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World Economic Outlook

Transitions and Tensions

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ASSUMPTIONS AND CONVENTIONS

A number of assumptions have been adopted for the projections presented in the *World Economic Outlook* (WEO). It has been assumed that real effective exchange rates remained constant at their average levels during July 29–August 26, 2013, except for the currencies participating in the European exchange rate mechanism II (ERM II), which are assumed to have remained constant in nominal terms relative to the euro; that established policies of national authorities will be maintained (for specific assumptions about fiscal and monetary policies for selected economies, see Box A1 in the Statistical Appendix); that the average price of oil will be $104.49 a barrel in 2013 and $101.35 a barrel in 2014 and will remain unchanged in real terms over the medium term; that the six-month London interbank offered rate (LIBOR) on U.S. dollar deposits will average 0.4 percent in 2013 and 0.6 percent in 2014; that the three-month euro deposit rate will average 0.2 percent in 2013 and 0.5 percent in 2014; and that the six-month Japanese yen deposit rate will yield on average 0.2 percent in 2013 and 0.3 percent in 2014. These are, of course, working hypotheses rather than forecasts, and the uncertainties surrounding them add to the margin of error that would in any event be involved in the projections. The estimates and projections are based on statistical information available through September 23, 2013.

The following conventions are used throughout the WEO*:*

. . . to indicate that data are not available or not applicable;

– between years or months (for example, 2012–13 or January–June) to indicate the years or months covered, including the beginning and ending years or months;

/ between years or months (for example, 2012/13) to indicate a fiscal or financial year.

"Billion" means a thousand million; "trillion" means a thousand billion.

"Basis points" refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to ¼ of 1 percentage point).

For some countries, the figures for 2012 and earlier are based on estimates rather than actual outturns.

Data refer to calendar years, except for a few countries that use fiscal years. Please refer to Table F in the Statistical Appendix, which lists the reference periods for each country.

On July 31, 2013, the U.S. Bureau of Economic Analysis released the Comprehensive Revision of the National Income and Product Accounts (NIPA). The revision includes improvements in methodology and data sources as well as significant changes in definitions and classifications. With this update, the accounts more accurately portray the evolution of the economy. Most notably, expenditures on research and development activities and for the creation of entertainment, literary, and artistic originals are now treated as capital expenditures. Furthermore, the treatment of defined-benefit pension plans is switched from a cash basis to an accrual basis. The revisions increase the level of GDP by 3.4 percent and boost the personal savings rate. The revised data also show that the Great Recession was shallower and the recovery was stronger through the first half of 2012, but also that cyclical weakness was greater during the past year. Overall, the revision does not significantly change the IMF staff's broad view on the U.S. economic outlook.

Starting with the July 2013 *WEO Update,* India's data and forecasts are presented on a fiscal year basis.

On July 1, 2013, Croatia became the 28th member state of the European Union.

Projections for Cyprus, which were excluded from the April 2013 WEO due to the crisis, are once again included.

As in the April 2013 WEO, data for Syria are excluded for 2011 onward due to the uncertain political situation.

Data for Palau are now included in the Developing Asia region.

Iran's real GDP growth for 2012 and beyond has not been significantly updated from the April 2013 WEO in light of the pending publication of national accounts by the central bank and the new authorities' plans.

Zambia redenominated its currency by replacing 1,000 old Zambian kwacha notes with 1 new Zambian kwacha note. Local currency data for Zambia are expressed in the new currency starting with the October 2013 WEO database.

If no source is listed on tables and figures, data are drawn from the WEO database.

When countries are not listed alphabetically, they are ordered on the basis of economic size.

Minor discrepancies between sums of constituent figures and totals shown reflect rounding.

As used in this report, the terms "country" and "economy" do not in all cases refer to a territorial entity that is a state as understood by international law and practice. Some territorial entities included here are not states, although their statistical data are maintained on a separate and independent basis.

Composite data are provided for various groups of countries organized according to economic characteristics or region. Unless otherwise noted, country group composites represent calculations based on 90 percent or more of the weighted group data.

The boundaries, colors, denominations, and any other information shown on the maps do not imply, on the part of the International Monetary Fund, any judgment on the legal status of any territory or any endorsement or acceptance of such boundaries.

FURTHER INFORMATION AND DATA

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The data appearing in the *World Economic Outlook* are compiled by the IMF staff at the time of the WEO exercises. The historical data and projections are based on the information gathered by the IMF country desk officers in the context of their missions to IMF member countries and through their ongoing analysis of the evolving situation in each country. Historical data are updated on a continual basis as more information becomes available, and structural breaks in data are often adjusted to produce smooth series with the use of splicing and other techniques. IMF staff estimates continue to serve as proxies for historical series when complete information is unavailable. As a result, WEO data can differ from other sources with official data, including the IMF's *International Financial Statistics*.

The WEO data and metadata provided are "as is" and "as available," and every effort is made to ensure, but not guarantee, their timeliness, accuracy, and completeness. When errors are discovered, there is a concerted effort to correct them as appropriate and feasible. Corrections and revisions made after publication are incorporated into the electronic editions available from the IMF eLibrary (www.elibrary.imf.org) and on the IMF website (www.imf.org). All substantive changes are listed in detail in the online tables of contents.

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World Economic Studies Division
Research Department
International Monetary Fund
700 19th Street, N.W.
Washington, DC 20431, U.S.A.
Fax: (202) 623-6343
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PREFACE

The analysis and projections contained in the *World Economic Outlook* are integral elements of the IMF's surveillance of economic developments and policies in its member countries, of developments in international financial markets, and of the global economic system. The survey of prospects and policies is the product of a comprehensive interdepartmental review of world economic developments, which draws primarily on information the IMF staff gathers through its consultations with member countries. These consultations are carried out in particular by the IMF's area departments—namely, the African Department, Asia and Pacific Department, European Department, Middle East and Central Asia Department, and Western Hemisphere Department—together with the Strategy, Policy, and Review Department; the Monetary and Capital Markets Department; and the Fiscal Affairs Department.

The analysis in this report was coordinated in the Research Department under the general direction of Olivier Blanchard, Economic Counsellor and Director of Research. The project was directed by Jörg Decressin, Deputy Director, Research Department, and by Thomas Helbling, Division Chief, Research Department.

The primary contributors to this report are Abdul Abiad, Jaromir Benes, John Bluedorn, Rupa Duttagupta, Davide Furceri, Jaime Guajardo, Sebnem Kalemli-Ozcan, Andrea Pescatori, Damiano Sandri, and John Simon.

Other contributors include Gustavo Adler, Hites Ahir, Daniel Ahn, Michal Andrl, Rabah Arezki, Bas Bakker, Angana Banerji, Alberto Behar, Samya Beidas-Strom, Patrick Blagrave, Dennis Botman, Kevin Cheng, Alfredo Cuevas, Romain Duval, Joshua Felman, Harald Finger, Roberto Garcia-Saltos, Ferdinand Heinz, Keiko Honjo, Benjamin Hunt, Dora Iakova, Zoltan Jakab, Joong Shik Kang, Michael Kumhof, René Lalonde, Douglas Laxton, Shuda Li, Prakash Loungani, Lusine Lusinyan, Junior Maih, Pritha Mitra, Dirk Muir, Sami Ben Naceur, Marco Pani, Marina Rousset, Jay Shambaugh, Serhat Solmaz, Shane Streifel, Yan Sun, Natalia Tamirisa, Thierry Tressel, Jarko Turunen, and Shengzu Wang.

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The analysis has benefited from comments and suggestions by staff from other IMF departments, as well as by Executive Directors following their discussion of the report on September 23, 2013. However, both projections and policy considerations are those of the IMF staff and should not be attributed to Executive Directors or to their national authorities.

FOREWORD

The world economy has entered yet another transition. Advanced economies are gradually strengthening. At the same time, growth in emerging market economies has slowed. This confluence is leading to tensions, with emerging market economies facing the dual challenges of slowing growth and tighter global financial conditions.

