.S. domestic risk is the potential for much sharper fiscal contraction (Figure 2.7, panel 6) if policymakers fail to reach agreement to prevent large automatic tax increases and spending cuts scheduled to take effect at the beginning of 2013. At the extreme, the fiscal cliff could result in a fiscal withdrawal of more than 4 percent of GDP in 2013—about 3 percentage points of GDP larger than the fiscal adjustment assumed under the

Figure 2.7. United States and Canada: A Weak Recovery

Growth in the United States has been sluggish, and job creation has weakened. The recovery is expected to remain tepid, given a weaker global environment and significant domestic policy uncertainty, including about the fiscal cliff. In Canada, easy financing conditions, strong credit growth, and robust commodity market conditions have supported domestic demand, and activity has expanded at a faster pace than in other major advanced economies.



Sources: Congressional Budget Office; Haver Analytics; and IMF staff estimates.

Table 2.2. Selected Advanced Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment

(Annual percent change unless noted otherwise)

	Real GDP			Consumer Prices[1]			Current Account Balance[2]			Unemployment[3]		
		Projections			Projections			Projections			Projections	
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Advanced Economies	**1.6**	**1.3**	**1.5**	**2.7**	**1.9**	**1.6**	**–0.2**	**–0.4**	**–0.3**	**7.9**	**8.0**	**8.1**
United States	1.8	2.2	2.1	3.1	2.0	1.8	–3.1	–3.1	–3.1	9.0	8.2	8.1
Euro Area[4,5]	1.4	–0.4	0.2	2.7	2.3	1.6	0.0	1.1	1.3	10.2	11.2	11.5
Japan	–0.8	2.2	1.2	–0.3	0.0	–0.2	2.0	1.6	2.3	4.6	4.5	4.4
United Kingdom[4]	0.8	–0.4	1.1	4.5	2.7	1.9	–1.9	–3.3	–2.7	8.0	8.1	8.1
Canada	2.4	1.9	2.0	2.9	1.8	2.0	–2.8	–3.4	–3.7	7.5	7.3	7.3
Other Advanced Economies[6]	3.2	2.1	3.0	3.1	2.2	2.4	4.7	3.7	3.3	4.5	4.5	4.6
Memorandum												
Newly Industrialized Asian Economies	4.0	2.1	3.6	3.6	2.7	2.7	6.6	5.6	5.5	3.6	3.5	3.5

[1]Movements in consumer prices are shown as annual averages. December–December changes can be found in Table A6 in the Statistical Appendix.

[2]Percent of GDP.

[3]Percent. National definitions of unemployment may differ.

[4]Based on Eurostat's harmonized index of consumer prices.

[5]Current account position corrected for reporting discrepancies in intra-area transactions.

[6]Excludes the G7 economies (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and euro area countries.

baseline. Growth would stall in 2013 with the full materialization of the cliff and, as detailed in the *2012 Spillover Report* (IMF, 2012b), would inflict large spillovers on major U.S. trading partners and also on commodity exporters (because of declines in commodity prices).

Another fiscal risk, although relatively more medium term, relates to a potential jump in the risk premium on U.S. Treasury bonds, reflecting investor concerns about the sustainability of U.S. debt levels in the absence of a credible plan for medium-term consolidation. The rise in long-term interest rates would lead to lower aggregate demand and growth, particularly in the United States but also elsewhere through asset price and trade spillovers (see IMF, 2012b). More generally, a deterioration in economic conditions in the U.S. economy that hurts investor confidence and raises risk aversion at the global level could induce sharp swings in global capital flows and asset prices (see the Spillover Feature).

Given its strong economic and financial ties with the U.S. economy, Canada is equally exposed to the risks facing its trading partner. In addition, an important domestic vulnerability in Canada relates to the housing market. A sharp or sustained decline in house prices could seriously set back the leveraged household sector and domestic demand.

The urgent policy priorities in the United States are to avoid excessive fiscal contraction in the short term, promptly raise the debt ceiling, and agree on a credible fiscal consolidation plan—centered around entitlement and tax reforms—that places government debt on a sustainable path in the medium term. The latter would also contribute to global demand rebalancing, given that the U.S. current account position is estimated to be weaker and the real effective exchange rate stronger than they would be if a more desirable path for fiscal deficits over the medium term were in place (IMF, 2012a). Notwithstanding recent steps and nascent signs of stabilization in the housing market, more must be done to reduce the rate of foreclosures and remove impediments to the transmission of low long-term policy rates to mortgage rates.[5] In this regard, the recent measures by the Federal Reserve on additional quantitative easing and the extension of its low-interest-rate guidance until mid-2015 were timely in limiting downside risks. Monetary policy needs to remain accommodative while the government and household sectors continue to consolidate

[5]Key measures include increasing the participation of government-sponsored enterprises in the principal reduction program, supporting refinancing on a larger scale, and converting foreclosed property into rental property to limit the downward price pressure. See IMF (2012c) and Chapter 3 of the April 2012 *World Economic Outlook*.

their balance sheet positions. These and other priorities—including financial regulatory, labor market, and structural reforms—are discussed in detail in Chapter 1 and in previous WEO reports.

In Canada, the key priority is to ensure that risks from the housing sector and increases in household debt remain well contained and do not create financial sector vulnerabilities. Thus far, mortgage credit growth has slightly decelerated in response to the measures taken by the authorities, including tighter mortgage insurance standards. If household leverage continues to rise, additional measures may need to be considered.

Asia: Calibrating a Soft Landing

Growth in Asia has moderated further with weaker external demand and the soft landing of domestic demand in China. The outlook is for a modest pickup in growth on the back of recent policy easing. Limited direct financial spillovers and some room for policy easing should be helpful in minimizing external downside risks. Balancing external and internal risks will be important, however, given that output gaps are still positive in some economies in the region while credit growth remains strong and that lower-than-expected potential output growth and domestic imbalances are still risks.

Growth continued to moderate in much of Asia during the first half of 2012. Slower growth in import demand in most advanced economies corresponded with weaker export growth in Asia. Growth in China slowed further in the second quarter of 2012, as the economy continued to adjust to the policy tightening undertaken in 2010–11. The tightening of monetary and credit policies has been partly reversed in 2012, as price pressures have eased and the residential real estate market has cooled. This easing, however, has not yet gained the traction expected earlier in the year. Slowing growth in China has affected activity in the rest of Asia, a consequence of the deepening of linkages throughout the region in the past decade.

In other parts of Asia, activity was boosted by recovery from natural disasters and reconstruction, notably in Japan and Thailand, but also in Australia and New Zealand. In Australia, continued strong mining activity and related investment have also supported growth. In India, growth weakened more than expected in the first half of 2012, an outcome of stalled investment caused by governance issues and red tape, and a deterioration in business sentiment against the backdrop of a rising current account deficit and the recent rupee depreciation.

Compared with the region's growth performance in recent years, the near- and medium-term outlooks are less buoyant. This view reflects weaker anticipated external demand resulting from the tepid growth prospects in major advanced economies and a downshift in China's and India's growth prospects, with a return to double-digit growth in China unlikely given the policy objectives laid out in the 12th Five-Year Plan. The main impetus for a moderate pickup in growth from late 2012 will come from recent policy easing in China and elsewhere. Specifically, growth in the region is projected to average 5½ percent this year and rise to 5¾ percent in 2013 (Table 2.3), downward revisions of more than ½ percentage point for both years relative to the April 2012 WEO (Figure 2.8).

- Growth in China is projected to be about 7¾ percent this year and then to strengthen to 8¼ percent in 2013 as domestic demand growth, especially investment growth, picks up with the policy easing now under way.
- Growth in India is projected to average 5 to 6 percent in 2012–13, more than 1 percentage point lower than in the April 2012 WEO. The downgrade reflects both an expectation that current drags on business sentiment and investment will persist and a weaker external environment.
- In Japan, growth is expected to reach almost 2¼ percent in 2012. Much of the recent strength is attributable to reconstruction activity and some rebound in manufacturing activity in the first half of the year following the supply shocks associated with the March 2011 earthquake and tsunami and the Thai floods in October 2011. The effects of these factors will fade, however, and growth is projected to moderate to 1¼ percent in 2013.
- Weaker external demand is the main factor underpinning generally modestly weaker growth in the ASEAN-5[6] economies in 2012 (Figure 2.9, panels

[6]The Association of Southeast Asian Nations (ASEAN) has 10 members; the ASEAN-5 are Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.

Table 2.3. Selected Asian Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment
(Annual percent change unless noted otherwise)

	Real GDP			Consumer Prices[1]			Current Account Balance[2]			Unemployment[3]		
		Projections			Projections			Projections			Projections	
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Asia	**5.8**	**5.4**	**5.8**	**5.0**	**3.9**	**3.8**	**1.9**	**1.2**	**1.3**	**. . .**	**. . .**	**. . .**
Advanced Asia	**1.3**	**2.3**	**2.3**	**1.6**	**1.2**	**1.2**	**2.3**	**1.5**	**1.6**	**4.3**	**4.3**	**4.2**
Japan	–0.8	2.2	1.2	–0.3	0.0	–0.2	2.0	1.6	2.3	4.6	4.5	4.4
Australia	2.1	3.3	3.0	3.4	2.0	2.6	–2.3	–4.1	–5.5	5.1	5.2	5.3
New Zealand	1.3	2.2	3.1	4.0	1.9	2.4	–4.2	–5.4	–5.9	6.5	6.6	5.7
Newly Industrialized Asian Economies	**4.0**	**2.1**	**3.6**	**3.6**	**2.7**	**2.7**	**6.6**	**5.6**	**5.5**	**3.6**	**3.5**	**3.5**
Korea	3.6	2.7	3.6	4.0	2.2	2.7	2.4	1.9	1.7	3.4	3.3	3.3
Taiwan Province of China	4.0	1.3	3.9	1.4	2.5	2.0	8.9	6.9	7.3	4.4	4.5	4.3
Hong Kong SAR	5.0	1.8	3.5	5.3	3.8	3.0	5.3	4.1	3.8	3.4	3.4	3.3
Singapore	4.9	2.1	2.9	5.2	4.5	4.3	21.9	21.0	20.7	2.0	2.1	2.1
Developing Asia	**7.8**	**6.7**	**7.2**	**6.5**	**5.0**	**4.9**	**1.6**	**0.9**	**1.1**	**. . .**	**. . .**	**. . .**
China	9.2	7.8	8.2	5.4	3.0	3.0	2.8	2.3	2.5	4.1	4.1	4.1
India	6.8	4.9	6.0	8.9	10.2	9.6	–3.4	–3.8	–3.3	. . .	. . .	. . .
ASEAN-5	**4.5**	**5.4**	**5.8**	**5.9**	**4.0**	**4.3**	**2.9**	**0.6**	**0.2**	**. . .**	**. . .**	**. . .**
Indonesia	6.5	6.0	6.3	5.4	4.4	5.1	0.2	–2.1	–2.4	6.6	6.2	6.1
Thailand	0.1	5.6	6.0	3.8	3.2	3.3	3.4	–0.2	0.1	0.7	0.7	0.7
Malaysia	5.1	4.4	4.7	3.2	2.0	2.4	11.0	7.5	6.9	3.1	3.1	3.0
Philippines	3.9	4.8	4.8	4.7	3.5	4.5	3.1	3.0	2.6	7.0	7.0	7.0
Vietnam	5.9	5.1	5.9	18.7	8.1	6.2	0.2	0.3	–0.9	4.5	4.5	4.5
Other Developing Asia[4]	**5.0**	**5.1**	**4.9**	**10.6**	**8.9**	**8.2**	**–0.6**	**–1.5**	**–1.5**	**. . .**	**. . .**	**. . .**
Memorandum												
Emerging Asia[5]	7.3	6.1	6.7	6.1	4.7	4.6	2.4	1.6	1.7	. . .	. . .	. . .

[1]Movements in consumer prices are shown as annual averages. December–December changes can be found in Tables A6 and A7 in the Statistical Appendix.

[2]Percent of GDP.

[3]Percent. National definitions of unemployment may differ.

[4]Other Developing Asia comprises Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Fiji, Kiribati, Lao P.D.R., Maldives, Myanmar, Nepal, Pakistan, Papua New Guinea, Samoa, Solomon Islands, Sri Lanka, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

[5]Emerging Asia comprises all economies in Developing Asia and Newly Industrialized Asian Economies.

1 and 2). The main exception is Thailand, where growth has bounced back sharply, led by reconstruction and investment after the devastating floods in October 2011. Overall, growth in the ASEAN-5 is projected to accelerate slightly to 5¾ percent in 2013, up from about 5½ percent in 2012.

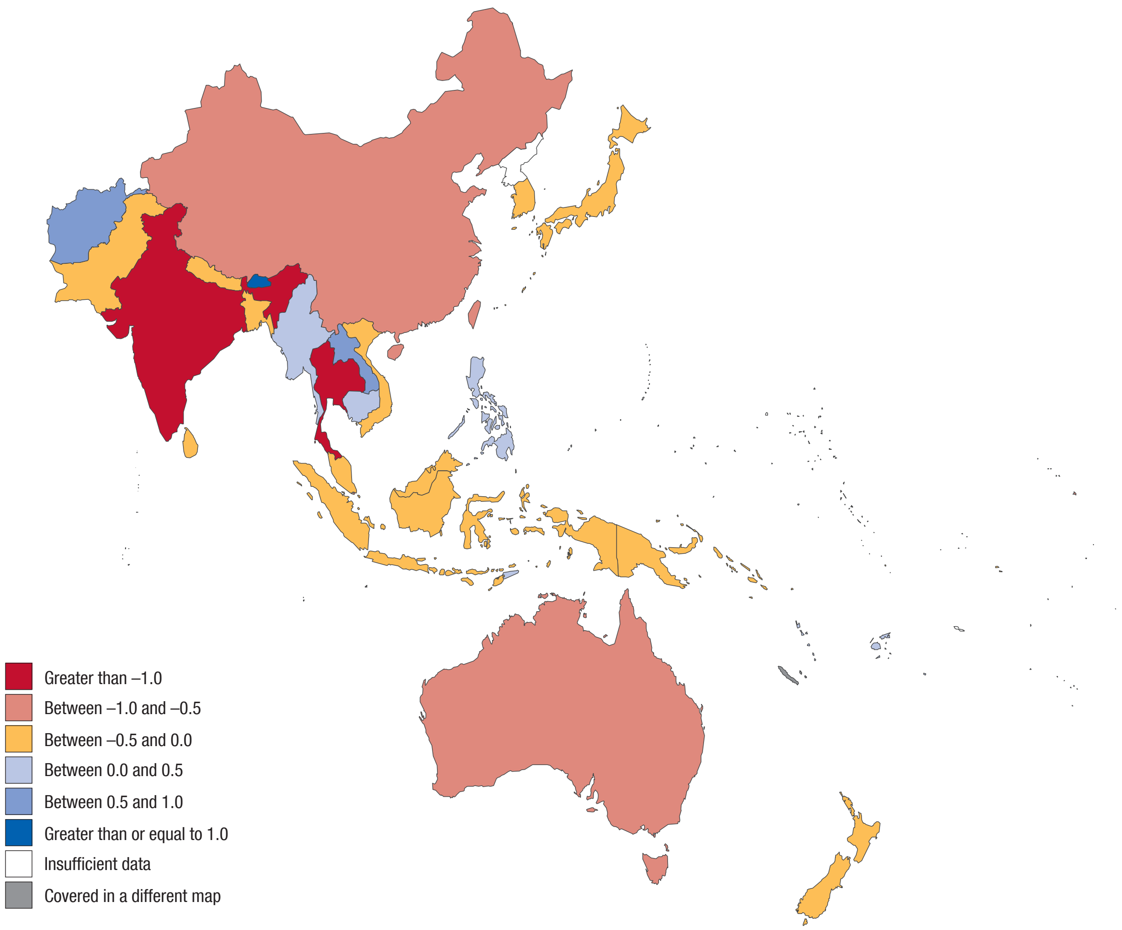
- In Korea, growth is projected to moderate to 2¾ percent this year but to pick up to about 3½ percent in 2013 because of a rebound in exports and private investment, which is geared toward the tradables sector.

Inflation in the region is projected to decline from 5 percent in 2011 to about 4 percent during 2012–13. This is due, in part, to the recent decline in commodity prices but also to the lagged effect of the policy tightening during 2010–11 put in place to relieve overheating pressure.

The balance of risks to the near-term growth outlook is tilted to the downside, reflecting external and, to a lesser extent in the near term, internal risks to the region. In the short term, a further escalation of the euro area crisis and failure to address the U.S. fiscal cliff are the main external risks for the region. If these risks were to materialize, Asia's open, trade-oriented economies would be faced with lower external demand and other spillovers (for example, on confidence), and growth could be substantially lower.