The U.S. economy remains at the center of events. Private demand continues to be strong, although growth has been hobbled this year by excessive fiscal consolidation. Politics is creating uncertainty about both the nature and the strength of the fiscal adjustment. The sequester is a bad way to consolidate, and conflicts around increasing the debt ceiling could lead to another bout of destabilizing uncertainty and lower growth. Nevertheless, it is time for monetary policy to make plans for an exit from both quantitative easing and zero policy rates. While there are no major conceptual or technical issues involved, the communication problems facing the Federal Reserve are new and delicate. It is reasonable to expect some volatility in long rates as Fed policy shifts.

The recovery in Japan has been spurred by Abenomics, but sustaining it will depend on meeting two major challenges. The first, reflected in the debate about increasing the consumption tax, is setting the right pace for fiscal consolidation: consolidating too slowly will compromise credibility, and moving too fast will kill growth. The second is implementing a credible set of structural reforms to transform what is now a cyclical recovery into sustained growth.

The core economies of Europe show some signs of recovery. This is the result not of recent major policy changes but of a change in mood, which nonetheless could be largely self-fulfilling if consumers and firms decide to increase spending. Southern periphery countries are still struggling, however. Progress on improving competitiveness and increasing exports is not yet strong enough to offset depressed internal demand. In both the core and the periphery, there is lingering uncertainty about bank balance sheets, which should be reduced by the promised review of banks' asset quality. Taking the longer view, just as for Japan, structural reforms are urgently needed to invigorate the anemic potential growth rates that plague the region.

The major news at this time comes from emerging market economies, where growth has declined—often by more than we previously forecast.

The obvious question is whether this slowdown reflects cyclical factors or a decrease in potential output growth. Based on what we know today, the answer is that it reflects both, albeit to different degrees in various countries—more cyclical in Russia and South Africa, more decreased potential in China and India. Unusually favorable world conditions, including high commodity prices and rapid financial market development, increased potential growth in these economies during the 2000s, and in a number of them, there was a cyclical component on top. As commodity prices stabilize and financial conditions tighten, potential growth is lower, leading in some cases to a sharp cyclical adjustment.

Confronted with these changing conditions, governments in emerging market economies face two challenges. The first is to adjust to lower potential growth. While some decrease in growth relative to the 2000s is inevitable, structural reforms can help ease the adjustment and are becoming more urgent. The list is a familiar one, from rebalancing toward consumption in China to removing barriers to investment in Brazil and India. The second challenge is to deal with the cyclical adjustment, and here the standard advice also applies. Countries with large fiscal deficits must consolidate. Countries with inflation running persistently above target must tighten and—often more important—put in place a more credible monetary policy framework.

The potential impact on these economies of an increase in U.S. long rates makes this advice even more relevant. Normalization of interest rates in advanced economies is likely to lead to a partial reversal of previous capital flows. As investors repatriate funds to the United States, countries with weaker fiscal positions or higher inflation are particularly exposed. The

right response is twofold. First, where needed, countries must put their macro houses in order by clarifying their monetary policy framework and maintaining fiscal sustainability. Second, they must let the exchange rate depreciate in response to outflows. Foreign currency exposure and balance-sheet effects, which have created adverse effects in the past, are more limited today, and emerging market economies should be able to adjust to the changed environment without a major crisis.

In short, the recovery from the crisis continues, albeit too slowly. The focus at this time is on emerging market economies—specifically, on the combination of slower growth and tighter financial conditions triggered by U.S. monetary policy. But, in the background, other legacies of the crisis still linger and may well come back to the fore. Public debt and, in some cases, private debt remain very high, and fiscal sustainability is not a given. The architecture of the financial system is evolving, and its future shape is still unclear. These issues will continue to shape the evolution of the world economy for many years to come.

Olivier Blanchard
Economic Counsellor

EXECUTIVE SUMMARY

Global growth is in low gear, the drivers of activity are changing, and downside risks persist. China and a growing number of emerging market economies are coming off cyclical peaks. Their growth rates are projected to remain much above those of the advanced economies but below the elevated levels seen in recent years, for both cyclical and structural reasons. The United States has seen several quarters of solid private demand. Although public sector demand has been pushing in the opposite direction, this counterforce will diminish in 2014, setting the stage for higher growth. Japan's economy is enjoying a vigorous rebound but will lose steam in 2014 as fiscal policy tightens. The euro area is crawling out of recession, but activity is forecast to stay tepid. In these three advanced economies, much slack remains and inflation pressure is expected to stay subdued.

These changing growth dynamics raise new policy challenges, and policy spillovers may pose greater concern. Two recent developments will likely shape the path of the global economy in the near term. First, markets are increasingly convinced that U.S. monetary policy is reaching a turning point. Talk by the Federal Reserve about tapering its quantitative easing measures led to an unexpectedly large increase in long-term yields in the United States and many other economies, much of which has not been reversed despite a subsequent decision by the Federal Reserve to maintain the amount of asset purchases and policy actions in other countries. Second, there is strengthening conviction that China will grow more slowly over the medium term than in the recent past—previous expectations that the Chinese authorities would react with a strong stimulus if output growth were to decline toward the government target of 7½ percent have had to be revised.

The October 2013 *Global Financial Stability Report* (GFSR) explains how spillovers from these changed perceptions have already provided a sort of mini stress test for financial systems. In emerging markets, the spillovers interacted with existing vulnerabilities and triggered both desirable and undesirable adjustments. The desirable adjustments feature reallocated capital flows and currency depreciations that help attenuate growing competitiveness problems: typically, the currencies that depreciated most were those that the 2013 *Pilot External Sector Report* had assessed as overvalued. At the same time, however, volatility has gone up, and the risk of overshooting could weigh on investment and growth.

Looking ahead, global activity is expected to strengthen moderately but the risks to the forecast remain to the downside. The impulse is projected to come from the advanced economies, where output is expected to expand at a pace of about 2 percent in 2014, about ¾ percentage point more than in 2013. Drivers of the projected uptick are a stronger U.S. economy, an appreciable reduction in fiscal tightening (except in Japan), and highly accommodative monetary conditions. Growth in the euro area will be held back by the very weak economies in the periphery. Emerging market and developing economies are projected to expand by about 5 percent in 2014, as fiscal policy is forecast to stay broadly neutral and real interest rates to remain relatively low. Unemployment will remain unacceptably high in many advanced economies as well as in various emerging market economies, notably those in the Middle East and North Africa.

Some new downside risks have come to the fore, while old risks largely remain. At the time of writing, a political standoff in the United States has led to a shutdown of its federal government. The projections assume that the shutdown is short, discretionary public spending is approved and executed as assumed in the forecast, and the debt ceiling—which may be reached by mid-October—is raised promptly. There is uncertainty on all three accounts. While the damage to the U.S. economy from a short shutdown is likely to be limited, a longer shutdown could be quite harmful. And, even more importantly, a failure to promptly raise the debt ceiling, leading to a U.S. selective default, could seriously damage the global economy.

Beyond immediate risks, the October 2013 *Global Financial Stability Report* underscores that the prospect of reduced monetary accommodation in the United States may cause additional market adjustments and

expose areas of financial excess and systemic vulnerability. In this setting, emerging market economies may face exchange rate and financial market overshooting as they also cope with weaker economic outlooks and rising domestic vulnerabilities; some could even face severe balance of payments disruptions. In the euro area, risks continue to flow from the unfinished business of restoring bank health and credit transmission and from corporate debt overhang. Insufficient fiscal consolidation and structural reforms in Japan could trigger serious downside risks, especially of the fiscal variety. In this regard, the October 2013 *Fiscal Monitor* emphasizes that the large public debt stocks and the absence of medium-term adjustment plans with concrete measures and strong entitlement reforms in key advanced economies, notably Japan and the United States, combine to keep fiscal risks at a stubbornly high level. Fiscal vulnerabilities are also building in emerging market and low-income economies to varying degrees. In the meantime, geopolitical risks have returned.

Policymakers have shown their determination to keep the global economy away from the precipice. Aside from new cliff events, a growing worry is a prolonged period of sluggish global growth. A plausible downside scenario for the medium term would be characterized by a continuation of only modest growth in the euro area because of persistent financial fragmentation and unexpectedly high legacy effects from private indebtedness, a hobbling of emerging market economies by imbalances and supply-side bottlenecks, and prolonged deflation in Japan. Meanwhile, the end of U.S. quantitative easing could come with a greater and longer-lasting tightening of global financial conditions than is presently expected. As a result, the global economy could grow by only slightly more than 3 percent a year over the medium term, instead of reaccelerating to over 4 percent. What is more worrisome, monetary policy in the advanced economies could be stuck at the zero interest bound for many years. Over time, worrisomely high public debt in all major advanced economies and persistent financial fragmentation in the euro area could then trigger new crises.

Forestalling the plausible downside scenario or the advent of new crises requires further policy efforts, mainly in the advanced economies. Old challenges to be addressed include repairing financial systems and adopting a banking union in the euro area and developing and implementing strong plans, supported by concrete measures, for medium-term fiscal adjustment and entitlement reform in Japan and the United States. Furthermore, in the euro area and Japan, in particular, there is a need to boost potential output, including through reforms that level the playing field between insiders and outsiders in labor markets and ease barriers to entry into product and services markets. A new challenge is for U.S. monetary policy to change tack carefully in response to changing growth, inflation, and financial stability prospects. Excessive tightening may be difficult to undo, and global growth may well fall short of, rather than exceed, medium-term growth and inflation projections.

Emerging market and developing economies are facing new policy challenges. The appropriate policy mix and the pace of adjustment will differ across economies, in view of the differences in output gaps, inflation pressure, central bank credibility, room for fiscal policy maneuvering, and the nature of vulnerabilities. However, many economies share five policy priorities. First, policymakers should allow exchange rates to respond to changing fundamentals but may need to guard against risks of disorderly adjustment, including through intervention to smooth excessive volatility. Second, where monetary policy frameworks are less credible, efforts may need to focus more on providing a strong nominal anchor. Third, prudential actions should be taken to safeguard financial stability, given legacy risks from recent credit booms and new risks from capital flows. Fourth, fiscal consolidation should proceed, unless activity threatens to deteriorate very sharply and funding conditions permit fiscal easing—issues discussed in more detail in the October 2013 *Fiscal Monitor.* Fifth, many economies need a new round of structural reforms, including investment in public infrastructure, removal of barriers to entry in product and services markets, and in the case of China, rebalancing growth away from investment toward consumption.

CHAPTER 1

GLOBAL PROSPECTS AND POLICIES

Global growth is still weak, its underlying dynamics are changing, and the risks to the forecast remain to the downside. As a result, new policy challenges are arising and policy spillovers may pose greater concern. In particular, markets are increasingly convinced that U.S. monetary policy is reaching a turning point, and this has led to an unexpectedly large increase in long-term yields in the United States and many other economies, notwithstanding the Federal Reserve's recent decision to maintain its asset purchases. This change could pose risks for emerging market economies, where activity is slowing and asset quality weakening. Careful policy implementation and clear communication on the part of the Federal Reserve will be essential. Also, growth in China is slowing, which will affect many other economies, notably the commodity exporters among the emerging market and developing economies. At the same time, old problems—a fragmented financial system in the euro area and worrisomely high public debt in all major advanced economies—remain unresolved and could trigger new crises. The major economies must urgently adopt policies that improve their prospects; otherwise the global economy may well settle into a subdued medium-term growth trajectory. The United States and Japan must develop and implement strong plans with concrete measures for medium-term fiscal adjustment and entitlement reform, and the euro area must develop a stronger currency union and clean up its financial systems. China should provide a permanent boost to private consumption spending to rebalance the growth of demand away from exports and investment. Many emerging market economies need a new round of structural reforms.

Growth Dynamics Further Diverge

Global growth remains in low gear, averaging only 2½ percent during the first half of 2013, which is about the same pace as in the second half of 2012. In a departure from previous developments since the Great Recession, the advanced economies have recently gained some speed, while the emerging market economies have slowed (Figure 1.1, panel 1). The emerging market economies, however, continue to account for the bulk of global growth. Within each group, there are still broad differences in growth and position in the cycle.

The latest indicators point to somewhat better prospects in the near term but different growth dynamics between the major economies (Figure 1.2). *World Economic Outlook* (WEO) projections continue to foresee a modest acceleration of activity, driven largely by the advanced economies (Table 1.1).

- The impulse to global growth is expected to come mainly from the United States (Figure 1.3, panel 1), where activity will move into higher gear as fiscal consolidation eases and monetary conditions stay supportive. Following sharp fiscal tightening earlier this year, activity in the United States is already regaining speed, helped by a recovering real estate sector (Figure 1.4, panel 5), higher household wealth, easier bank lending conditions (Figure 1.4, panel 3), and more borrowing (Figure 1.4, panels 2 and 4). The fiscal tightening in 2013 is estimated to be 2½ percent of GDP (Table A8 in the Statistical Appendix). However, this will ease to ¾ percent of GDP in 2014, helping raise the rate of economic growth to 2½ percent, from 1½ percent in 2013 (see Table 1.1). This assumes that discretionary public spending is authorized and executed as projected and the debt ceiling is raised in a timely manner.
- In Japan, activity is projected to slow in response to tightening fiscal policy in 2014. Thus far, the data point to an impressive pickup in output in response to the Bank of Japan's Quantitative and Qualitative Monetary Easing and the government's 1.4 percent of GDP fiscal stimulus to end deflation and raise growth. IMF staff estimates suggest that the new policies may have boosted GDP by about 1 percent, although wage increases have remained subdued. As stimulus and reconstruction spending unwind and consumption tax hikes are implemented, the structural deficit will drop—the projections assume a decline by 2½ percent of GDP in 2014, which

Table 1.1. Overview of the *World Economic Outlook* Projections

(Percent change unless noted otherwise)