Much of the discussion of spillovers from advanced economies to economies in emerging Asia has focused on spillovers through trade and confidence channels. However, as discussed in the Spillover Feature, emerging Asia, like other emerging markets, has become more integrated with global

Figure 2.8. Asia: Revisions to 2013 GDP Growth Forecasts
(Change in percentage points from April 2012 WEO projections)



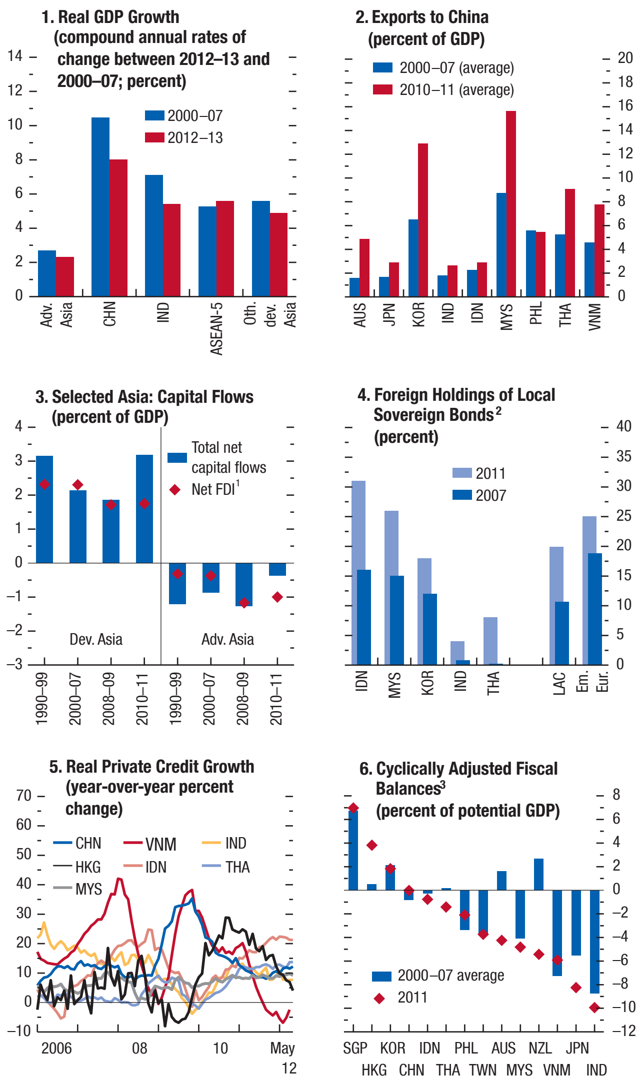
Source: IMF staff estimates.

financial markets (Figure 2.9, panels 3 and 4). With the resulting higher exposure to financial shocks, increases in financial stress in advanced economies during the past few years have indeed been associated with lower capital flows and asset price declines in the region. Overall, though, private capital flows to the region have remained sizable and credit growth strong (Figure 2.9, panel 5). With increased exposure, volatility in global capital markets also can have larger effects, including through effects on exchange rates (as illustrated by safe haven effects and the recent yen appreciation).

Among internal risks to the region, lower-than-expected potential growth in emerging Asia in the medium term is a key risk. As noted in Chapter 1, the housing boom and similar temporary factors in the major advanced economies may have contributed to the recent strong growth performance in the region. China experienced residential real estate and investment booms of its own, which accelerated during 2009–10 subsequent to macroeconomic policy stimulus actions taken in response to the global financial crisis. Strong credit growth has supported demand across emerging market economies more broadly, including in Asia, but cannot continue at its recent pace without creating large financial stability risks. In the event of simultaneous lower potential growth in emerging Asia and in other regions, the impact on growth would be sizable in Asia, as would be the outward spillovers on commodity exporters

Figure 2.9. Asia: Activity Decelerates

Growth in Asia has moderated further, given weaker external demand and the soft landing in China. The downgrading of medium-term growth prospects in China will affect regional growth performance because of China's expanding trade linkages with other economies in the region. The region has been exposed to financial spillovers from advanced economies, but capital flows to its emerging market economies and credit growth both remain strong.



Sources: CEIC; Haver Analytics; IMF, Balance of Payments Statistics database; IMF, Direction of Trade Statistics database; IMF, International Financial Statistics database; IMF, *Regional Economic Outlook: Asia and Pacific* (October 2011); national sources; and IMF staff estimates.
Note: Advanced Asia (Adv. Asia): Australia (AUS), Hong Kong SAR (HKG), Japan (JPN), Korea (KOR), New Zealand (NZL), Singapore (SGP), Taiwan Province of China (TWN); ASEAN-5: Indonesia (IDN), Malaysia (MYS), Philippines (PHL), Thailand (THA), Vietnam (VNM); other developing Asia (Oth. dev. Asia): Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Kiribati, Lao P.D.R., Maldives, Myanmar, Nepal, Pakistan, Papua New Guinea, Samoa, Solomon Islands, Sri Lanka, Timor-Leste, Tonga, Vanuatu; developing Asia (Dev. Asia): ASEAN-5 and other developing Asia; CHN = China; IND = India.
[1]FDI = foreign direct investment.
[2]Em. Eur. = emerging Europe (see Figure 2.1 for regional country compositions); LAC = Latin America and the Caribbean; India: total bond market.
[3]Indonesia: average of 2004–07; New Zealand: average of 2005–07; Vietnam: in percent of fiscal year nominal GDP.

(see Figure 2.2). A related risk is that the recent surge in investment in China could be reversed and result in a sharper-than-expected investment slowdown in the future. Such a shock would strongly affect economies in the highly interlinked Asian supply chain—for example, Korea, Malaysia, Taiwan Province of China, and Thailand—including indirectly through the large effects on other major manufacturing exporters, especially Germany and Japan.[7]

Policies must strike the right balance between managing external and internal risks and orchestrating a soft landing. External risks have been more pressing, and the recent shift toward monetary easing across much of the region seems appropriate for most economies, given decelerating inflation in both advanced and emerging Asia. Even so, recent rate cuts have used some of the available space in emerging Asia—output gaps are still positive and real policy rates remain well below their precrisis averages. In India, where inflation is still high, monetary policy should stay on hold until a sustained decrease in inflation materializes. In Japan, the easing of monetary policy announced in September should help support economic growth and exit from deflation. Further easing of monetary policy may, however, be needed for inflation accelerating toward the Bank of Japan's goal of 1 percent.

Should downside risks materialize, some economies (ASEAN-5, China, Korea) still have the fiscal space to allow automatic stabilizers to operate fully, if appropriate, or to use discretionary fiscal stimulus (Figure 2.9, panel 6). In a number of economies, however, addressing debt sustainability through credible fiscal consolidation remains a priority (India, Japan, Vietnam). In Japan, the recent approval of a gradual doubling of the consumption tax rate to 10 percent by 2015 is an important step toward putting public debt on a sustainable trajectory, although further consolidation measures are needed to achieve this goal. Structural fiscal policy reform is needed in a number of economies in the region, including China, to address social spending and protection as well as infrastructure needs. By reducing distortions that hold back private consumption, such reforms would lower

[7]IMF (2012b) presents a more detailed analysis of spillovers from investment shocks in China.

risks of a buildup in domestic imbalances and are part of the set of desirable policies that would help rebalance global demand. Indeed, in a number of Asian economies—including China, Korea, Malaysia, Singapore, and Thailand—current account positions are stronger and currencies are weaker than they would be with a more desirable set of policies.[8]

Against the risks of deteriorating credit quality while growth is slowing, policymakers in many Asian economies also need to guard against financial stability risks arising from recent rapid credit growth, including by closely monitoring balance sheet health and funding conditions in the banking and shadow banking systems. In the event of global or local liquidity shortages, central banks should stand ready to backstop liquidity.

Latin America and the Caribbean: Losing Some Buoyancy

With slowing growth, overheating pressures and inflation in Latin America and the Caribbean (LAC) have declined. Private capital flows remain strong and financing conditions favorable. The outlook has deteriorated compared with the April 2012 WEO (Figure 2.10). Growth is expected to pick up later this year, as recent policy easing gains traction. Risks to the near-term growth outlook are to the downside, as elsewhere. With continued rapid credit growth and inflation above the midpoint of the target band in many economies in the region, however, the priority is to rebuild macroeconomic policy space unless downside risks materialize.

Growth in the LAC region decelerated further in the first half of 2012. Activity outside the region moderated more than expected, including in emerging Asia, which weakened external demand for LAC goods and services. Together with weaker near-term global prospects, this slump in activity also led to lower prices for most commodities and terms-of-trade losses for commodity exporters, which account for three-quarters of the region's output. Domestic demand growth, especially investment, cooled on the back of past policy tightening. The pickup in growth was lower than expected in Brazil—an important cause of the weaker regional growth performance—an acknowledgment of both poorer external conditions and slower transmission of the monetary policy easing since August 2011 as a result of an increase in nonperforming loans after several years of rapid credit growth.

The LAC region has been exposed to financial spillovers from the euro area crisis and concerns about global growth prospects, but their effects have been contained. These spillovers contributed to increased risk aversion and temporarily reduced capital flows to the region but have not caused a reversal of flows (Figure 2.11). Foreign currency debt spreads have increased, as in other emerging markets, but they remain well below recent highs. At the same time, most of the region's currencies have appreciated, with the notable exception of the Brazilian *real* (Figure 2.11, panels 1 and 2).

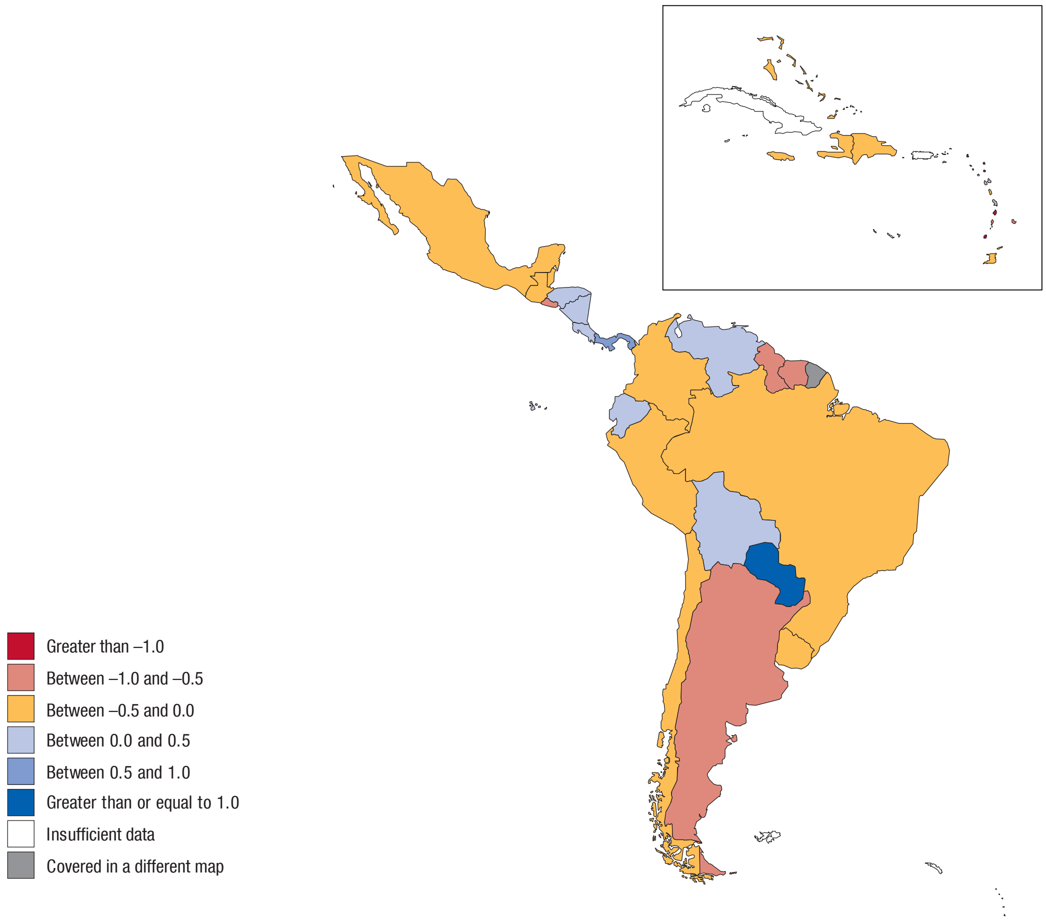
Spillovers from the region's exposure to the operations of European banks, predominantly Spanish banks, have also been contained, primarily because the LAC operations of these banks are largely conducted by subsidiaries and funded by local deposits. Credit growth throughout the region has thus remained robust, notwithstanding slowing activity.

Growth in the region is projected to moderate to 3¼ percent in 2012, before strengthening to about 4 percent in 2013 (Table 2.4). Among the commodity exporters, recent monetary policy easing is expected to spur stronger growth in Brazil from late 2012, led by domestic demand. Employment growth is also expected to remain robust, primarily in the domestic services sectors. In most other commodity exporters, growth is expected to remain close to potential for the remainder of 2012 and in 2013, after moderating gradually during the past year or so. In Mexico, growth has remained strong in 2012 but is expected to moderate with the weaker near-term U.S. growth prospects. Overall, growth is forecast to average 3¾ percent in 2012–13, somewhat above potential. In Central America, where the outlook is closely tied to developments in the United States, growth is expected to moderate by ½ percentage point from 2011 to 4¼ percent in 2012–13. In the Caribbean, high public debt and weak tourism and remittance flows continue to constrain the outlook, and growth is expected to remain lackluster at about 2¾ to 3½ percent.

Risks to the growth outlook are to the downside, and the main risks are broadly aligned with those

[8]See also IMF (2012a).

Figure 2.10. Latin America and the Caribbean: Revisions to 2013 GDP Growth Forecasts
(Change in percentage points from April 2012 WEO projections)



Source: IMF staff estimates.

affecting the global economy. The main near-term risks relate to an escalation of the euro area crisis and the U.S. fiscal cliff. The euro area risk scenario analysis in Chapter 1 suggests that the peak decline in regional output could amount to about ½ percent relative to the baseline. This is modest compared with other regions and reflects the LAC region's relatively low level of trade with Europe (only about 10 percent of goods exports) and limited financial linkages. If global growth slowed sharply because the United States failed to avoid the fiscal cliff, the impact on the LAC region would be relatively larger because of stronger linkages with the U.S. economy. In both cases, countercyclical policy responses in the region could help dampen the spillover effects on domestic output.

In view of the region's dependence on commodity market developments, particularly in the Southern Cone, the medium-term risks that have the greatest impact on commodity prices are of particular concern. The Chapter 1 risk scenario of lower potential growth in systemically important economies and temporarily higher global risk aversion illustrates this concern. Even if potential growth in the LAC region were only ½ percentage point lower, the short-term growth impact would be considerably larger because a commodity price bust would follow the large output declines in emerging Asia and the advanced economies. A sharper-than-expected investment slowdown in China is another important medium-term risk that could affect the LAC region. China's economic boom of the past decade has been commodity intensive, boosting its market share in global commodity markets, especially in industrial base metals and raw materials, and leading to much greater trade linkages with the LAC region. Among the commodity exporters, the largest spillover effects of an investment shock in China would be on undiversified exporters specializing in metal extraction and trade; diversified exporters such as Brazil would be relatively less affected (see IMF, 2012b).