	Year over Year						Q4 over Q4		
			Projections		Difference from July 2013 WEO Update		Estimates	Projections	
	2011	2012	2013	2014	2013	2014	2012	2013	2014
World Output[1]	**3.9**	**3.2**	**2.9**	**3.6**	**–0.3**	**–0.2**	**2.7**	**3.1**	**3.6**
Advanced Economies	**1.7**	**1.5**	**1.2**	**2.0**	**0.0**	**0.0**	**0.9**	**1.8**	**2.1**
United States[2]	1.8	2.8	1.6	2.6	–0.1	–0.2	2.0	1.9	3.0
Euro Area	1.5	–0.6	–0.4	1.0	0.1	0.0	–1.0	0.4	1.1
Germany	3.4	0.9	0.5	1.4	0.2	0.1	0.3	1.3	1.1
France	2.0	0.0	0.2	1.0	0.3	0.1	–0.3	0.5	1.1
Italy	0.4	–2.4	–1.8	0.7	0.0	0.0	–2.8	–0.9	1.4
Spain	0.1	–1.6	–1.3	0.2	0.3	0.1	–2.1	–0.2	0.2
Japan	–0.6	2.0	2.0	1.2	–0.1	0.1	0.3	3.5	0.2
United Kingdom	1.1	0.2	1.4	1.9	0.5	0.4	0.0	2.3	1.5
Canada	2.5	1.7	1.6	2.2	–0.1	–0.1	1.0	1.9	2.4
Other Advanced Economies[3]	3.2	1.9	2.3	3.1	0.0	–0.2	2.1	2.8	3.0
Emerging Market and Developing Economies[4]	**6.2**	**4.9**	**4.5**	**5.1**	**–0.5**	**–0.4**	**4.9**	**4.7**	**5.4**
Central and Eastern Europe	5.4	1.4	2.3	2.7	0.2	–0.1	0.8	2.8	3.4
Commonwealth of Independent States	4.8	3.4	2.1	3.4	–0.7	–0.3	1.4	2.0	3.5
Russia	4.3	3.4	1.5	3.0	–1.0	–0.3	2.0	1.6	3.8
Excluding Russia	6.1	3.3	3.6	4.2	0.1	–0.1	. . .	. . .	. . .
Developing Asia	7.8	6.4	6.3	6.5	–0.6	–0.5	6.8	6.2	6.6
China	9.3	7.7	7.6	7.3	–0.2	–0.4	7.9	7.6	7.2
India[5]	6.3	3.2	3.8	5.1	–1.8	–1.1	3.0	3.9	5.8
ASEAN-5[6]	4.5	6.2	5.0	5.4	–0.6	–0.3	8.9	4.2	5.3
Latin America and the Caribbean	4.6	2.9	2.7	3.1	–0.3	–0.3	2.8	1.9	3.8
Brazil	2.7	0.9	2.5	2.5	0.0	–0.7	1.4	1.9	3.6
Mexico	4.0	3.6	1.2	3.0	–1.7	–0.2	3.2	1.0	3.5
Middle East, North Africa, Afghanistan, and Pakistan	3.9	4.6	2.3	3.6	–0.7	–0.1	. . .	. . .	. . .
Sub-Saharan Africa	5.5	4.9	5.0	6.0	–0.2	0.1	. . .	. . .	. . .
South Africa	3.5	2.5	2.0	2.9	0.0	0.0	2.3	2.3	3.0
Memorandum									
European Union	1.7	–0.3	0.0	1.3	0.2	0.1	–0.7	0.8	1.4
Middle East and North Africa	3.9	4.6	2.1	3.8	–0.9	0.0	. . .	. . .	. . .
World Growth Based on Market Exchange Rates	2.9	2.6	2.3	3.0	–0.2	–0.2	1.9	2.6	3.1
World Trade Volume (goods and services)	**6.1**	**2.7**	**2.9**	**4.9**	**–0.2**	**–0.4**	**. . .**	**. . .**	**. . .**
Imports									
Advanced Economies	4.7	1.0	1.5	4.0	0.1	–0.2	. . .	. . .	. . .
Emerging Market and Developing Economies	8.8	5.5	5.0	5.9	–0.9	–1.4	. . .	. . .	. . .
Exports									
Advanced Economies	5.7	2.0	2.7	4.7	0.3	0.0	. . .	. . .	. . .
Emerging Market and Developing Economies	6.8	4.2	3.5	5.8	–0.7	–0.5	. . .	. . .	. . .
Commodity Prices (U.S. dollars)									
Oil[7]	31.6	1.0	–0.5	–3.0	4.2	1.7	–1.2	5.0	–7.7
Nonfuel (average based on world commodity export weights)	17.9	–9.9	–1.5	–4.2	0.3	0.2	1.2	–3.8	–2.9
Consumer Prices									
Advanced Economies	2.7	2.0	1.4	1.8	–0.2	–0.1	1.8	1.3	2.0
Emerging Market and Developing Economies[4]	7.1	6.1	6.2	5.7	0.2	0.1	5.1	5.5	5.1
London Interbank Offered Rate (percent)[8]									
On U.S. Dollar Deposits	0.5	0.7	0.4	0.6	–0.1	0.0	. . .	. . .	. . .
On Euro Deposits	1.4	0.6	0.2	0.5	0.0	0.2	. . .	. . .	. . .
On Japanese Yen Deposits	0.3	0.3	0.2	0.3	0.0	0.0	. . .	. . .	. . .

Note: Real effective exchange rates are assumed to remain constant at the levels prevailing during July 29–August 26, 2013. When economies are not listed alphabetically, they are ordered on the basis of economic size. The aggregated quarterly data are seasonally adjusted.

[1]The quarterly estimates and projections account for 90 percent of the world purchasing-power-parity weights.

[2]U.S. data are subject to change pending completion of the release of the Bureau of Economic Analysis's Comprehensive Revision of the National Income and Product Accounts (NIPA).

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

[4]The quarterly estimates and projections account for approximately 80 percent of the emerging market and developing economies.

[5]For India, data and forecasts are presented on a fiscal year basis.

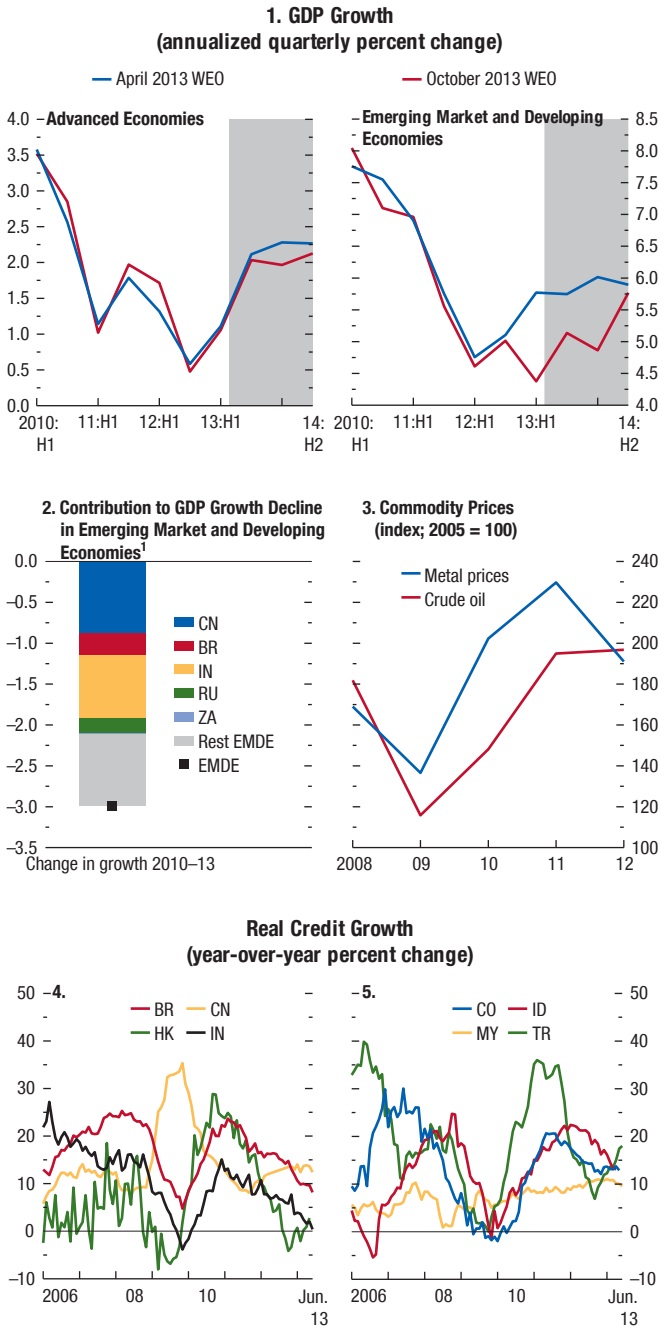
[6]Indonesia, Malaysia, Philippines, Thailand, and Vietnam.

[7]Simple average of prices of U.K. Brent, Dubai Fateh, and West Texas Intermediate crude oil. The average price of oil in U.S. dollars a barrel was $105.01 in 2012; the assumed price based on futures markets is $104.49 in 2013 and $101.35 in 2014.

[8]Six-month rate for the United States and Japan. Three-month rate for the euro area.