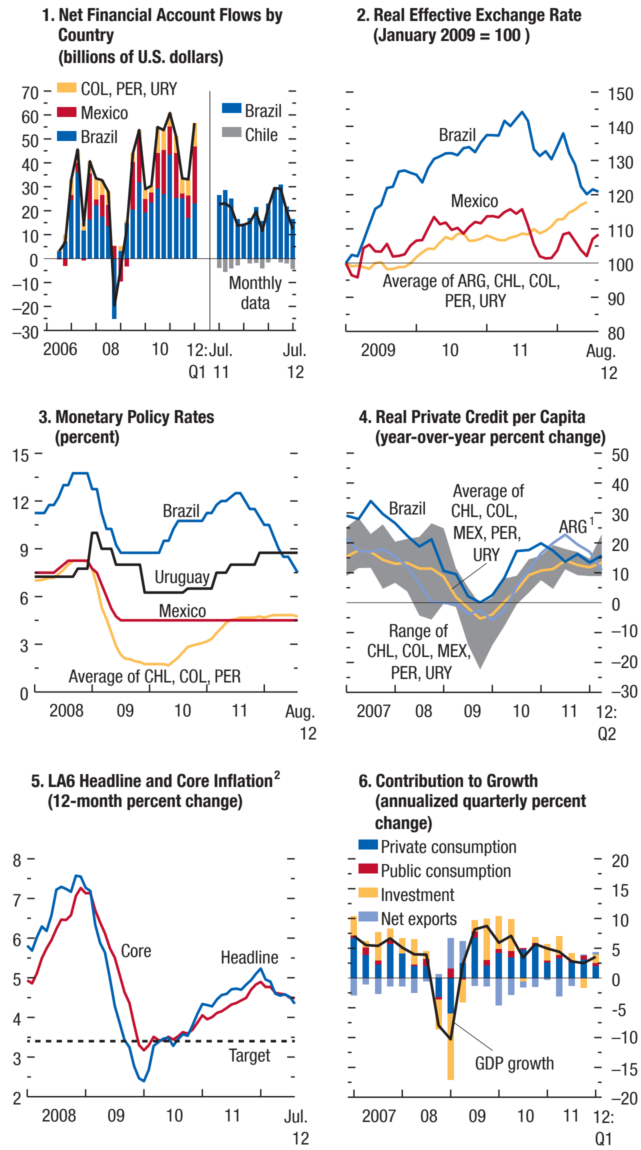
Lower potential growth also is a risk from an intraregional perspective because growth in the region has been above historical trends during the past decade or so, supported in part by financial deepening and rapid credit growth. This success may well have generated overly optimistic expectations about potential growth in the medium term. There are related risks of domestic financial instability after years of rapid credit growth.

Against this backdrop, policymakers in the region must be alert to spillovers from weaker prospects in advanced economies and major emerging markets outside the region, volatile capital flows, and emerging domestic financial risks. Nevertheless, policymakers must carefully balance these downside risks with the remnants of recent overheating and reduced policy space. Despite recent declines, inflation is still above the midpoint of target bands, and output gaps are close to zero or still positive. Concerns about upside risks to inflation are particularly acute in Venezuela and Argentina, where policies have not been tightened noticeably and inflation continues at high levels. Still, monetary policy should be the first line of defense if global growth slows more than expected, especially in economies with established and tested inflation-targeting frameworks. As for risks related to capital flows and financial stability, policies must build on a strong foundation of prudential measures and further enhance risk-based prudential regulation and supervision. At the same time, liquidity provision may also be needed if a change in global risk sentiment leads to acute funding pressure in the region's banking systems.

Fiscal policy should continue to rebuild room for maneuvering unless large downside risks materialize. New fiscal space is particularly important for commodity exporters to buffer the downside risks to global growth and commodity prices.

Figure 2.11. Latin America: A Moderate Slowdown

Private capital flows to Latin America remain strong despite increased global risk aversion and concerns about domestic strains. Inflation and overheating risks have declined, but with continued rapid credit growth and inflation above the midpoint of the target band in many economies in the region, the priority remains to rebuild macroeconomic policy space and build on progress in macroprudential regulation and supervision unless downside risks materialize.



Sources: Haver Analytics; and IMF staff calculations.
Note: ARG = Argentina; CHL = Chile; COL = Colombia; MEX = Mexico; PER = Peru; URY = Uruguay.
[1]Nominal variables for Argentina are deflated using IMF staff estimates of average provincial inflation.
[2]LA6: Brazil, Chile, Colombia, Mexico, Peru, and Uruguay.

Table 2.4. Selected Western Hemisphere Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment

(Annual percent change unless noted otherwise)

	Real GDP			Consumer Prices[1]			Current Account Balance[2]			Unemployment[3]		
		Projections			Projections			Projections			Projections	
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
North America	**2.0**	**2.3**	**2.2**	**3.1**	**2.1**	**1.9**	**–2.9**	**–3.0**	**–3.0**	**. . .**	**. . .**	**. . .**
United States	1.8	2.2	2.1	3.1	2.0	1.8	–3.1	–3.1	–3.1	9.0	8.2	8.1
Canada	2.4	1.9	2.0	2.9	1.8	2.0	–2.8	–3.4	–3.7	7.5	7.3	7.3
Mexico	3.9	3.8	3.5	3.4	4.0	3.5	–1.0	–0.9	–1.1	5.2	4.8	4.8
South America[4]	**4.8**	**2.9**	**4.0**	**7.8**	**6.8**	**6.9**	**–1.0**	**–1.5**	**–1.7**	**. . .**	**. . .**	**. . .**
Brazil	2.7	1.5	4.0	6.6	5.2	4.9	–2.1	–2.6	–2.8	6.0	6.0	6.5
Argentina[5]	8.9	2.6	3.1	9.8	9.9	9.7	–0.1	0.3	–0.1	7.2	7.2	7.2
Colombia	5.9	4.3	4.4	3.4	3.2	2.8	–3.0	–2.9	–2.9	10.8	11.0	10.5
Venezuela	4.2	5.7	3.3	26.1	23.2	28.8	8.6	6.7	5.6	8.1	8.0	8.1
Peru	6.9	6.0	5.8	3.4	3.7	2.5	–1.9	–3.0	–3.0	7.7	7.5	7.5
Chile	5.9	5.0	4.4	3.3	3.1	3.0	–1.3	–3.2	–3.0	7.1	6.6	6.9
Ecuador	7.8	4.0	4.1	4.5	5.1	4.3	–0.3	–0.3	3.0	6.0	5.8	6.2
Uruguay	5.7	3.5	4.0	8.1	7.9	7.6	–3.1	–3.0	–1.9	6.0	6.7	7.0
Bolivia	5.2	5.0	5.0	9.9	4.8	4.7	2.2	1.8	1.1	. . .	. . .	. . .
Paraguay	4.3	–1.5	11.0	6.6	5.0	5.0	–1.0	–1.1	–0.4	5.6	5.8	5.4
Central America[6]	**4.7**	**4.3**	**4.1**	**5.6**	**5.0**	**4.9**	**–6.9**	**–7.2**	**–6.9**	**. . .**	**. . .**	**. . .**
Caribbean[7]	**2.7**	**2.8**	**3.5**	**7.2**	**5.5**	**5.3**	**–6.3**	**–5.9**	**–5.8**	**. . .**	**. . .**	**. . .**
Memorandum												
Latin America and the Caribbean[8]	4.5	3.2	3.9	6.6	6.0	5.9	–1.3	–1.7	–1.9	. . .	. . .	. . .
Eastern Caribbean Currency Union[9]	–1.1	0.7	1.3	3.5	3.3	2.6	–20.3	–20.5	–19.8	. . .	. . .	. . .

[1]Movements in consumer prices are shown as annual averages. December–December changes can be found in Tables A6 and A7 in the Statistical Appendix.

[2]Percent of GDP.

[3]Percent. National definitions of unemployment may differ.

[4]Also includes Guyana and Suriname.

[5]Figures are based on Argentina's official GDP and consumer price index (CPI-GBA) data. The IMF has called on Argentina to adopt remedial measures to address the quality of the official GDP and CPI-GBA data. The IMF staff is also using alternative measures of GDP growth and inflation for macroeconomic surveillance, including data produced by private analysts, which have shown significantly lower real GDP growth than the official data since 2008, and data produced by provincial statistical offices and private analysts, which have shown considerably higher inflation figures than the official data since 2007.

[6]Central America comprises Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

[7]The Caribbean comprises Antigua and Barbuda, The Bahamas, Barbados, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago.

[8]Latin America and the Caribbean comprises Mexico and economies from the Caribbean, Central America, and South America.

[9]Eastern Caribbean Currency Union comprises Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines as well as Anguilla and Montserrat, which are not IMF members.

More generally, the move to countercyclical macroeconomic policies has been an important factor underpinning greater resilience in emerging market economies (see Chapter 4). With output gaps close to zero or still positive in many economies in the region, a countercyclical policy stance would indicate that fiscal policy needs to remain tight. Many economies in the region should also include structural reforms aimed at boosting medium-term growth. In Brazil, for example, infrastructure bottlenecks are a constraint on growth. Recent steps to grant private concessions to develop critical road and railway infrastructure are a welcome step forward, but increased public investment is also needed. Greater resolve is required to reduce debt overhang in the Caribbean while addressing weak competitiveness.

Commonwealth of Independent States: Growth Is Still Robust

Growth in the Commonwealth of Independent States (CIS) is expected to moderate slightly in line with the projected small decline in commodity prices and a weaker external environment. The region remains *vulnerable to stress from advanced economies, given the CIS's deeper economic and financial linkages with the euro area. The region should take advantage of the still-favorable current economic conditions to rebuild policy space.*

Growth remained robust in the CIS through the beginning of 2012, supported by high prices for key commodities, good harvests in 2011, and strong remittance flows. However, financial conditions in the three largest CIS economies (Kazakhstan, Russia, Ukraine) have been significantly affected by increased financial stress in the euro area periphery and higher global risk aversion: sovereign spreads have widened; stock prices have fallen; and capital outflows have risen. Investment growth has weakened, but expansionary fiscal policies and strong credit growth in Russia and other energy exporters have dampened the overall growth impact.

Regional growth is expected to average 4 percent during 2012–13 compared with close to 5 percent in 2011, in response to a weaker external environment and terms-of-trade losses from the slight decline in commodity prices (Table 2.5; Figures 2.12 and 2.13).

- Russia's growth is projected at about 3¾ percent during 2012–13, led by domestic demand, which is supported by an expansionary fiscal stance and a rebound in credit growth. Growth is projected to moderate in the region's other energy-exporting economies, mainly owing to weaker growth in the energy sector, although strong public spending should help sustain activity in other sectors.
- The global growth slowdown is projected to have a larger impact on some of the region's energy-importing economies. Growth in Ukraine will slow to 3 percent in 2012 compared with more than 5 percent in 2011, driven by weaker export and domestic demand growth. In Belarus, lower domestic demand after the 2011 currency crisis will weigh on growth. In the Kyrgyz Republic and Tajikistan, activity is supported by strong remittances and import demand from Russia

Table 2.5. Commonwealth of Independent States: Real GDP, Consumer Prices, Current Account Balance, and Unemployment

(Annual percent change unless noted otherwise)

	Real GDP			Consumer Prices[1]			Current Account Balance[2]			Unemployment[3]		
		Projections			Projections			Projections			Projections	
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Commonwealth of Independent States (CIS)[4]	**4.9**	**4.0**	**4.1**	**10.1**	**6.8**	**7.7**	**4.6**	**4.2**	**2.9**	. . .	. . .	. . .
Net Energy Exporters	**4.7**	**4.0**	**4.1**	**8.5**	**5.3**	**6.7**	**6.1**	**5.6**	**4.2**	. . .	. . .	. . .
Russia	4.3	3.7	3.8	8.4	5.1	6.6	5.3	5.2	3.8	6.5	6.0	6.0
Kazakhstan	7.5	5.5	5.7	8.3	5.0	6.6	7.6	6.2	4.5	5.4	5.4	5.3
Uzbekistan	8.3	7.4	6.5	12.8	12.9	10.7	5.8	4.7	3.3	0.2	0.2	0.2
Azerbaijan	0.1	3.9	2.7	7.9	3.0	6.0	26.5	20.4	16.1	6.0	6.0	6.0
Turkmenistan	14.7	8.0	7.7	5.3	4.3	6.0	2.0	–1.5	–1.6	. . .	. . .	. . .
Net Energy Importers	**5.7**	**3.8**	**4.2**	**18.2**	**14.7**	**12.7**	**–7.9**	**–6.8**	**–6.9**	. . .	. . .	. . .
Ukraine	5.2	3.0	3.5	8.0	2.0	7.4	–5.5	–5.6	–6.6	7.9	7.8	7.7
Belarus	5.3	4.3	3.4	53.2	60.2	30.6	–10.5	–3.6	–5.8	0.6	0.6	0.6
Georgia	7.0	6.5	5.5	8.5	0.2	5.5	–11.8	–12.6	–11.2	15.1	14.2	13.8
Armenia	4.6	3.9	4.0	7.7	2.8	4.2	–10.9	–9.8	–9.3	19.0	19.0	18.5
Tajikistan	7.4	6.8	6.0	12.4	6.0	8.1	0.6	–0.4	–1.5	. . .	. . .	. . .
Mongolia	17.5	12.7	15.7	7.7	14.1	11.7	–31.8	–31.4	–10.1	7.7	6.8	6.1
Kyrgyz Republic	5.7	1.0	8.5	16.6	2.9	9.4	–6.3	–12.8	–6.2	7.9	7.7	7.6
Moldova	6.4	3.0	5.0	7.6	5.1	5.0	–11.5	–11.4	–10.7	6.7	5.8	6.4
Memorandum												
Low-Income CIS Countries[5]	7.3	6.1	6.1	11.6	8.2	8.6	–1.5	–2.3	–2.3	. . .	. . .	. . .
Net Energy Exporters Excluding Russia	6.8	5.8	5.5	8.9	6.3	7.3	10.6	8.1	6.0	. . .	. . .	. . .

[1]Movements in consumer prices are shown as annual averages. December–December changes can be found in Table A7 in the Statistical Appendix.

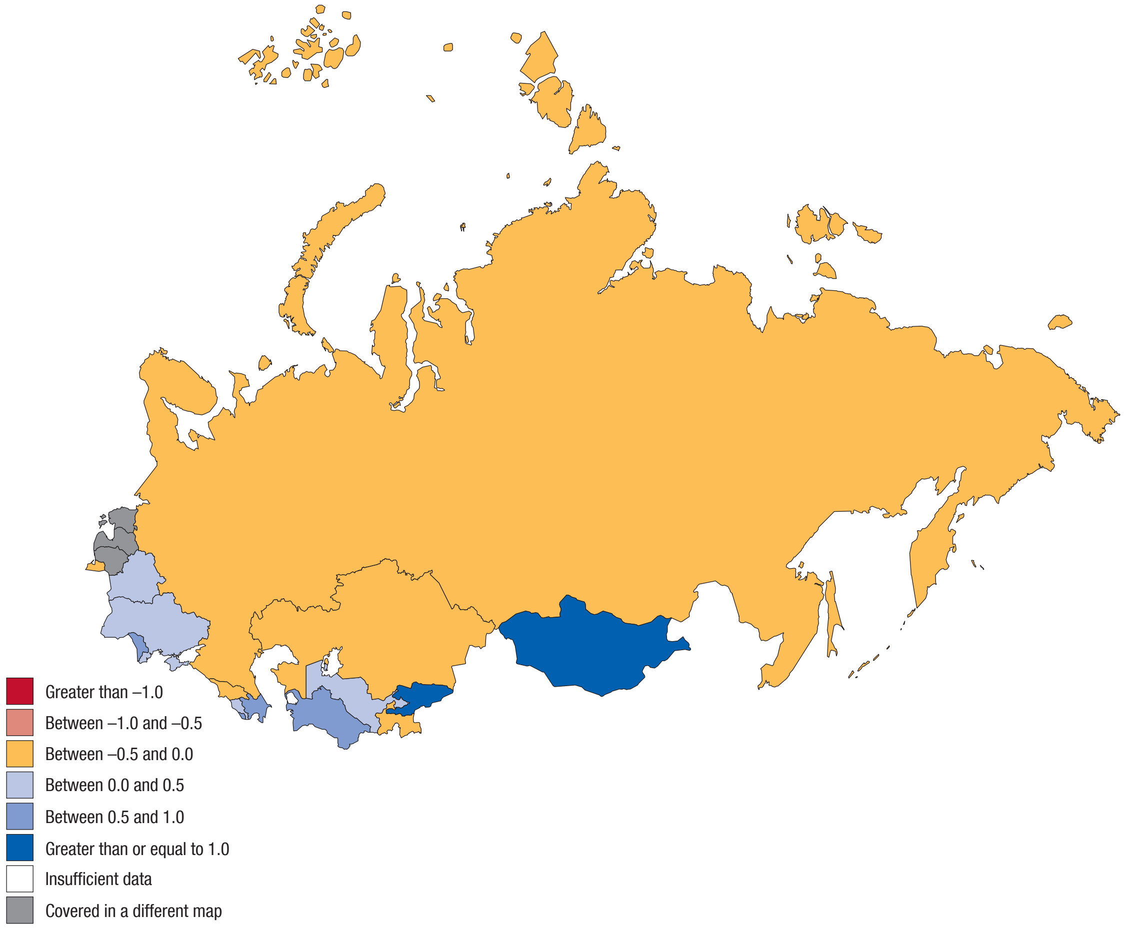
[2]Percent of GDP.

[3]Percent. National definitions of unemployment may differ.