Figure 1.1. Global Growth

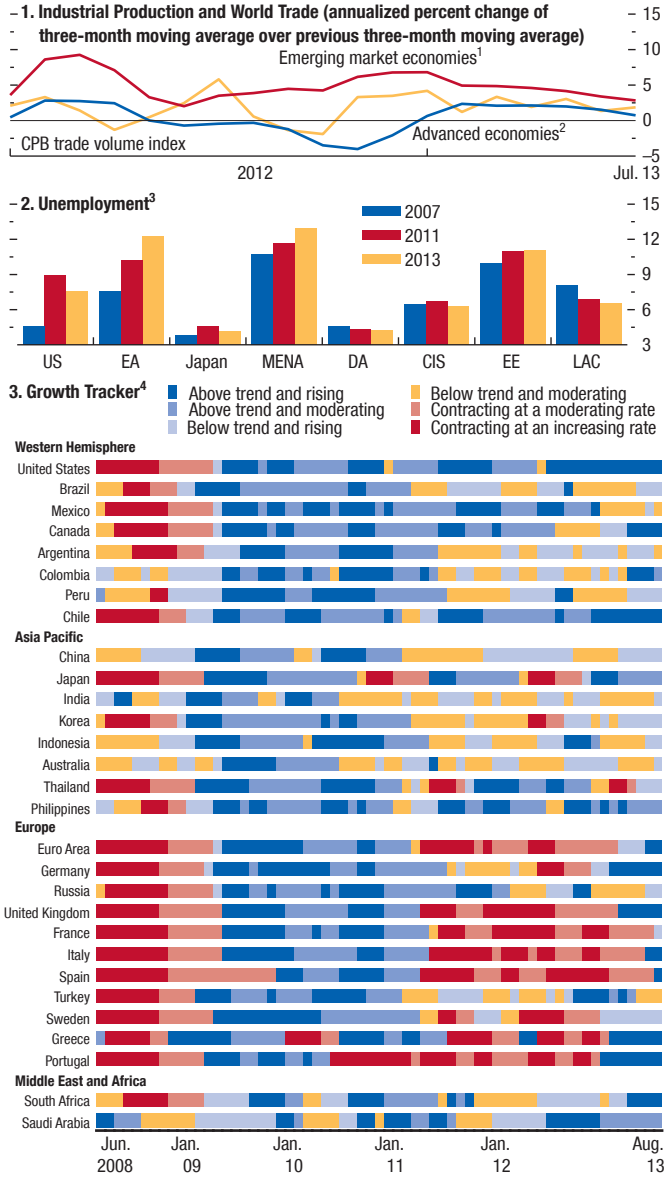
Real GDP growth has disappointed in the emerging market and developing economies, while it has been broadly in line with projections in advanced economies. The reasons for the weaker growth differ across emerging market and developing economies and may include tightening capacity constraints, stabilizing or falling commodity prices, less policy support, and slowing credit after a period of rapid financial deepening.



Sources: Haver Analytics; IMF, *International Financial Statistics;* and IMF staff estimates.
Note: BR = Brazil; CN = China; CO = Colombia; HK = Hong Kong SAR; ID = Indonesia; IN = India; MX = Mexico; MY = Malaysia; RU = Russia; TR = Turkey; ZA = South Africa; EMDE = emerging market and developing economies.
[1]GDP growth is weighted by 2013 purchasing-power-parity share.

Figure 1.2. Global Activity Indicators

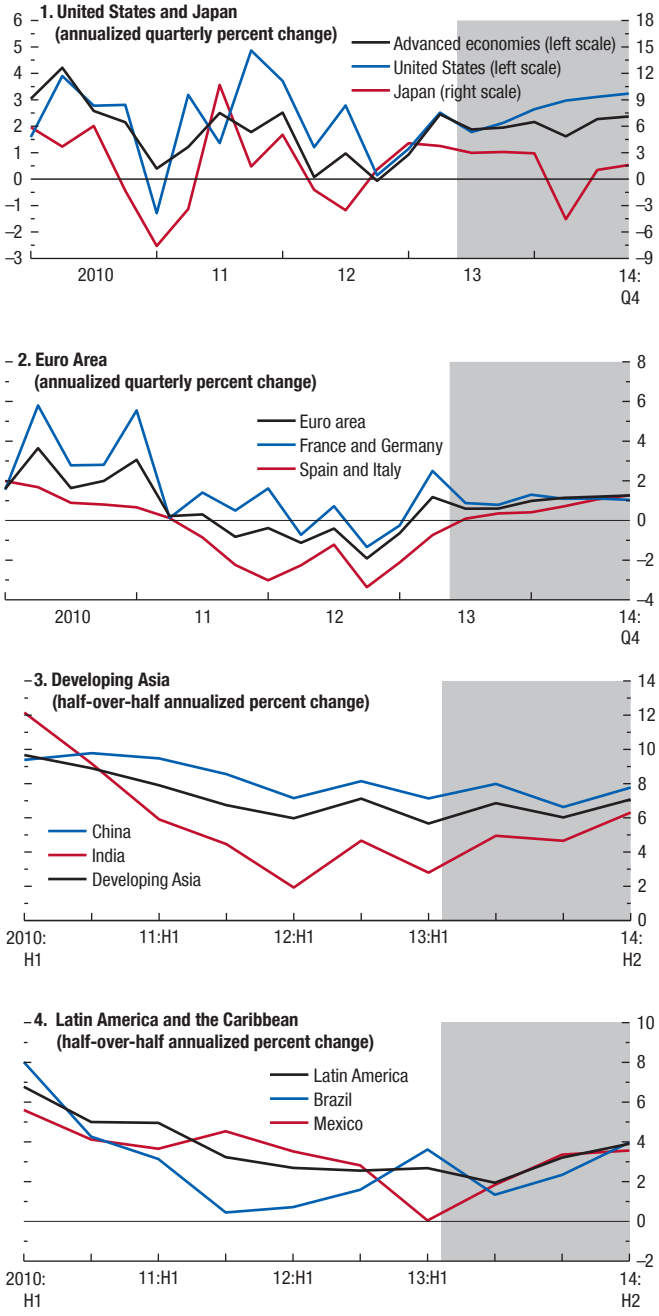
Industrial production recovered modestly in the advanced economies but is still slowing in the emerging market and developing economies. There are now some signs of below-trend but rising growth in emerging market economies. Activity remains very subdued in the periphery of theeuro area. Together with the MENA region, the euro area is seeing another increase in an already high unemployment rate.



Sources: Haver Analytics; Netherlands Bureau for Economic Policy Analysis for CPB trade volume index; and IMF staff estimates.
Note: CIS = Commonwealth of Independent States; DA = developing Asia; EA = euro area; EE = emerging Europe; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; US = United States.
[1]Argentina, Brazil, Bulgaria, Chile, China, Colombia, Hungary, India, Indonesia, Latvia, Lithuania, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Romania, Russia, South Africa, Thailand, Turkey, Ukraine, Venezuela.
[2]Australia, Canada, Czech Republic, Denmark, euro area, Hong Kong SAR, Israel, Japan, Korea, New Zealand, Norway, Singapore, Sweden, Switzerland, Taiwan Province of China, United Kingdom, United States.
[3]Sub-Saharan Africa is omitted because of data limitations.
[4]The Growth Tracker is described in Matheson (2011). Within regions, countries are listed by economic size. The colors indicate whether estimated monthly growth is positive or negative, higher or lower than estimated trend growth, and whether estimated growth has been rising or falling over the previous quarter. Trend growth is estimated using a Hodrick-Prescott filter and may differ from the IMF staff's estimates of potential growth, where these are available.