[4]Georgia and Mongolia, which are not members of the Commonwealth of Independent States, are included in this group for reasons of geography and similarities in economic structure.

[5]Low-income CIS economies comprise Armenia, Georgia, Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan.

Figure 2.12. Commonwealth of Independent States: Revisions to 2013 GDP Growth Forecasts
(Change in percentage points from April 2012 WEO projections)



Source: IMF staff estimates.
Note: Includes Georgia and Mongolia.

(deferred gold production increases planned for 2012 will temporarily lower growth in the Kyrgyz Republic).

Inflation is projected to moderate during 2012–13 compared with 2011, reflecting favorable harvests in many economies of the region, monetary policy tightening in some, and a slight retreat in commodity prices. The recent surge in global food prices, however, could push prices up temporarily, and demand pressures remain strong in energy exporters.

As in other regions, the balance of risks to the near-term outlook is tilted to the downside. In view of the region's strong dependence on commodity exports, most major risks to global growth discussed in Chapter 1 would be of concern to the CIS region because they would involve large commodity price declines. For the energy importers in the region, direct trade spillovers from a further escalation of the euro area crisis would also be sizable given that Europe is the most important trading partner outside the region.

If downside risks materialize, external balances would deteriorate, which would tend to exacerbate capital outflows and put pressure on currencies, especially in energy importers with large external financing needs (Ukraine). More flexible exchange rates and a reduction in balance sheet mismatches (Kazakhstan, Russia) would help cushion the growth impact compared with the 2009 downturn. The impact on Russia, should any of the downside risks materialize, would be critical for the region as a whole, given the tight linkages between Russia and other CIS economies via trade, foreign direct investment (FDI), and remittances.

Against this backdrop, the major CIS economies should take advantage of the current, still-robust economic conditions to rebuild fiscal policy buffers. In Russia, the non-oil fiscal deficit is more than three times larger than it was before the Great Recession. In energy importers, the fiscal adjustment should aim to put public debt on a downward trajectory (Kyrgyz Republic, Tajikistan), which would also lower external vulnerabilities by reducing large current account deficits (Armenia, Georgia).

Consolidation efforts should be accompanied by structural reforms, a strengthening of fiscal frameworks, and improvements in the quality and efficiency of public spending.

In some economies, further monetary policy tightening is needed to rein in inflation expectations (Belarus, Mongolia, Uzbekistan). If downside risks materialize, however, monetary and fiscal policies may need to be eased, maintaining a balance between immediate stabilization needs and medium-term objectives.

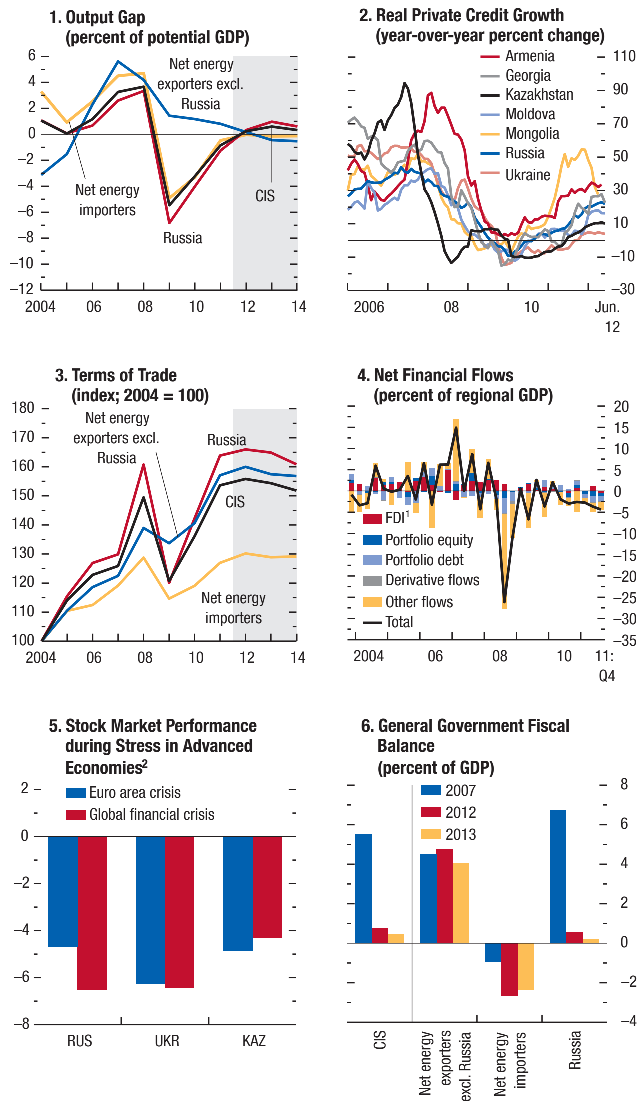
Global risks also call for speeding up financial system repair and improving the region's resilience to negative external spillovers of financial stress (see the Spillover Feature). Although progress has been made to strengthen the banking system, bank balance sheets are still impaired in a number of economies faced with a significant share of nonperforming loans (Ukraine) and poor capital adequacy (Kazakhstan, Kyrgyz Republic, Tajikistan).

Middle East and North Africa: A Two-Speed Region

Differences in the economic performance of oil exporters and oil importers have widened. Higher government spending in most oil exporters has supported robust growth. Elsewhere, uncertainties from political and economic change after the Arab Spring, slowing growth in major trading partners, and, in some cases, internal conflict have led to a marked weakening in activity. For oil importers, the policy priority will be preserving or rebuilding macroeconomic stability while defining and implementing a reform agenda to accelerate growth. For

Figure 2.13. Commonwealth of Independent States: Vulnerable to Negative Spillovers

Growth in the CIS has remained robust, supported by high prices for key commodities and good harvests in 2011, although indicators suggest some moderation of activity in recent months. Financial conditions in the three largest CIS economies (Kazakhstan, Russia, Ukraine) have deteriorated with increased financial stress in the euro area periphery and higher global risk aversion. Given downside risks, the priority is to strengthen the policies by improving fiscal balances, accelerating financial system reform, and tightening the monetary stance where inflation risks are high.



Sources: Haver Analytics; IMF, Balance of Payments Statistics database; IMF, International Financial Statistics database; Thomson Reuters Datastream; and IMF staff estimates.
Note: Net energy exporters: Azerbaijan, Kazakhstan (KAZ), Russia (RUS), Turkmenistan, Uzbekistan. Net energy importers: Armenia, Belarus, Georgia, Kyrgyz Republic, Moldova, Mongolia, Tajikistan, Ukraine (UKR).
[1]FDI = foreign direct investment.
[2]Percent change in average level of index five days after and five days before stress in advanced economies. The periods for euro area crisis and global financial crisis are respectively: January 2010–June 2012 and January 2007–December 2009. See the Spillover Feature for details.

Table 2.6. Selected Middle East and North African Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment

(Annual percent change unless noted otherwise)

	Real GDP			Consumer Prices[1]			Current Account Balance[2]			Unemployment[3]		
		Projections			Projections			Projections			Projections	
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Middle East and North Africa	**3.3**	**5.3**	**3.6**	**9.7**	**10.4**	**9.1**	**14.2**	**12.2**	**10.6**	...	...	...
Oil Exporters[4]	**3.9**	**6.6**	**3.8**	**10.1**	**11.1**	**9.4**	**18.7**	**16.4**	**14.2**	...	...	...
Iran	2.0	–0.9	0.8	21.5	25.2	21.8	12.5	3.4	1.3	12.3	14.1	15.6
Saudi Arabia	7.1	6.0	4.2	5.0	4.9	4.6	26.5	26.1	22.7	...	...	...
Algeria	2.4	2.6	3.4	4.5	8.4	5.0	10.0	6.2	6.1	10.0	9.7	9.3
United Arab Emirates	5.2	4.0	2.6	0.9	0.7	1.6	9.7	9.3	10.1	...	...	...
Qatar	14.1	6.3	4.9	1.9	2.0	3.0	30.2	29.6	26.8	...	...	...
Kuwait	8.2	6.3	1.9	4.7	4.3	4.1	44.0	44.1	39.2	2.1	2.1	2.1
Iraq	8.9	10.2	14.7	5.6	6.0	5.5	8.3	0.3	6.1	...	...	...
Oil Importers[5]	**1.4**	**1.2**	**3.3**	**8.5**	**8.3**	**8.3**	**–5.2**	**–6.9**	**–5.8**	...	...	...
Egypt	1.8	2.0	3.0	11.1	8.6	10.7	–2.6	–3.4	–3.3	12.1	12.7	13.5
Morocco	4.9	2.9	5.5	0.9	2.2	2.5	–8.0	–7.9	–5.4	8.9	8.8	8.7
Tunisia	–1.8	2.7	3.3	3.5	5.0	4.0	–7.3	–7.9	–7.7	18.9	17.0	16.0
Sudan[6]	–4.5	–11.2	0.0	18.3	28.6	17.0	–0.5	–7.8	–6.6	12.0	10.8	9.6
Lebanon	1.5	2.0	2.5	5.0	6.5	5.7	–14.0	–16.2	–15.6	...	...	...
Jordan	2.6	3.0	3.5	4.4	4.5	3.9	–12.0	–14.1	–9.9	12.9	12.9	12.9
Memorandum												
Israel	4.6	2.9	3.2	3.4	1.7	2.1	0.8	–2.1	–1.3	7.1	7.0	7.0
Maghreb[7]	–1.9	19.0	6.0	4.0	6.4	3.6	2.2	4.4	2.9	...	...	...
Mashreq[8]	1.8	2.0	3.0	10.0	8.2	9.8	–4.9	–6.0	–5.4	...	...	...

[1]Movements in consumer prices are shown as annual averages. December–December changes can be found in Tables A6 and A7 in the Statistical Appendix.
[2]Percent of GDP.
[3]Percent. National definitions of unemployment may differ.
[4]Also includes Bahrain, Libya, Oman, and Yemen.
[5]Also includes Djibouti, Mauritania, and Syria. Excludes Syria for 2011 onward.
[6]Data for 2011 exclude South Sudan after July 9. Data for 2012 and onward pertain to the current Sudan.
[7]The Maghreb comprises Algeria, Libya, Mauritania, Morocco, and Tunisia.
[8]The Mashreq comprises Egypt, Jordan, Lebanon, and Syria. Excludes Syria for 2011 onward.

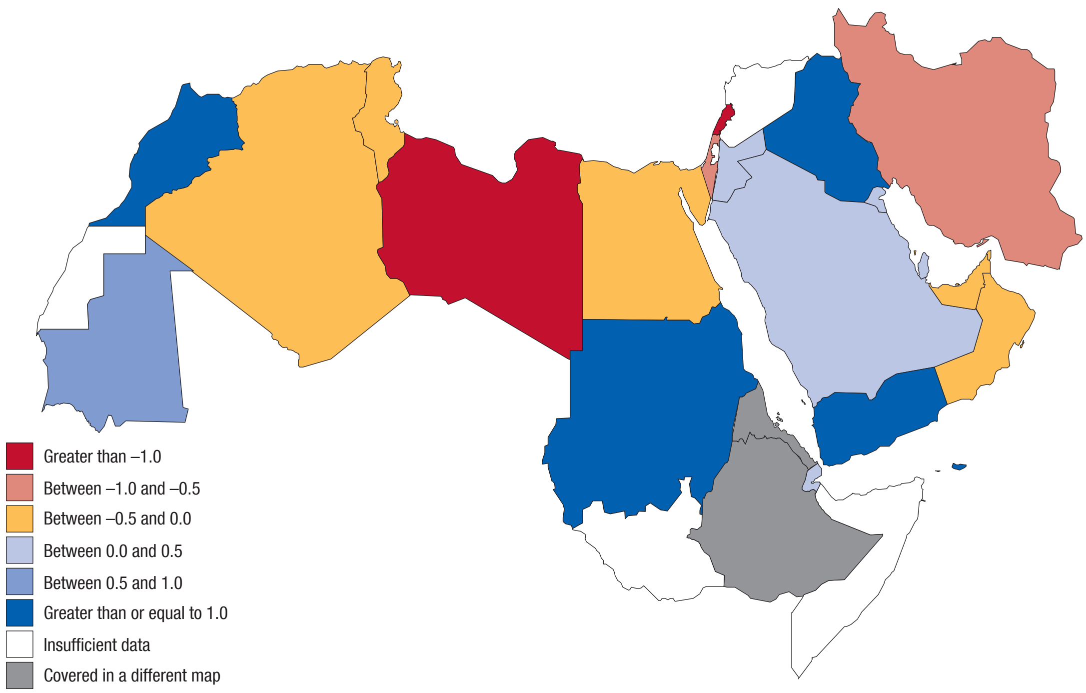
oil exporters, the priority is to take advantage of current high oil prices to diversify their economies.

Growth in the Middle East and North Africa (MENA) region was relatively subdued at 3¼ percent in 2011, but is projected to strengthen to 5¼ percent in 2012 on account of oil exporters (Table 2.6).[9] Growth in oil exporters is expected to accelerate from about 4 percent in 2011 to 6½ percent in 2012, largely as a result of a strong rebound of activity in Libya since late 2011. In most other oil exporters, non-oil GDP growth is expected to remain robust in 2012, supported by ratcheted-up government spending as oil prices remain at historically high levels, while oil sector growth is forecast to moderate somewhat after a strong increase in 2011 (Figure 2.14). The boost from Libya will moderate in 2013, when growth in the oil exporters of the region is projected to be 3¾ percent.

In contrast, growth in oil importers has been about 1¼ percent during 2011–12, reflecting the effects of social unrest and political uncertainty, weak external demand, and high oil prices. Uncertainty and unrest have led to a pullback from the region, evidenced most dramatically in steep declines in tourism and FDI (Figure 2.15). At the same time, the contraction of activity in advanced Europe—a major trading partner for most economies in the group—has been a drag on growth. Looking forward, uncertainty is expected to decrease as political transitions stabilize, while external demand

[9]Syria has been excluded from regional aggregates, including projections, because of the ongoing civil war. Regional aggregates do include Libya, where activity has been strongly affected by its civil war, with a collapse in output in 2011 and a sharp rebound in 2012.

Figure 2.14. Middle East and North Africa: Revisions to 2013 GDP Growth Forecasts
(Change in percentage points from April 2012 WEO projections)



Source: IMF staff estimates.

picks up, and growth in oil importers is projected to recover to 3¼ percent in 2013.

Risks to the near-term outlook for oil exporters revolve primarily around oil prices and global growth, given that all major risks to global growth discussed in Chapter 1 involve lower oil prices. For oil exporters, government expenditures have risen to such a degree that substantial declines in the price of oil could undermine fiscal positions. Despite significant accrued financial buffers, such declines could put at risk ongoing infrastructure investment and growth. On the upside, Iran-related and other geopolitical risks could lead to higher oil prices.

Oil importers face both external and internal risks. On the external side, they are vulnerable to trade spillovers if downside risks to growth in major economies materialize.[10] Another concern is risks to internal and external balances from upside risks to food and fuel prices (see the Special Feature in Chapter 1). Because of extensive food and fuel subsidies in most economies, the immediate concern with spikes in commodity prices is not the effect on inflation and disposable income, but rather the strain on budgets and foreign exchange reserves. More broadly, meeting social demands when growth has slowed and political uncertainty has increased has resulted in higher budget deficits and declines in foreign exchange reserves in non-oil importers.

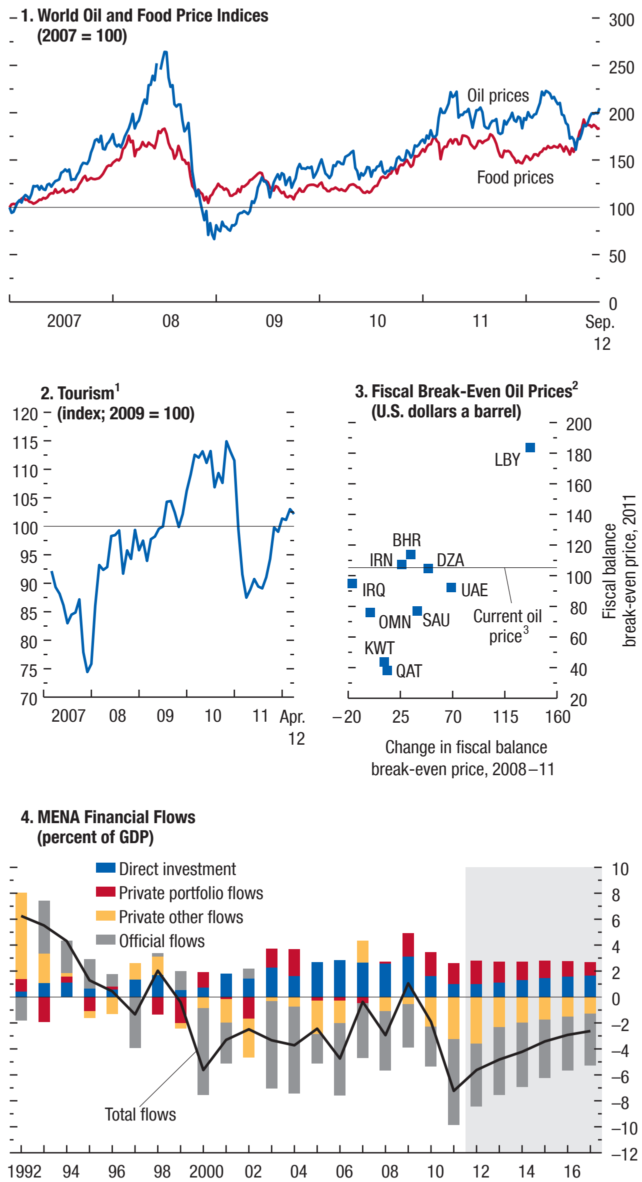
A general policy priority in the MENA region is to secure economic and social stability through more inclusive medium-term growth. Achieving this goal will require institutional and regulatory reform to stimulate private sector activity and ensure greater and more equal access to economic opportunities and measures to address chronically high unemployment, particularly among the young.

Maintaining macroeconomic stability while supporting strong, inclusive medium-term growth will be an important policy challenge. Increased spending on food and fuel subsidies, along with pressure to raise civil ser-

[10] The November 2012 *Regional Economic Outlook: Middle East and Central Asia* provides a detailed analysis of spillovers from the economies of the Gulf Cooperation Council to other MENA economies.

Figure 2.15. Middle East and North Africa: An Uneven Recovery

Continued high oil prices, increased oil production, and increased government spending have supported robust activity in oil exporters. Internal conflicts and their aftermath remain a source of uncertainty, and tourism has not yet recovered. The increases in government expenditure in oil exporters in the region have raised the break-even oil price (the price at which oil revenue covers the non-oil budget deficit), implying that significant oil price declines could undermine fiscal positions.



Sources: Bloomberg Financial Markets; Haver Analytics; IMF, *Regional Economic Outlook: Middle East and Central Asia*, November 2012; and IMF staff estimates.
[1]Index of tourism is calculated based on the simple average of tourism receipts of Egypt, Jordan, Lebanon, Morocco, and Tunisia. Morocco's figures are based on nonresident entries instead of tourist arrivals because of a lack of data.
[2]DZA = Algeria; BHR = Bahrain; IRN = Iran; IRQ = Iraq; KWT = Kuwait, LBY = Libya; OMN = Oman; QAT = Qatar; SAU = Saudi Arabia; UAE = United Arab Emirates.
[3]Current oil price as of August 2012.

vice wages and pensions, risks straining public finances. In oil exporters, it will be critical to contain increases in spending on entitlements that are hard to reverse. Instead, the focus should be on productivity-enhancing spending on human capital and infrastructure investment, which could also support diversification of their economies. In oil importers, policy buffers have been diminished, creating pressures for fiscal consolidation. Structural fiscal reforms aimed at reorienting government spending toward poverty reduction and the promotion of productive investment will be crucial to improving the budget outlook. Improved targeting of subsidies, especially through fuel subsidy reforms, will be an important step in this respect.

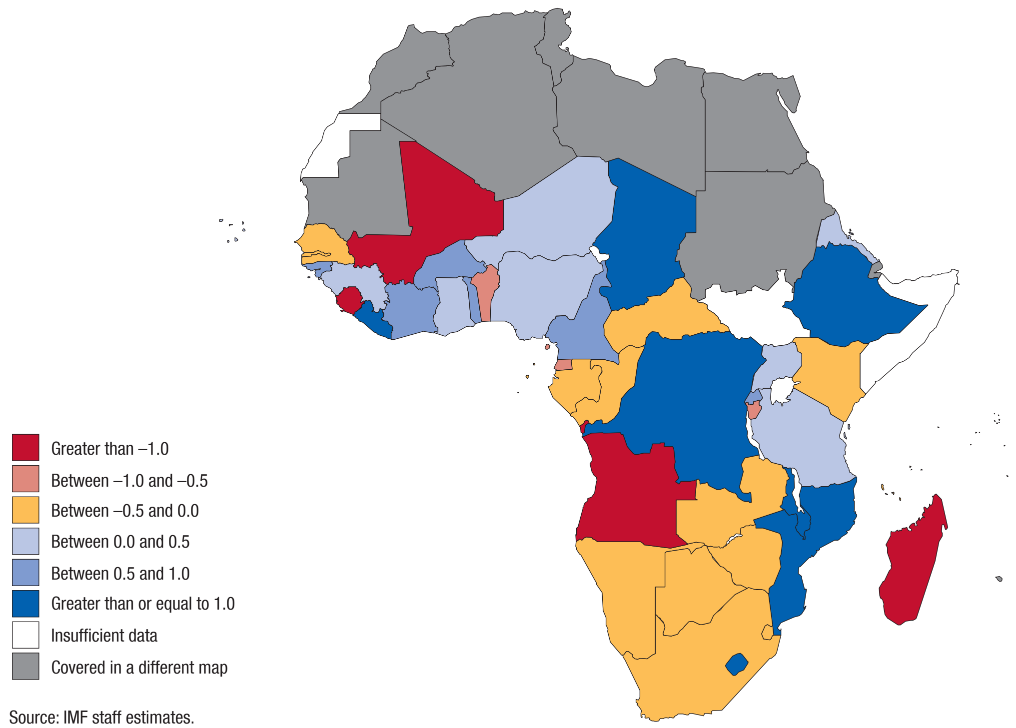
Sub-Saharan Africa: A Continued Favorable Outlook

Sub-Saharan Africa is expected to continue growing strongly in the near term, with regional differences in prospects reflecting in part economies' varying exposure to external shocks (Figure 2.16). As elsewhere, external risks remain elevated. Policymakers in the region should use the window provided by strong growth to rebuild budgetary space and normalize monetary conditions to be better prepared for downside risks.

Economic activity in sub-Saharan Africa (SSA) has expanded by more than 5 percent in each of the past three years—continuing a decade-long run of strong performance that was only briefly interrupted by the global downturn in 2009 (Figure 2.17, panels 1 and 2). Most SSA economies are participating in this solid expansion, with the notable exception of South Africa, which has been hampered by its strong linkages with Europe, as well as some countries in western Africa affected by drought and civil conflict. More recently, some food importers in the region have also been hit by the sharp increase in global food prices for a few major crops—leading to higher headline inflation and widening trade imbalances—although so far with less severe effects than during the 2007–08 food price shocks (see Chapter 1, Box 1.5).

The region's recent growth has occurred against a backdrop of difficult external conditions, including the escalation of the euro area crisis. But apart from South Africa, financial spillovers from Europe to the region have been modest (Figure 2.17, panel 3).

Figure 2.16. Sub-Saharan Africa: Revisions to 2013 GDP Growth Forecasts
(Change in percentage points from April 2012 WEO projections)



Source: IMF staff estimates.

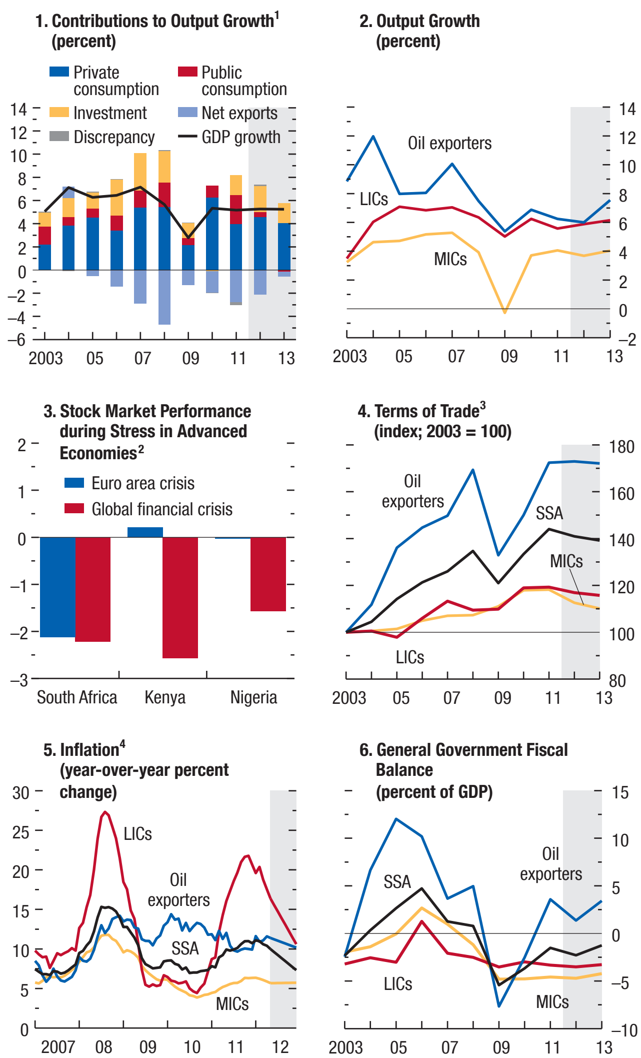
Export diversification has reduced exposure to weak demand from advanced economies, and high commodity prices have supported the region's commodity exporters and boosted investment in resource extraction. However, as documented in Chapter 4, improved policy frameworks and judicious use of policy space in response to adverse shocks have been important elements in these economies' improved performance during the past decade.

In the baseline scenario, under which strains in the euro area remain contained and the global economy expands by 3¼ to 3½ percent this year and next, growth in SSA will continue above 5 percent during 2012–13 (Table 2.7).

- Growth in the oil-exporting economies is projected to remain high, near 6 percent in 2012; increased oil production in Angola will expand its GDP by close to 6¾ percent this year. In Nigeria, non-oil GDP growth will moderate with the softer external environment and tighter macroeconomic policies, but a slight rebound in oil output will keep overall GDP growth at 7 percent.
- Among the middle-income countries, growth in South Africa is projected to be 2½ percent in 2012—below most estimates of potential growth—largely because of strong linkages with Europe. Growth is expected to rebound to 3 percent next year under the relatively favorable external conditions of the WEO baseline. Output growth in Cameroon is expected to strengthen this year and next, with the non-oil sector being supported by major public investment projects and measures to boost agricultural productivity.
- The region's low-income economies face varying outlooks. In Ethiopia, growth is projected to decelerate moderately this year and next, reflecting weaker external demand and an increasingly constrained environment for private sector activity. In Kenya, tight monetary conditions have slowed consumption, but construction activity and corporate investment remain buoyant and will support an acceleration of growth to 5 percent this year and 5½ percent in 2013.

Figure 2.17. Sub-Saharan Africa: A Strong Expansion

Economic activity in sub-Saharan Africa has been expanding by 5 percent or more a year throughout the past decade, except during the global downturn in 2008–09. High commodity prices have supported the region's commodity exporters and boosted investment in resource extraction. Better policy frameworks and judicious use of policy space in responding to adverse shocks have also contributed to this improved performance. But with macroeconomic policies still accommodative in much of the region, rebuilding policy buffers is a priority.



Sources: Bloomberg Financial Markets; Haver Analytics; and IMF staff estimates.
Note: LIC = low-income country (SSA); MIC = middle-income country (SSA); SSA = sub-Saharan Africa.
[1]Liberia, South Sudan, and Zimbabwe are excluded due to data limitations.
[2]Percent change in average level of index five days after and five days before stress in advanced economies. The periods for euro area crisis and global financial crisis are respectively: January 2010–June 2012 and January 2007–December 2009. See the Spillover Feature for details.
[3]Excludes South Sudan due to data limitations.
[4]Due to data limitations, the following are excluded: Chad and Equatorial Guinea from oil exporters; Cameroon and Swaziland from MICs; Burkina Faso, Central African Republic, Comoros, Democratic Republic of the Congo, Eritrea, The Gambia, Guinea, Guinea-Bissau, Liberia, Mozambique, São Tomé and Príncipe, and Zimbabwe from LICs.

Risks to the outlook remain high, primarily because of global uncertainties. If the euro area crisis escalates further and global growth slows further, SSA's prospects will be less favorable. The primary channel for spillovers is trade. South Africa, strongly linked to Europe, would be particularly affected, with possible repercussions for some economies in southern Africa, and softer commodity prices would adversely affect the region's natural resource exporters.[11] Another key risk relates to the possible further elevation of global food prices, which would undermine the external and fiscal balances of the food importers in the region. For the medium term, a potential sharp slowdown in China would also affect the region adversely, not only because of the region's deepening trade linkages with China in the past several years (see Figure 2.SF.7) or through the effect on global commodity prices (see IMF, 2012b), but also because of China's increasingly important contribution to the region's FDI and official financing.[12]

The priority in much of the region is to continue to strengthen policy buffers and prepare contingency plans if downside risks materialize. Macroeconomic policies have remained generally accommodative, although a surge in inflation during 2011 prompted a sharp tightening of monetary policy in several east African economies. In several countries, some fiscal consolidation is also under way. If downside risks to the global economy materialize, economies without significant financing constraints should stand ready to ease policies in response. But countries that are in the process of reducing elevated inflation will need to maintain tight monetary policies. The situation is different in South Africa, where four years of macroeconomic stimulus have significantly diminished the policy space available to deal with an adverse shock. This constraint is particularly acute on the fiscal side, where fiscal space will shrink further in a global slowdown; under such a scenario the authorities may need to rely more heavily on countercyclical monetary policy to cushion the economy against adverse spillovers.

[11]See Chapter 2 of the October 2012 *Regional Economic Outlook: Sub-Saharan Africa* for a detailed analysis of spillover channels from the region's two largest economies, South Africa and Nigeria, to the rest of the region.

[12]See Chapter 3 of the October 2011 *Regional Economic Outlook: Sub-Saharan Africa*.

Table 2.7. Selected Sub-Saharan African Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment

(Annual percent change unless noted otherwise)

	Real GDP			Consumer Prices[1]			Current Account Balance[2]			Unemployment[3]		
		Projections			Projections			Projections			Projections	
	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
Sub-Saharan Africa	**5.1**	**5.0**	**5.7**	**9.7**	**9.1**	**7.1**	**–1.7**	**–3.2**	**–3.3**	**. . .**	**. . .**	**. . .**
Oil Exporters[4]	**6.2**	**6.0**	**7.5**	**11.2**	**10.8**	**8.9**	**5.5**	**3.8**	**3.4**	**. . .**	**. . .**	**. . .**
Nigeria	7.4	7.1	6.7	10.8	11.4	9.5	3.6	3.5	3.1	23.9	. . .	. . .
Angola	3.9	6.8	5.5	13.5	10.8	8.6	9.6	8.5	6.6	. . .	. . .	. . .
Equatorial Guinea	7.8	5.7	6.1	6.3	5.4	7.0	–6.0	–7.7	–7.7	. . .	. . .	. . .
Gabon	6.6	6.1	2.0	1.3	2.3	2.6	10.6	9.1	4.1	. . .	. . .	. . .
Republic of Congo	3.4	4.9	5.3	1.8	5.1	4.5	0.8	–0.6	–0.4	. . .	. . .	. . .
Middle-Income[5]	**4.1**	**3.7**	**4.0**	**5.4**	**5.7**	**5.5**	**–3.4**	**–5.3**	**–5.3**	**. . .**	**. . .**	**. . .**
South Africa	3.1	2.6	3.0	5.0	5.6	5.2	–3.3	–5.5	–5.8	23.9	24.4	24.7
Ghana	14.4	8.2	7.8	8.7	9.8	10.9	–9.2	–9.1	–7.0	. . .	. . .	. . .
Cameroon	4.2	4.7	5.0	2.9	3.0	3.0	–4.1	–4.1	–3.8	. . .	. . .	. . .
Côte d'Ivoire	–4.7	8.1	7.0	4.9	2.0	2.5	6.7	–3.1	–1.6	. . .	. . .	. . .
Botswana	5.1	3.8	4.1	8.5	7.5	6.2	1.6	3.9	3.4	. . .	. . .	. . .
Senegal	2.6	3.7	4.3	3.4	2.3	2.1	–6.4	–8.5	–6.9	. . .	. . .	. . .
Low-Income[6]	**5.6**	**5.9**	**6.1**	**15.1**	**12.5**	**7.6**	**–10.9**	**–11.1**	**–11.2**	**. . .**	**. . .**	**. . .**
Ethiopia	7.5	7.0	6.5	33.1	22.9	10.2	0.6	–6.1	–7.7	. . .	. . .	. . .
Kenya	4.4	5.1	5.6	14.0	10.0	5.8	–10.6	–8.5	–8.6	. . .	. . .	. . .
Tanzania	6.4	6.5	6.8	12.7	15.6	9.8	–13.7	–15.4	–13.4	. . .	. . .	. . .
Uganda	5.1	4.2	5.7	18.7	14.6	6.1	–11.4	–11.0	–11.7	. . .	. . .	. . .
Democratic Republic of the Congo	6.9	7.1	8.2	15.5	10.4	9.5	–11.5	–12.5	–14.3	. . .	. . .	. . .
Mozambique	7.3	7.5	8.4	10.4	3.0	8.6	–12.8	–11.6	–12.4	. . .	. . .	. . .
Memorandum												
Sub-Saharan Africa Excluding South Sudan	5.2	5.3	5.3	9.3	8.9	7.0	–2.0	–3.1	–3.5	. . .	. . .	. . .