Figure 1.3. GDP Growth Forecasts

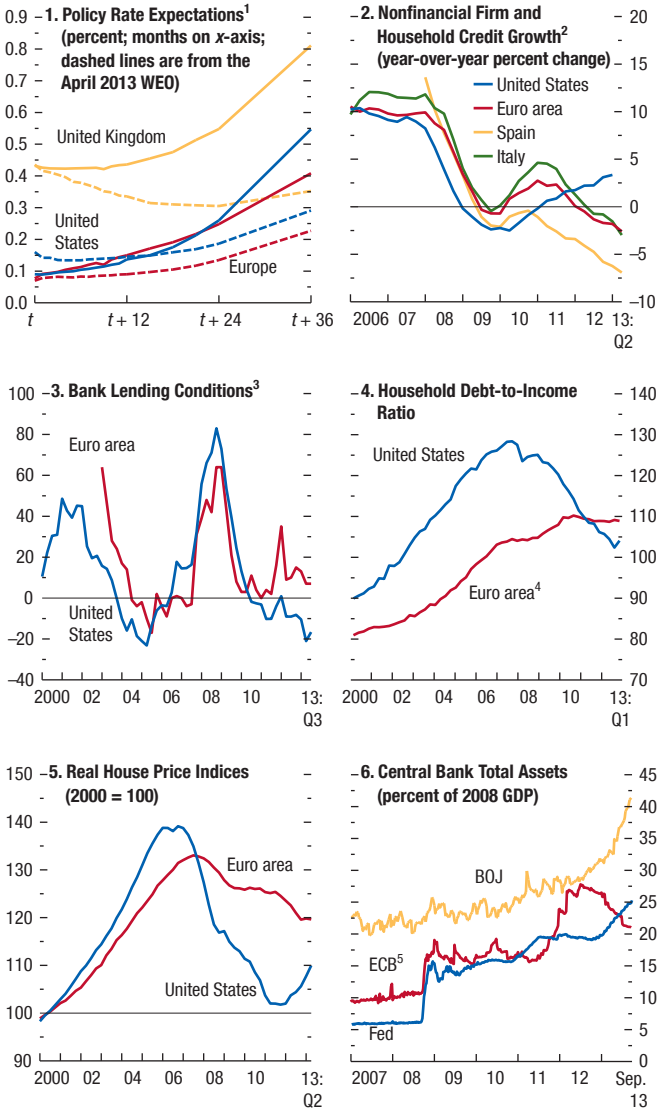
Activity will continue to pick up in the advanced economies. In many emerging market and developing economies, the projected pickup is now relatively more modest.



Source: IMF staff estimates.

Figure 1.4. Monetary Conditions in Advanced Economies

Expectations for policy rate hikes in the major advanced economies have been pulled forward. Lending continues to contract in the euro area, especially the periphery, but is rising in the United States. Lending conditions are still tightening in the euro area, even if to a diminishing extent, while they are continuing to loosen in the United States. The Federal Reserve's and Bank of Japan's balance sheets continue to expand, while that of the ECB contracts as periphery banks repay their long-term loans. House prices are coming back in the United States.



Sources: Bank of America/Merrill Lynch; Bank of Italy; Bank of Spain; Bloomberg, L.P.; Haver Analytics; Organization for Economic Cooperation and Development; and IMF staff calculations.
Note: BOJ = Bank of Japan; ECB = European Central Bank; Fed = Federal Reserve.
[1]Expectations are based on the federal funds rate for the United States, the sterling overnight interbank average rate for the United Kingdom, and the euro interbank offered forward rate for Europe; updated September 24, 2013.
[2]Flow of funds data are used for the euro area, Spain, and the United States. Italian bank loans to Italian residents are corrected for securitizations.
[3]Percent of respondents describing lending standards as tightening "considerably"or "somewhat" minus those indicating standards are easing "considerably" or "somewhat" over the previous three months. Survey of changes to credit standards for loans or lines of credit to firms for the euro area; average of surveys on changes in credit standards for commercial and industrial and commercial real estate lending for the United States.
[4]Euro area includes the subsector employers (including own-account workers).
[5]ECB calculations are based on the Eurosystem's weekly financial statement.

is expected to drag down growth from 2 percent in 2013 to 1¼ percent in 2014. However, if another "stimulus package" does go ahead, fiscal drag would be lower and growth higher than presently projected.

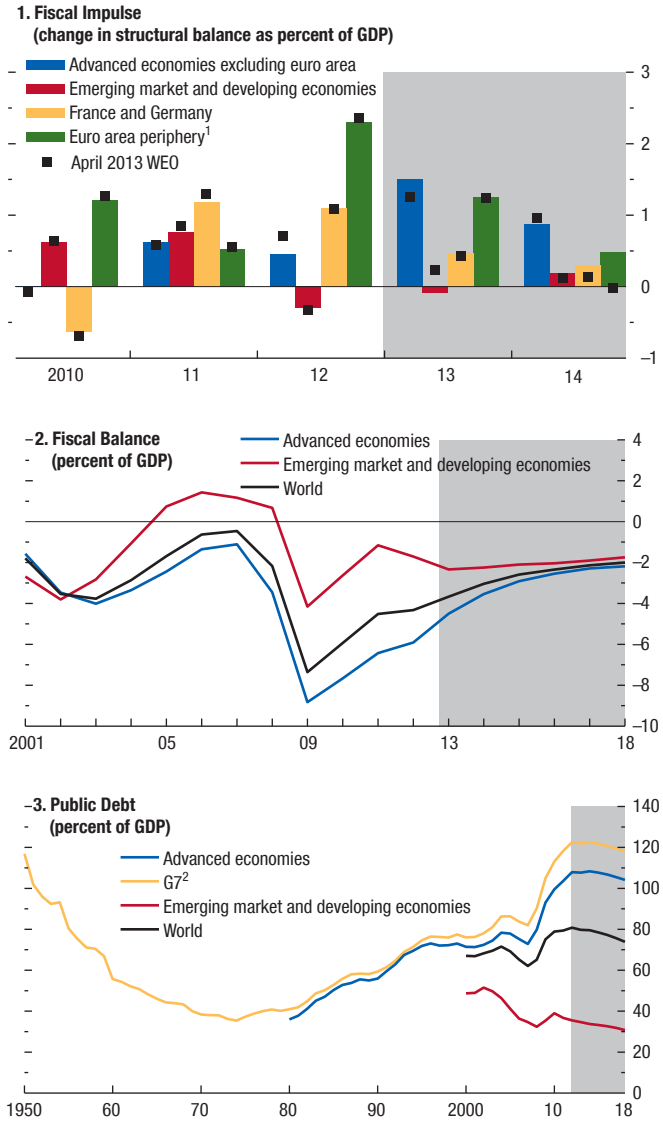
- In the euro area, business confidence indicators suggest that activity is close to stabilizing in the periphery and already recovering in the core economies. In 2014, a major reduction in the pace of fiscal tightening, to less than ½ percent of GDP from about 1 percent of GDP in 2013, is in the offing (see Figure 1.5, panel 1). However, the support for activity from the reduction in the pace of fiscal tightening is dampened by tight credit conditions in the periphery (see Figure 1.4, panel 2). Thus, economic growth is expected to reach only 1 percent, after contracting by about ½ percent in 2013.

In emerging market and developing economies, exports driven by stronger advanced economy growth and solid consumption encouraged by low levels of unemployment are expected to support activity. Fiscal policies are projected to be broadly neutral (see Figure 1.5, panel 1), and real interest rates are still low in many economies, which should foster investment. However, external funding conditions have tightened and there is increasing evidence for supply-side constraints. Importantly, for many of these economies the risks to growth are on the downside (see below).

- The forecasts assume that Chinese authorities do not enact major stimulus and accept somewhat lower growth, consistent with the transition to a more balanced and sustainable growth path. The forecast for real GDP growth for China has thus been reduced to about 7½ percent for 2013–14. This slowdown will reverberate across developing Asia, where growth is expected to remain between 6¼ and 6½ percent in 2013–14 (Figure 1.3, panel 3). The projections for real GDP growth in India have also been marked down significantly, with growth foreseen at 3¾ percent in 2013 and about 5 percent in 2014. Some economies are seeing an appreciable tightening of financial conditions because of the recent global reversal in capital flows.
- In Latin America, projections assume that the recent repricing of stocks and bonds was largely a one-time event, with currency depreciations partly offsetting the effect on activity of tightening financial conditions. However, there is a lot of uncertainty about this at the moment. The recovery in Brazil is assumed to continue at a moderate pace, helped by the depreciation of the exchange rate, a pick-up

Figure 1.5. Fiscal Policies

Fiscal policy will tighten less in the advanced economies in 2014 and stay broadly neutral in emerging market and developing economies. Among advanced economies, the pace of tightening will fall off appreciably in the euro area and the United States. However, this will be partly offset by tightening in Japan. Public debt will remain very high in the advanced economies in the medium term, while declining to about 30 percent of GDP in the emerging market and developing economies.