[1]Movements in consumer prices are shown as annual averages. December–December changes can be found in Table A7 in the Statistical Appendix.

[2]Percent of GDP.

[3]Percent. National definitions of unemployment may differ.

[4]Also includes Chad and South Sudan.

[5]Also includes Cape Verde, Lesotho, Mauritius, Namibia, Seychelles, Swaziland, and Zambia.

[6]Also includes Benin, Burkina Faso, Burundi, Central African Republic, Comoros, Eritrea, The Gambia, Guinea, Guinea-Bissau, Liberia, Madagascar, Malawi, Mali, Niger, Rwanda, São Tomé and Príncipe, Sierra Leone, Togo, and Zimbabwe.

Spillover Feature: The Financial Transmission of Stress in the Global Economy

Four years after the global financial crisis, the world economy is still struggling to achieve sustained expansion amid major downside risks. This Spillover Feature sheds light on a number of concerns relating to the weak recovery: Could a major intensification of the euro area crisis or renewed U.S. financial stress induce contagion effects? Have such spillovers increased over time? Can a sharp economic slowdown in China affect financial conditions elsewhere?

Financial markets react differently to stress depending on the strength of offsetting factors. Capital may flow out of economies under stress to regions in which perceived economic prospects and financial returns are higher. However, if banks in the economies under stress are forced to reduce leverage by unwinding their cross-border exposures, this would cause capital outflows from across the world.[1] Stress could also dampen risk appetite more generally and precipitate a flight to safety out of all risky assets, depressing asset prices and financing conditions more broadly.

We assess the nature of global contagion during episodes of financial stress in the United States and the euro area as well as the contagion of shocks to real activity specific to China. We gauge this contagion by tracking developments in weekly bond and equity flows to advanced and emerging market economy funds and daily equity prices and sovereign yields in the immediate aftermath of these stress episodes. However, the spillovers evident in the analysis should be interpreted as associations rather than drivers of stress because we do not identify the factors underlying the stress nor control for common factors that may be affecting global financial markets concurrently.[2]

The findings confirm that global financial conditions are vulnerable to stress in major economies. Global capital flows and asset prices tend to be weaker in the period after stress compared with the period before. However, the magnitudes of the spillovers are generally smaller now than they were during the global financial crisis. Stress related to sharp economic downswings in China has also become a source of financial contagion, although more so for emerging market and developing economies than for advanced economies. For many emerging market and developing economy regions, stress during the euro area crisis has been transmitted more quickly to equity than to bond flows, whereas in the aftermath of the global financial crisis, both bond and equity flows were similarly affected by stress. The greater persistence of bond flows may be indicative of increased investor confidence about these economies, but could also be the result of a search for yield in a time of low global interest rates.

The consequences of stress vary by region, likely reflecting differences in underlying vulnerabilities and in exposures to the various types of stress. The Commonwealth of Independent States (CIS) and emerging Europe—which have deeper economic and financial ties with the euro area—have experienced somewhat larger swings in financial conditions than others during the euro area crisis. Spillovers for other regions are relatively smaller. Stress emanating from China coincides with sharper declines in financial conditions in Latin America and the Caribbean (LAC), sub-Saharan Africa (SSA) and the Middle East and North Africa (MENA) than elsewhere—possibly because of these regions' ties with China for oil and other commodity exports. These findings resonate with recent studies highlighting the role of spillovers.[3]

The main author of this feature is Rupa Duttagupta with support from Gavin Asdorian, Sinem Kilic Celik, Nadia Lepeshko, and Bennet Voorhees.

[1]The potential global consequences of bank deleveraging in the euro area, as observed in late 2011, were analyzed in the Spillover Feature in Chapter 2 of the April 2012 *World Economic Outlook.*

[2]For instance, IMF (2012b) finds that the spillover consequences of increased volatility in euro area sovereign bond markets depend on the level of global risk repricing.

[3]Fratzscher, Lo Duca, and Straub (2012) analyze the spillover consequences of unconventional monetary policy announcements by the Federal Reserve. Bayoumi and Bui (2011) document the consequences of U.S. fiscal, financial, and monetary policies on asset prices for a number of systemically important economies. IMF (2011a, 2012b) consider other scenarios to analyze the potential global effects of a further intensification of the crisis

Defining Stress

To compare the consequence of stress in recent years with that during the global financial crisis, we distinguish between two sample periods: (1) January 2007 through 2009, which included the U.S. subprime mortgage meltdown and culminated in the global financial crisis; and (2) January 2010 to mid-2012, the period of the euro area crisis.

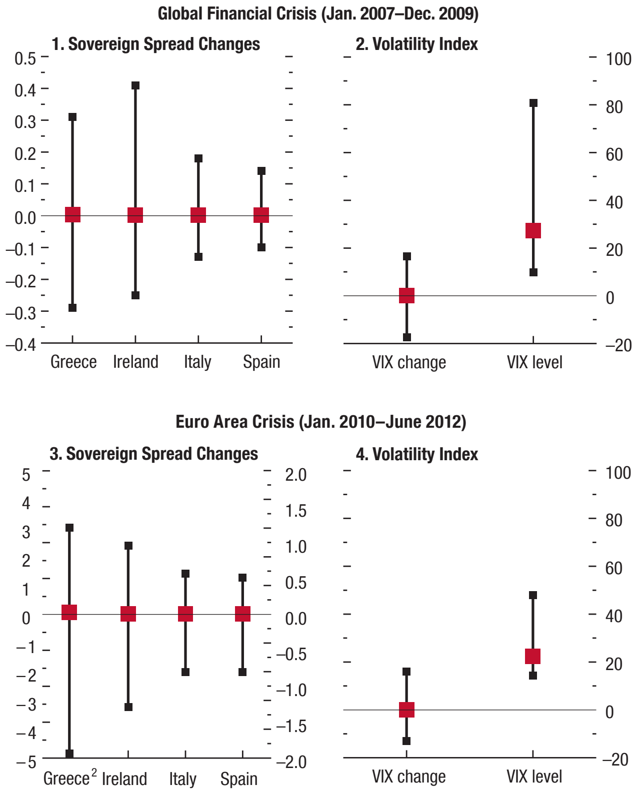
Financing conditions for sovereigns in the euro area periphery have sharply deteriorated only with the escalation of their debt crises.[4] The volatility in their financing conditions, as measured by the range of daily 10-year sovereign spread changes relative to German bunds, has also increased (Figure 2.SF.1, panels 1 and 3). Conversely, U.S. financial market uncertainty, as measured by the Chicago Board Options Exchange Market Volatility Index (VIX), is relatively lower now (Figure 2.SF.1, panels 2 and 4). However, the VIX has experienced occasional volatility in recent years: in May 2010, possibly related to contagion from the outbreak of the Greek crisis, and in late 2011 during the acrimonious U.S. debt-ceiling debate and the escalation of sovereign funding pressure in Italy.

How were episodes of financial stress in the advanced economies chosen? Drawing on Romer (2012), episodes of high stress in a euro area periphery economy are defined as days in which the change in the daily 10-year sovereign spread was in the 95th percentile of its distribution for the given sample period (see Figure 2.SF.1). The euro area periphery as a whole is considered to have been under stress when all periphery economies were under stress as defined by the above metric. For the United States, stress is defined as days in which the VIX level is higher than 30 and the daily VIX increase is in the 95th percentile of the distribution.[5] We filter out

Figure 2.SF.1. Financing Conditions for Euro Area Periphery Economies and the United States, 2007–12

(Percentage points for daily spread changes and points for VIX)[1]

Financing conditions faced by the euro area periphery economies sharply deteriorated during the euro area crisis. In contrast, U.S. financial market stress is somewhat lower now than during the global financial crisis.



Sources: Bloomberg Financial Markets; and IMF staff calculations.
[1]VIX: Chicago Board Options Exchange Market Volatility Index.
[2]Greek sovereign spread changes are on the left scale.

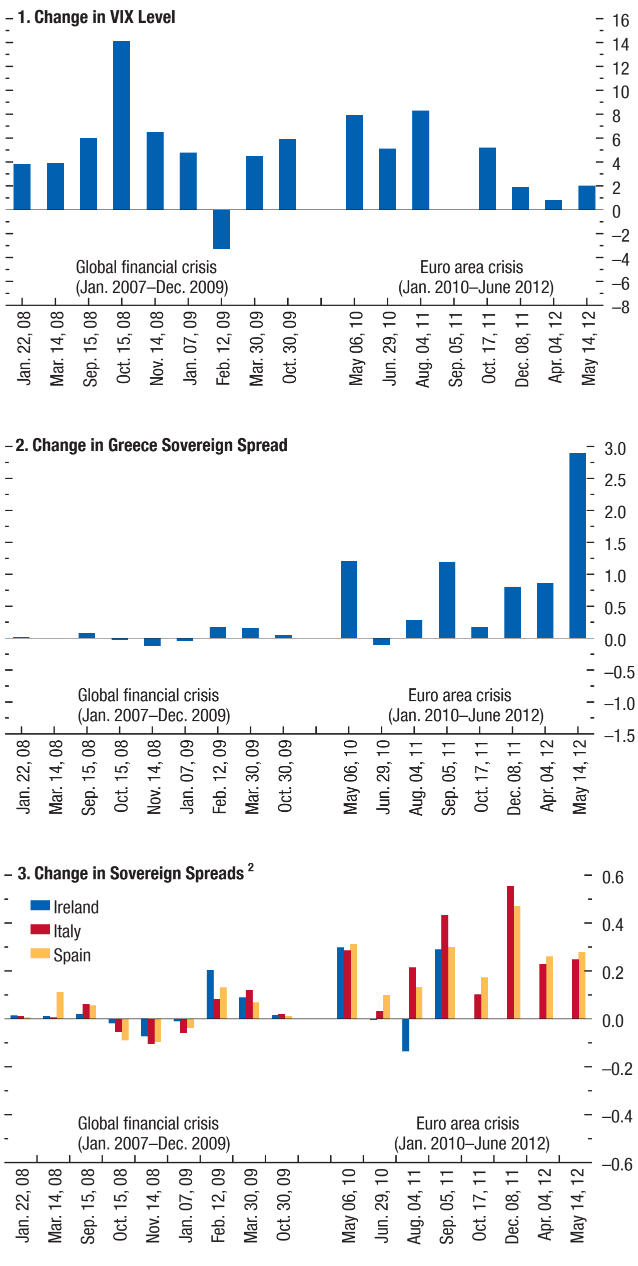
in the euro area. See also Chapter 4 of the October 2009 *World Economic Outlook*.

[4]The euro area periphery economies considered here comprise Greece, Ireland, Italy, and Spain.

[5]Although the U.S. 10-year sovereign yield could serve as an alternative proxy for tracking U.S. stress, this yield has declined in periods of stress in part because of the dollar's status as a safe haven currency and in part because of the Federal Reserve's unconventional measures to lower rates (see IMF, 2012b, for the effects of unconventional Federal Reserve measures on U.S. sovereign yields). Therefore, the VIX is a better gauge of U.S. financial stress.

Figure 2.SF.2. Changes in Stress Indicators, 2007–12
(percentage points for daily sovereign spread and points for VIX)[1]

Financial stress is proxied by sharp increases in sovereign spreads for the euro area periphery economies and in the VIX for the United States.



Sources: Bloomberg Financial Markets; and IMF staff calculations.
[1]VIX: Chicago Board Options Exchange Market Volatility Index.
[2]Data on Irish 10-year bond yields were discontinued after October 11, 2011. Beyond this date, stress in the euro area reflects data on Greece, Italy, and Spain.

consecutive days of stress in a region by restricting each stress episode to those that occur at least one month after the previous episode. The final number of stress episodes is determined by the days during which the euro area periphery, the United States, or both were under stress.

Focusing on the euro area crisis period, we identify episodes of real activity-related stress from China as periods during which China's manufacturing activity is weaker than can be explained by its external trade links. Specifically, we first single out residuals from a 12-month rolling regression of the Chinese manufacturing purchasing managers' index (PMI) on U.S. and euro area PMIs only when they are in the bottom quartile of the distribution. Among these, episodes since 2011 that do not coincide with the episodes of advanced economy stress are considered China-induced stress events.[6]

The above criteria identify 15 stress episodes for the advanced economies and 2 for China (Figure 2.SF.2, Table 2.SF.1). As expected, during the global financial crisis, stress was experienced mainly in the United States, whereas during 2010 through mid-2012, stress was experienced by both the United States and the euro area periphery, although increasingly by only the latter since late 2011.

Transmission of Stress

Spillovers through Cross-Border Capital Flows

We use data on portfolio capital flows compiled by Emerging Portfolio Fund Research (EPFR) to track capital flow movements at a weekly frequency. These data suggest a drying up of capital flows from most regions at the outbreak of the global financial crisis (Figure 2.SF.3, panels 1 and 2).[7] However,

[6]Manufacturing PMIs are released on the first working day of the month, so the specific China-induced stress date is the first working day of the month identified as a stress episode. Even so, given the lower frequency for the PMI data, the case for a correctly identified shock emanating from China is weaker than for the advanced economies, whose stress dates were identified using daily data. Thus, the results relating to China-specific stress should be treated with caution.

[7]These data are not available at daily frequency for most regions. Although EPFR funds do not cover all portfolio flows, recent studies find a close match between EPFR and balance of payments gross portfolio flows (Fratzscher, 2011; Miao and Pant, 2012).

Table 2.SF.1. Behavior of Stress Indicators, 2007–12

Stress Dates	Chicago Board Options Exchange Market Volatility Index (VIX): VIX Level	Chicago Board Options Exchange Market Volatility Index (VIX): Change in VIX Level	Daily Changes in 10-year Sovereign Spreads: Greece: Spread Level[1]	Greece: Change in Spread[2]	Ireland: Spread Level[1]	Ireland: Change in Spread[2]	Italy: Spread Level[1]	Italy: Change in Spread[2]	Spain: Spread Level[1]	Spain: Change in Spread[2]	Stress Experienced by
Stress during the Global Financial Crisis (January 2007—December 2009)											
Jan. 22, 2008	31.01	3.83	0.37	0.01	0.22	0.01	0.38	0.01	0.19	0.01	United States
Mar. 14, 2008	31.16	3.87	0.68	–0.00	0.41	0.01	0.63	0.01	0.41	0.11	United States
Sep. 15, 2008	31.70	6.04	0.80	0.07	0.42	0.02	0.72	0.06	0.47	0.06	United States
Oct. 15, 2008	69.25	14.12	0.84	–0.03	0.60	–0.02	0.69	–0.05	0.47	–0.09	United States
Nov. 14, 2008	66.31	6.48	1.39	–0.13	0.78	–0.07	0.95	–0.10	0.46	–0.10	United States
Jan. 07, 2009	43.39	4.83	2.11	–0.04	1.38	–0.01	1.25	–0.06	0.80	–0.04	United States
Feb. 12, 2009	41.25	–3.28	2.64	0.17	2.23	0.20	1.41	0.08	1.17	0.13	Euro area periphery
Mar. 30, 2009	45.54	4.50	2.72	0.15	2.38	0.09	1.40	0.12	1.03	0.07	Both
Oct. 30, 2009	30.69	5.93	1.42	0.04	1.47	0.02	0.84	0.02	0.56	0.01	United States
Stress during the Euro Area Crisis (January 2010—June 2012)[3]											
May 06, 2010	32.80	7.89	8.52	1.21	3.00	0.30	1.49	0.28	1.63	0.31	Both
Jun. 29, 2010	34.13	5.13	7.89	–0.11	2.95	–0.00	1.57	0.03	2.05	0.10	United States
Aug. 4, 2011	31.66	8.28	12.87	0.28	8.10	–0.13	3.90	0.21	3.98	0.13	United States
Sep. 5, 2011	33.92	0.00	17.47	1.19	6.91	0.29	3.71	0.43	3.41	0.30	Both
Oct. 17, 2011	33.39	5.15	21.90	0.17	. . .	. . .	3.70	0.10	3.22	0.17	United States
Dec. 8, 2011	30.59	1.92	32.70	0.80	. . .	. . .	4.44	0.55	3.80	0.47	Euro area periphery
Apr. 4, 2012	16.44	0.78	20.34	0.86	. . .	. . .	3.58	0.23	3.90	0.26	Euro area periphery
May 14, 2012	21.87	1.98	26.13	2.89	. . .	. . .	4.24	0.25	4.77	0.28	Euro area periphery

China, Real Activity Stress

	PMI[4]	Change from Previous Month	Unexplained PMI[5]
Feb. 1, 2011	51.7	–2.8	–2.0
Jun. 1, 2011	52.5	–1.5	–2.4

Source: IMF staff calculations. See Table 2.SF.2 for data sources.

[1]Daily spread with 10-year bunds.

[2]Daily spread change.

[3]Data on Irish 10-year bond yields were discontinued after October 11, 2011. (Stress in the euro area reflects data on Greece, Italy, and Spain only).

[4]Purchasing Managers' Index.

[5]The bottom quartile residuals from a 12-month rolling regression of China's manufacturing purchasing managers' index (PMI) on the U.S. and euro area manufacturing PMIs. (The residuals for months that coincided with months of advanced economy stress are filtered out.)

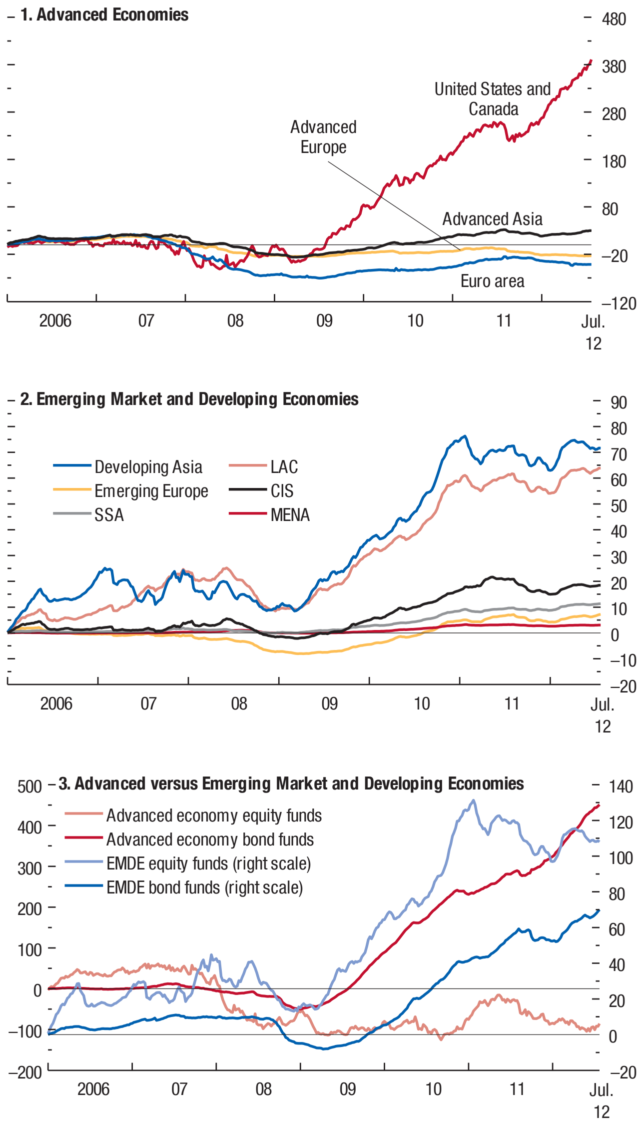
capital flow volatility increased even before the crisis—as early as January 2007 for developing Asia and late 2007 for LAC economies. Flows picked up for most regions from the second half of 2009, although volatility has increased again since early 2011. Since late 2009, there has also been a change in the composition of portfolio flows toward bond flows for both advanced and emerging market and developing economies (Figure 2.SF.3, panel 3). The rise in bond flows for the latter marks a shift from the steady decline in the share of debt-creating inflows in the run-up to the global financial crisis.[8]

[8]See Chapter 4 of the April 2011 *World Economic Outlook.*

Event studies based on the identified stress episodes confirm that stress in major economies tends to be associated with lower global capital flows. The exercise compares the level of capital flows to alternative regions in the week of and the weeks before and after stress, and then averages across all stress episodes within each sample period. Lower flows in the weeks of and after stress relative to the week before suggest that foreign investors' appetite for cross-border investment is lower during stress (Figure 2.SF.4). The poststress decline in flows during the euro area crisis is generally not as sharp as that observed during the global financial crisis, although there is considerable regional heterogeneity:

Figure 2.SF.3. Global Weekly Capital Flows
(Billions of U.S. dollars)[1]

Following a sharp decline during the global financial crisis, capital flows have steadily risen in most regions. Emerging market and developing economies have seen a buildup in both bond and equity flows, whereas equity flows have largely been negative in advanced economies.



Sources: Emerging Portfolio Fund Research; and IMF staff calculations.
Note: LAC = Latin America and the Caribbean; CIS = Commonwealth of Independent States; SSA = sub-Saharan Africa; MENA = Middle East and North Africa; EMDE = emerging market and developing economy. See Table 2.SF.2 for the country composition of each group.
[1]Equity and bond fund flows, cumulated from January 2006.

- Advanced economies tend to experience greater declines in capital flows when their own economies are under stress compared with periods of China-specific stress (Figure 2.SF.4, panels 1–4). With the exception of advanced Asia, flows to advanced economies do not fall immediately after China-related stress and, in fact, increase for some.
- Although capital flows to emerging market and developing economies also dry up after stress, the scale varies by region (Figure 2.SF.4, panels 5–10). For the CIS, poststress capital outflows during the euro area crisis are larger than in other emerging market and developing economies and almost as sharp as outflows during the global financial crisis, whereas for emerging Europe flows continue to be lower even in the week after stress. This may reflect in part these regions' ties with the euro area and the effects of increased deleveraging by euro area banks, many of which have a strong presence in the CIS and emerging Europe.
- The evidence of contagion from China is stronger for emerging market and developing economies, particularly in the LAC, MENA, and SSA regions, likely reflecting commodity trade linkages, but also for emerging Europe.[9]

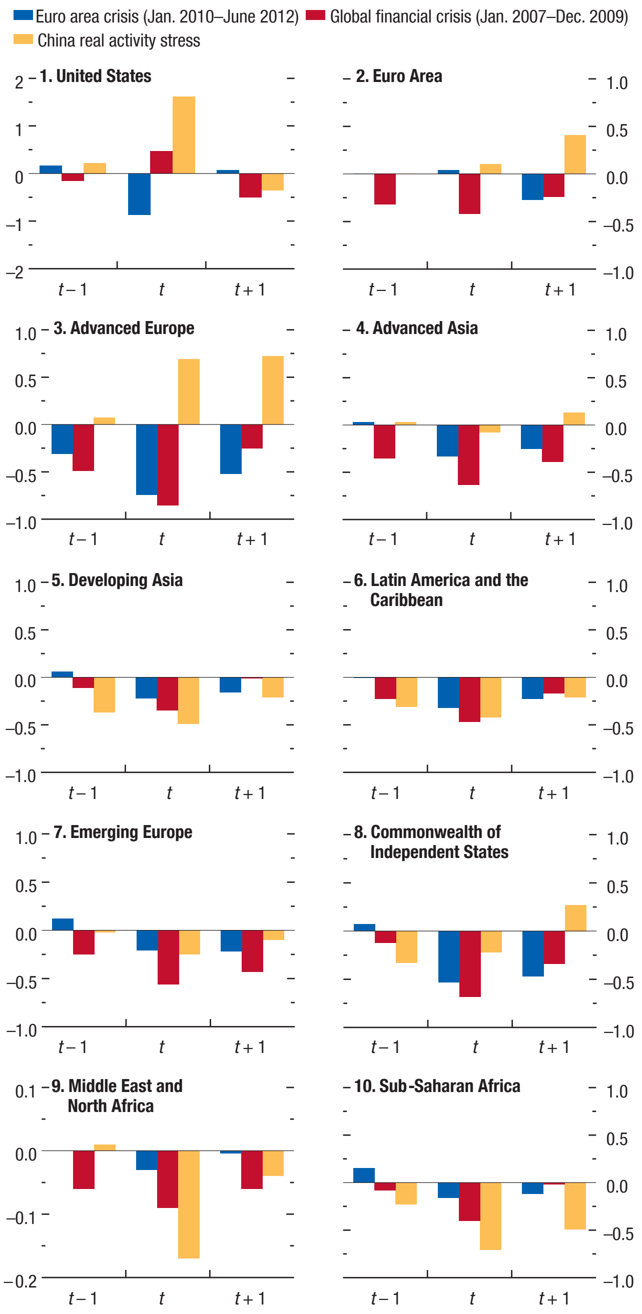
Stress has affected bond and equity flows differently over time, suggesting that investors are increasingly distinguishing between asset classes rather than between economies (Figure 2.SF.5).[10] During the euro area crisis, bond flows—including to emerging market and developing economies—have held up more than equity flows after stress, declining in level but not reversing immediately. The decline in equity flows is generally sharper. In contrast, during the global financial crisis, bond flows were generally negative and fell further after stress (equity flows behaved in a similar fashion). It is possible that investors increasingly consider that

[9]IMF (2012b) analyzes the consequences of potentially lower Chinese investment growth on growth in commodity exporters through direct trade linkages and global commodity prices.

[10]The EPFR database does not have data on bond and equity fund flow breakdowns for every country. Therefore, total flows for a country are included in the regional aggregates only if both bond and equity fund flows are available. See Table 2.SF.2 for details on the country coverage of the data.

Figure 2.SF.4. Global Fund Flows during Stress
(Percent of 2011 weekly GDP)

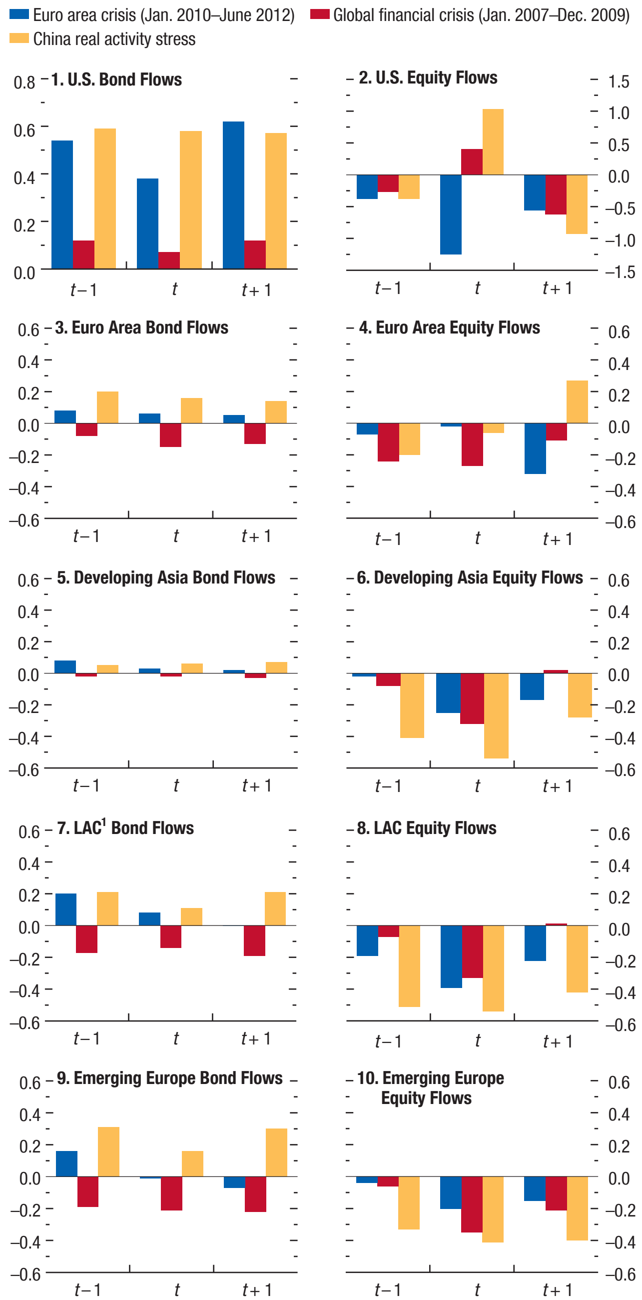
Global capital flows are generally weaker during the week of and the week after advanced economy stress than during the week before stress. For most regions, the swings in flows around stress episodes are still somewhat smaller compared with those experienced during the global financial crisis. Stress from China also tends to coincide with lower flows but more dominantly for emerging market and developing economies that have strong trade-related ties with China.



Sources: Emerging Portfolio Fund Research; and IMF staff calculations.
Note: t denotes the week of stress, and $t-1$ and $t+1$ refer to the weeks before and after stress, respectively. See Table 2.SF.2 for country composition in each group.

Figure 2.SF.5. The Composition of Capital Flows during Stress
(Percent of 2011 weekly GDP)

Bond flows have tended to be relatively more resilient to stress than equity flows during the euro area crisis.



Sources: Emerging Portfolio Fund Research; and IMF staff calculations.
Note: t denotes the week of stress, and $t-1$ and $t+1$ refer to the weeks before and after stress, respectively. See Table 2.SF.2 for the country composition of each group.
[1]LAC: Latin America and the Caribbean.

Table 2.SF.2. Data for Spillover Feature

Variable	Definition/Description/Source	
Sovereign Spreads Greece Ireland Italy Spain	Ten-year general government bond index. The spread is calculated as a country's indexed yield over German 10-year bonds. Source: Bloomberg Financial Markets.	
VIX	Chicago Board Options Exchange Market Volatility Index. Source: Bloomberg Financial Markets.	
Total, Bond, and Equity Fund Flows	Weekly total, bond, and equity fund flows to 10 regions. Source. Emerging Portfolio Fund Research.	
	Country Compositions for Each Region:	
	Total Flows	
	Euro Area	Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Slovak Republic, Slovenia, Spain
	Advanced Europe	Czech Republic, Denmark, Iceland, Israel, Norway, Sweden, Switzerland, United Kingdom
	Advanced Asia	Australia, Hong Kong SAR, Japan, Korea, New Zealand, Singapore, Taiwan Province of China
	Developing Asia	China, India, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam
	Latin America and the Caribbean	Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru, Venezuela
	Emerging Europe	Bulgaria, Croatia, Hungary, Latvia, Lithuania, Poland, Romania, Serbia, Turkey
	Commonwealth of Independent States	Georgia, Kazakhstan, Mongolia, Russia, Ukraine
	Sub-Saharan Africa	Botswana, Côte d'Ivoire, Ghana, Kenya, Mauritius, Namibia, Nigeria, South Africa, Zambia
	Middle East and North Africa	Bahrain, Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Saudi Arabia, Tunisia, United Arab Emirates
	United States and Canada	Canada, United States
	United States	United States
	Bond Flows: *Each region includes the same composition as Total Flows, with additional countries listed below.*	
	Developing Asia	Cambodia
	Latin America and the Caribbean	Costa Rica, Jamaica, Nicaragua, Trinidad and Tobago, Uruguay
	Emerging Europe	Albania, Bosnia and Herzegovina, FYR Macedonia
	Commonwealth of Independent States	Azerbaijan, Belarus, Moldova
	Sub-Saharan Africa	Angola, Democratic Republic of the Congo, Gabon, Liberia, Uganda
	Middle East and North Africa	Algeria, Iran, Iraq, Libya
	Advanced Economies	All countries listed under Euro Area, Advanced Europe, Advanced Asia, and United States and Canada
	Emerging Market and Developing Economies	All countries listed under Developing Asia, Latin America and the Caribbean, Emerging Europe, Commonwealth of Independent States, Sub-Saharan Africa, and Middle East and North Africa
	Equity Flows: *Each region includes the same composition as Total Flows, with additional countries listed below.*	
	Developing Asia	Bangladesh, Cambodia, Papua New Guinea
	Commonwealth of Independent States	Turkmenistan