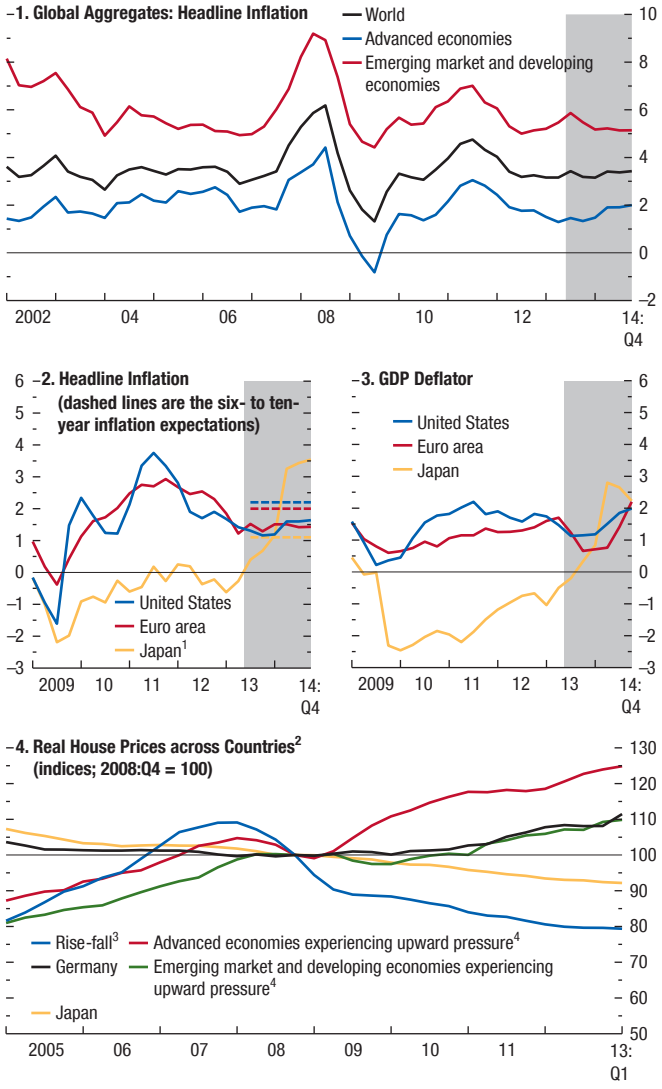


Source: IMF staff estimates.
[1]Greece, Ireland, Italy, Portugal, Spain.
[2]G7 comprises Canada, France, Germany, Italy, Japan, United Kingdom, and United States.

Figure 1.6. Global Inflation

(Year-over-year percent change unless indicated otherwise)

Inflation pressure is generally subdued. In the euro area, it is expected to stay appreciably below the European Central Bank's objective for several years; in Japan it will bounce up in response to consumption tax increases and rising inflation expectations in response to the new monetary policy. Consistent with slowing activity and stabilizing commodity prices, inflation has eased in emerging market and developing economies.



Sources: Consensus Economics; Haver Analytics; Organization for Economic Cooperation and Development, *Global Property Guide;* national sources; and IMF staff estimates.
[1]In Japan, the increase in inflation in 2014 reflects, to a large extent, the increase in the consumption tax.
[2]For the following countries, regional or metropolitan area averages were used instead of national composities: Estonia, Hungary, India, Latvia, Lithuania, Philippines, Poland, Ukraine, Uruguay.
[3]Rise-fall countries: Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Iceland, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, New Zealand, Poland, Russia, Slovak Republic, Slovenia, South Africa, Spain, Turkey, Ukraine, United Kingdom, United States. Rise-fall countries are those in which real house prices increased by more than 10 percent in the run-up to the global financial crisis (2002–07) and have declined since then.
[4]Upward pressure countries: Australia, Austria, Belgium, Canada, Colombia, China, Hong Kong SAR, Hungary, India, Israel, Malaysia, Norway, Philippines, Switzerland, Singapore, Sweden, Uruguay.

in consumption, and policies aimed at boosting investment. Mexico will receive a fillip from the rebound in U.S. activity, following a disappointing first half in 2013. The acceleration of activity across the continent, however, will be modest (Figure 1.3, panel 4).

- In sub-Saharan Africa, commodity-related projects are expected to support higher growth. Exchange rates adjusted sharply, but external financing has resumed and the forecasts include no further disruptions.
- In the Middle East, North Africa, Afghanistan, and Pakistan activity is projected to accelerate in 2014, supported by a modest recovery in oil production. Non-oil activity will remain generally robust in the oil-exporting economies, thanks in part to high public spending. By contrast, many oil-importing economies continue to struggle with difficult socio-political and security conditions.
- In central and eastern Europe, growth rates are projected to gradually increase, helped by recovering demand in Europe and improving domestic financial conditions. With a few exceptions, the effects of externally induced increases in interest rates will be limited and partly offset by currency depreciations. Many economies of the Commonwealth of Independent States are still seeing strong domestic demand; they will benefit from more external demand, although some will suffer from the recent external funding shocks.

Inflation Pressure Is Subdued

The differing growth dynamics between the major economies are projected to come with subdued inflation pressure, for two reasons. First, the pickup in activity in the advanced economies will not lead to a major reduction in output gaps, which remain large (see Table A8 in the Statistical Appendix). Second, commodity prices have fallen amid improved supply and lower demand growth from key emerging market economies, notably China (see the Special Feature). The latest projections for both fuel and nonfuel prices indicate modest declines in both 2013 and 2014.

In advanced economies, inflation is currently running below target, at about 1½ percent on average (Figure 1.6, panel 1). The return to target is projected to be slow given that output is expected to return to potential only slowly (Figure 1.6, panels 2 and 3). In

the United States, the decline in the unemployment rate partly reflects reductions in labor force participation due to demographic trends as well as discouraged workers dropping out of the labor force. Discouraged workers are likely to return to the labor market as prospects improve, and thus wage growth will be sluggish for some time. In the euro area, a weak economy and downward pressure on wages in the periphery are forecast to hold inflation to about 1½ percent in the medium term, falling short of the European Central Bank's (ECB's) inflation objective. For Japan, the projection reflects a temporary surge in the price level in response to the consumption tax hikes in 2014 and 2015; excluding the effect of the consumption tax hike, inflation is projected to move up only very gradually, reaching the 2 percent target sometime in 2016–17.

Inflation is expected to move broadly sideways at around 5-6 percent in emerging market and developing economies (Figure 1.6, panel 1). The drop in commodity prices and the downshift in growth will reduce price pressures, but capacity constraints and the pass-through from weakening exchange rates will offset this downward pressure to some degree. Another counterpush to lower inflation will be strong domestic demand pressure in a few of these economies—as evidenced by many external overheating indicators that still flash yellow or red (Figure 1.7).

Monetary Policies Are Gradually Moving in Different Directions

Monetary conditions have stayed supportive globally, although they will increasingly start to reflect the changing growth dynamics in the major economies. Growing uncertainty about the implications for future policies has prompted financial markets to anticipate a greater degree of U.S. monetary policy tightening than in recent WEO forecasts, and this has caused larger-than-expected spillovers on emerging market economies.