Table 2.SF.2. *(continued)*

Variable	Definition/Description/Source	
	Sub-Saharan Africa	Malawi, Rwanda, Swaziland, Tanzania, Uganda, Zimbabwe
	Middle East and North Africa	Iran, Yemen
	Advanced Economies	All countries listed under Euro Area, advanced Europe, Advanced Asia, and United States and Canada
	Emerging Market and Developing Economies	All countries listed under Developing Asia, Latin America and the Caribbean, Emerging Europe, Commonwealth of Independent States, Sub-Saharan Africa, and Middle East and North Africa
2011 Weekly GDP	2011 annual GDP in U.S. dollars divided by 52. Source: World Economic Outlook database (series NGDPD).	
Sovereign Yields[1]	Ten-year government bond yields for most advanced economies; JPMorgan EMBIG Sovereign Yields for emerging market economies. Source: Bloomberg Financial Markets.	
	Country Compositions for Each Region	
	Euro Area (core)	Belgium, Finland, France, Germany, Netherlands, Slovak Republic
	Advanced Europe	Czech Republic, Denmark, Norway, Sweden, Switzerland, United Kingdom
	Advanced Asia	Australia, Hong Kong SAR, Japan, Korea, New Zealand, Singapore, Taiwan Province of China
	Developing Asia	China, India, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam
	Latin America and the Caribbean	Argentina, Belize, Brazil, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, Jamaica, Mexico, Panama, Peru, Trinidad and Tobago, Uruguay, Venezuela
	Emerging Europe	Bulgaria, Croatia, Hungary, Lithuania, Poland, Serbia, Turkey
	Commonwealth of Independent States	Belarus, Georgia, Kazakhstan, Russia, Ukraine
	Sub-Saharan Africa	Côte d'Ivoire, Gabon, Ghana, Nigeria, Senegal, South Africa
	Middle East and North Africa	Egypt, Iraq, Jordan, Lebanon, Morocco, Tunisia
Equity Prices[1]	MSCI Equity Indices. Source: Bloomberg Financial Markets.	
	Country Compositions for Each Region	
	Euro Area	Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain
	Advanced Europe	Czech Republic, Denmark, Norway, Sweden, Switzerland, United Kingdom
	Advanced Asia	Australia, Hong Kong SAR, Japan, Korea, New Zealand, Singapore, Taiwan Province of China
	Developing Asia	China, India, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand
	Latin America and the Caribbean	Argentina, Brazil, Chile, Mexico, Peru, Venezuela
	Emerging Europe	Hungary, Poland, Turkey
	Commonwealth of Independent States	Kazakhstan, Russia, Ukraine
	Sub-Saharan Africa	Kenya, Nigeria, South Africa
	Middle East and North Africa	Egypt, Israel, Jordan, Morocco
Financial Equity Prices[1]	MSCI Financial Equity Indices. Source: Bloomberg Financial Markets.	
	Country Compositions for Each Region	
	Euro Area	Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain
	Advanced Europe	Czech Republic, Denmark, Norway, Sweden, Switzerland, United Kingdom

Table 2.SF.2. *(continued)*

Variable	Definition/Description/Source	
	Advanced Asia	Australia, Hong Kong SAR, Japan, Korea, New Zealand, Singapore, Taiwan Province of China
	Developing Asia	China, India, Indonesia, Malaysia, Pakistan, Philippines, Sri Lanka, Thailand
	Latin America and the Caribbean	Argentina, Brazil, Chile, Colombia, Mexico, Peru
	Emerging Europe	Hungary, Poland, Turkey
	Commonwealth of Independent States	Russia
	Sub-Saharan Africa	South Africa
	Middle East and North Africa	Egypt, Israel, Jordan, Morocco
Purchasing Managers' Index (manufacturing) China Euro Area United States	Markit Economics Purchasing Managers' Index for the manufacturing sector (monthly data). Source: Haver Analytics.	

[1]Regional aggregates are computed as a weighted average of the countries within the region, with weights based on 2012 U.S. dollar GDP weights from the April 2012 *World Economic Outlook.*

these economies issue higher-quality assets given the resilience of their expansions. However, it could also reflect a greater thirst for yield in an environment of ultra-low interest rates.

Contagion through Asset Prices

The above results using weekly capital flows are complemented by studying the poststress behavior of global sovereign yields and equity prices, the data for which are available at a daily frequency. Global asset prices tend to tighten in periods of stress—sovereign yields rise and equity prices fall (Figure 2.SF.6)—although the size of spillovers has typically varied across regions:

- During the euro area crisis, for emerging Europe, the CIS, and LAC, the average sovereign yields in the two days after stress were 8 to10 basis points higher compared with average yields in the two days before stress. During the global financial crisis, the rise in yields after stress was generally larger, particularly for the CIS. For developing Asia, stress has been associated with a decline in sovereign yields in both crisis periods, but more so during the euro area crisis. This observation is consistent with the greater persistence of bond flows observed for emerging market and developing economies over time. Yields in most advanced economies also tend to be lower after stress, more so during the euro area crisis period, reflecting in part a flight to quality.
- Both equity and financial equity prices are lower after stress, with the poststress declines in financial equity prices slightly larger than those in overall equity prices for most regions. During the euro area crisis, for most regions, equity prices were lower by 1 to 3 percentage points for the two days after stress (compared with the average two-day prices before stress), while the decline was about 4 percentage points for the CIS and euro area economies. These declines were larger during stress in the global financial crisis.
- Sovereign yields do not exhibit any specific pattern during China-specific stress episodes. Equity and financial equity prices are generally weaker after such stress, particularly for commodity-exporting regions (LAC, MENA).

Conclusions

The analysis confirms that financial or real stress in major economies can affect global financial conditions either because stress occurs concurrently everywhere or because of spillover effects. Global capital flows decline, equity prices fall, and sovereign yields generally rise following such stress. Although spillovers have been smaller in recent years than during the global financial crisis, economies with greater linkages to advanced economies—emerging Europe and the CIS region—remain vulnerable. Swings in financial conditions are also experienced around stress from downswings in Chinese real economic activity, particularly for commodity exporters. The recent shift in financial markets away from equity to bond flows in emerging market and developing economies could suggest that bonds issued by the latter are now considered safer for investors than before. However, it could also reflect a search for yield in the face of low global interest rates, which raises concerns about a potential increase in the exposure of these economies to such debt-creating flows.

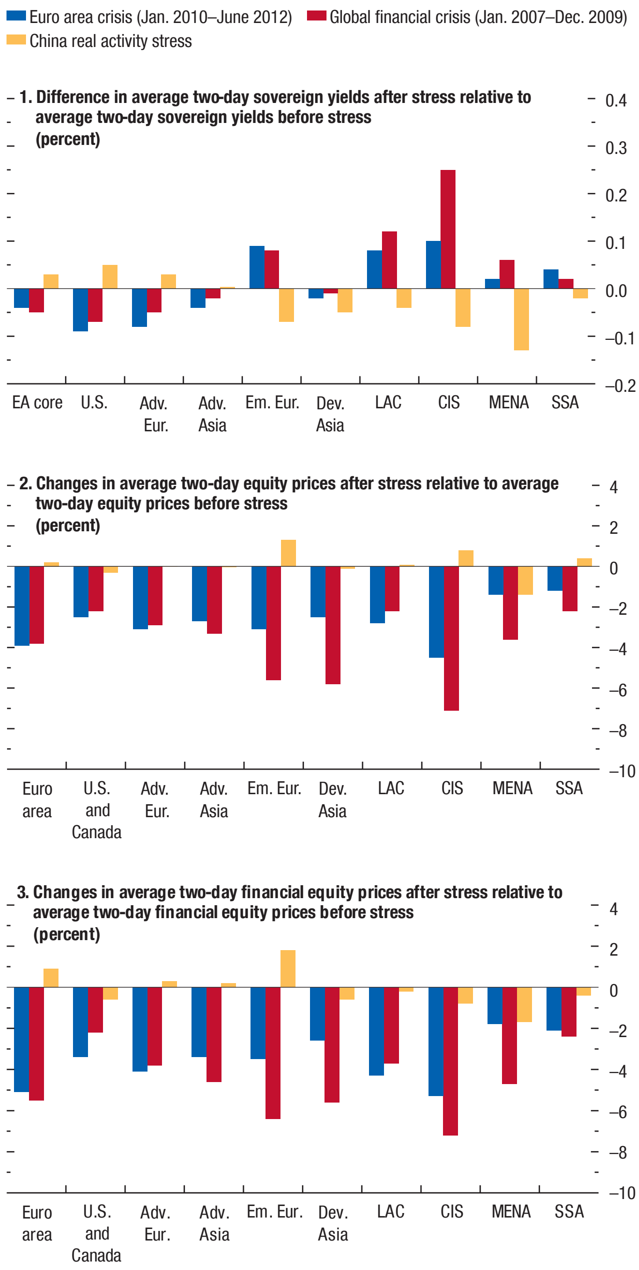
The real implications of stress can be severe in the context of strong macrofinancial linkages in systemically important economies.[11] Growth spillovers from these economies can be large given the sizable trade linkages of most regions with these economies (Figure 2.SF.7). More generally, a sharp rise in global risk aversion—the proxy used here for U.S. financial strain—is also associated with a higher likelihood of the end of economic expansions in emerging market and developing economies (see Chapter 4).

Policymakers should focus on limiting the potential for such stress in the first place, which involves a range of policies, as discussed in Chapter 1. For economies at the receiving end, it is crucial to maintain strong macroeconomic and prudential policies that sustain market confidence and increase resilience to potential contagion.

[11]See Claessens, Kose, and Terrones (2011); Igan and others (2009); Reinhart and Rogoff (2009); and IMF (2012b).

Figure 2.SF.6. Global Asset Price Performance around Stress Episodes

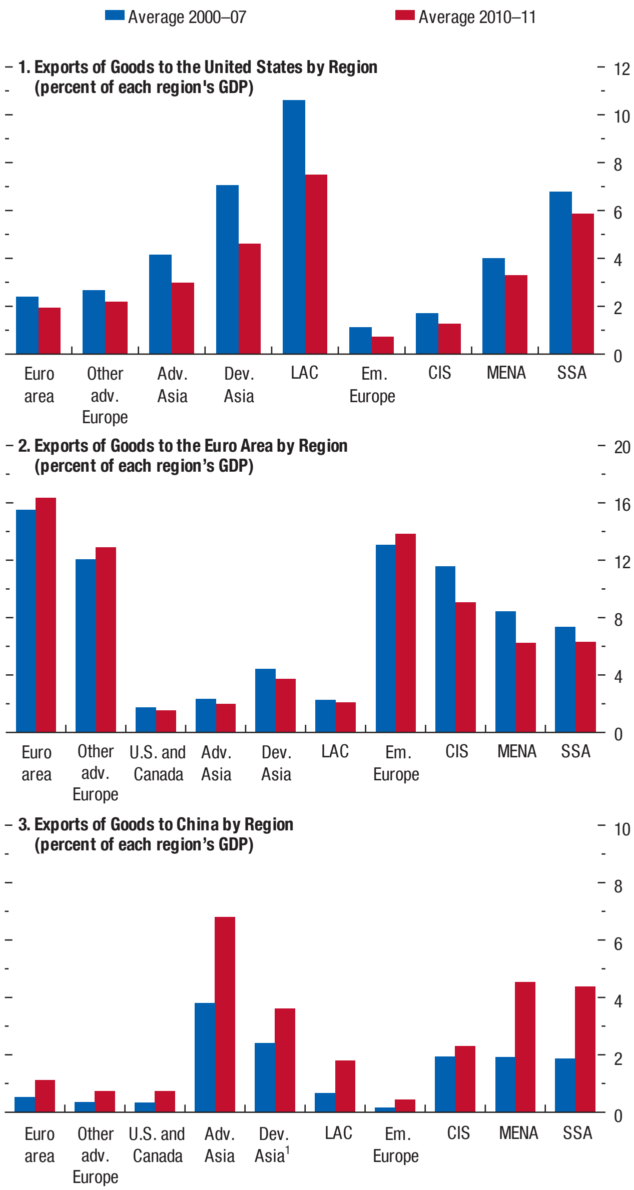
Global sovereign yields tend to rise and equity prices to fall during periods of stress emanating from major economies.



Sources: See Table 2.SF.2.
Note: EA core = euro area core; Adv. Eur. = advanced Europe; Adv. Asia = advanced Asia; Em. Eur. = emerging Europe; Dev. Asia = developing Asia; LAC = Latin America and the Caribbean; CIS = Commonwealth of Independent States; MENA = Middle East and North Africa; SSA = sub-Saharan Africa. See Table 2.SF.2 for the country composition of each group.

Figure 2.SF.7. Global Trade Linkages with Advanced Economies and China

Global trade linkages with advanced economies remain sizable, and those with China have been increasing in recent years.



Sources: IMF, Direction of Trade Statistics database; and IMF staff calculations.
Note: Adv. Asia = advanced Asia; Dev. Asia = developing Asia; LAC = Latin America and the Caribbean; Em. Europe = emerging Europe; CIS = Commonwealth of Independent States; MENA = Middle East and North Africa; SSA = sub-Saharan Africa.
See the Statistical Appendix for regional country compositions, except other advanced Europe (Other adv. Europe): Czech Republic, Denmark, Iceland, Norway, Sweden, Switzerland, United Kingdom.
[1]Excluding China.

References

Anderson, Derek, Benjamin Hunt, Mika Kortelainen, Dirk Muir, and Stephen Snudden, forthcoming, "Getting to Know the GIMF: The Simulation Properties of the Global Integrated Monetary and Fiscal Model," IMF Working Paper (Washington: International Monetary Fund).

Bayoumi, Tamim, and Trung Bui, 2011, "Unforeseen Events Wait Lurking: Estimating Policy Spillovers from U.S. to Foreign Asset Prices," IMF Working Paper No. 11/183 (Washington: International Monetary Fund).

Claessens, Stijn, Ayhan M. Kose, and Marco Terrones, 2011, "How Do Business and Financial Cycles Interact?" IMF Working Paper No. 11/88 (Washington: International Monetary Fund).

Fratzscher, Marcel, 2011, "Capital Flows, Push versus Pull Factors and the Global Financial Crisis," ECB Working Paper No. 1364 (Frankfurt: European Central Bank).

______, Marco Lo Duca, and Roland Straub, 2012, "Quantitative Easing, Portfolio Choice and International Capital Flows" (unpublished; Frankfurt: European Central Bank).

Hyndman, Rob, Anne B. Koeher, J. Keith Ord, and Ralph D. Snyder, 2008, *Forecasting with Exponential Smoothing: The State Space Approach* (Berlin: Springer-Verlag).

Igan, Deniz, Alain N. Kabundi, Franciso Nadal-De Simone, Marcelo Pinheiro, and Natalia T. Tamirisa, 2009, "Three Cycles: Housing, Credit, and Real Activity," IMF Working Paper No. 09/231 (Washington: International Monetary Fund).

International Monetary Fund (IMF), 2011a, *Euro Area Policies: Spillover Report for the 2011 Article IV Consultation and Selected Issues,* IMF Country Report No. 11/185 (Washington). www.imf.org/external/pubs/ft/scr/2011/cr11185.pdf.

______, 2011b, "Recent Experiences in Managing Capital Flows: Cross-Cutting Themes and Possible Policy Framework" (Washington). www.imf.org/external/np/pp/eng/2011/021411a.pdf.

———, 2012a, *Pilot External Sector Report* (Washington). http://www.imf.org/external/np/pp/eng/2012/070212.pdf.

______, 2012b, *2012 Spillover Report* (Washington). www.imf.org/external/np/pp/eng/2012/070912.pdf.

______, 2012c, *The United Kingdom: Staff Report for the 2012 Article IV Consultation*, IMF Country Report No. 12/190 (Washington).

Kamenik, Ondrej, 2011, OG research paper (unpublished; Prague: OGResearch). http://www.ogresearch.com/products.

Kumhof, Michael, Douglas Laxton, Dirk Muir, and Susanna Mursula, 2010, "The Global Integrated Monetary and Fiscal Model (GIMF)—Theoretical Structure," IMF Working Paper No. 10/34 (Washington: International Monetary Fund).

Miao, Yanliang, and Malika Pant, 2012, "Coincident Indicators of Capital Flows," IMF Working Paper No. 12/55 (Washington: International Monetary Fund).

Reinhart, Carmen M., and Kenneth S. Rogoff, 2009, *This Time Is Different: Eight Centuries of Financial Folly* (Princeton, New Jersey: Princeton University Press).

Romer, Christina, D., 2012, "Fiscal Policy in the Crisis: Lessons and Policy Implications" (unpublished; Berkeley: University of California).