The April 2013 WEO argued that "markets may have moved ahead of the real economy" but judged that near-term financial risks had eased. Since then, perceptions have changed in two important respects:

- There is strengthening conviction in markets that U.S. monetary policy will soon reach a turning point. Following the midyear policy meetings of the Federal Reserve and communication hinting at tapering of asset purchases, market participants raised their expectations for the policy rate (see Figure 1.8, panel 1). Contrary to expectations of many in the markets, however, the Federal Reserve decided not to begin tapering in September. This brought the yield curve down modestly. Nonetheless, since end May 2013, long-term bond yields are up some 100 basis points, as are fixed rates on 30-year mortgages (see Figure 1.8, panel 2).
- In China, the authorities have attempted to rein in the flow of credit, including through shadow banks, preferring more targeted and limited support (such as to small businesses) over widespread stimulus. These actions are consistent with their intention to move to a more balanced and sustainable growth path. Reflecting this, and the second quarter outturn, projections for growth this year have been marked down from 7¾ to 7½ percent.

Financial conditions have tightened globally in response to the rise in U.S. long-term bond yields (see Figure 1.8, panels 2 and 5)—spillovers that are not unusual from a historical perspective (Box 1.1).

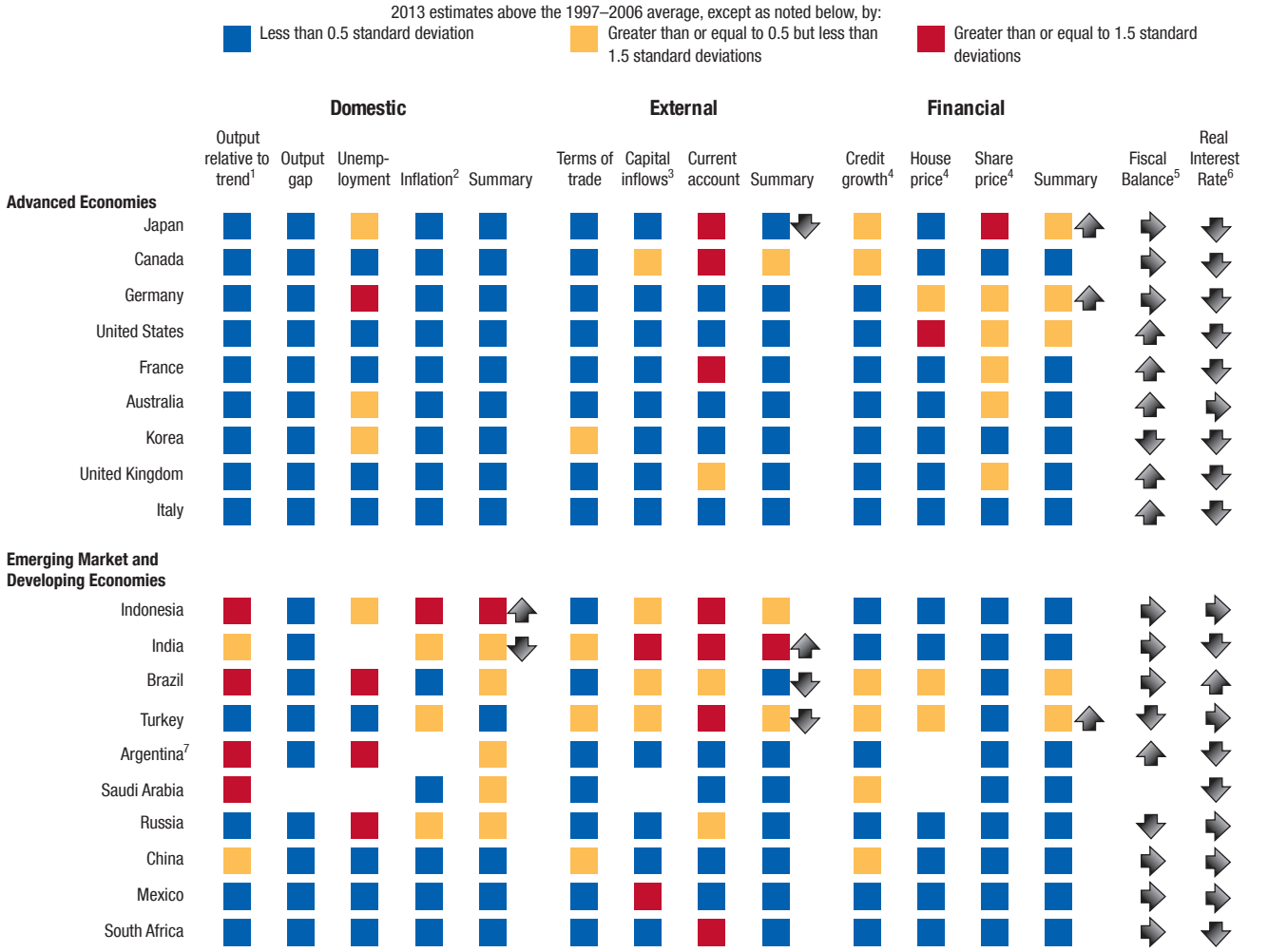
In the euro area, perceptions of earlier-than-expected U.S. tightening led to asset price losses. Subsequent developments brought about rallies—notably an ECB statement that it expects policy rates to remain at current levels or lower for an extended period because of a weak economy. Japanese long-term bond yields are up modestly owing to foreign as well as domestic factors.

In emerging markets, the spillovers interacted with weaker growth prospects and rising vulnerabilities. Capital outflows led to a significant tightening of financial conditions for some economies over the summer (Figure 1.9, panel 1). Markdowns to projections for Chinese growth and imports, notably commodities, have added to the repricing. Sovereign bond yields are up some 80 basis points since the beginning of 2013, pulled up by fairly large increases in Brazil, Indonesia, Mexico, South Africa, and Turkey. Equity markets have been retreating to varying degrees, with the largest corrections typically in those economies with the largest downward revisions to growth forecasts and the largest recent inflows of capital (Figure 1.9, panels 5 and 6)—so far this year, they are down some 10 percent (see Figure 1.8, panel 3). Indicators of equity market volatility are up modestly as are risk spreads (Figure 1.9, panel 2). Capital outflows typically led to currency depreciations (Figure 1.10, panels 1 and 2). The specific developments are discussed in more detail

Figure 1.7. Overheating Indicators for the G20 Economies

Most indicators point to ample cyclical slack in the advanced economies but capacity constraints in emerging economies. The red and yellow external indicators for Japan point to a healthy demand-rebalancing process, which has not yet made much progress in Germany. In Indonesia, India, Turkey, and, to a lesser extent, Brazil, the red and yellow external indicators point to external vulnerabilities.

Regarding financial developments, equity prices are flagged as high in the advanced economies but other valuation indicators are within historical bounds. Credit continues to expand rapidly in several emerging market economies.



Sources: Australian Bureau of Statistics; Bank for International Settlements; CEIC China Database; Organization for Economic Cooperation and Development; *Global Property Guide;* Haver Analytics; IMF, *Balance of Payments Statistics;* IMF, *International Financial Statistics;* National Bureau of Statistics of China; and IMF staff estimates.

Note: For each indicator, except as noted below, economies are assigned colors based on projected 2013 values relative to their precrisis (1997–2006) average. Each indicator is scored as red = 2, yellow = 1, and blue = 0; summary scores are calculated as the sum of selected component scores divided by the maximum possible sum of those scores. Summary blocks are assigned red if the summary score is greater than or equal to 0.66, yellow if greater than or equal to 0.33 but less than 0.66, and blue if less than 0.33. When data are missing, no color is assigned. Arrows up (down) indicate hotter (colder) conditions compared with the April 2013 WEO.

[1]Output more than 2.5 percent above the precrisis trend is indicated by red. Output less than 2.5 percent below the trend is indicated by blue. Output within ±2.5 percent of the precrisis trend is indicated by yellow.

[2]The following scoring methodology is used for the following inflation-targeting economies: Australia, Brazil, Canada, Indonesia, Korea, Mexico, South Africa, Turkey, and United Kingdom. End-of-period inflation above the country's target inflation band from the midpoint is assigned yellow; end-of-period inflation more than two times the inflation band from the midpoint is assigned red. For all other economies in the chart, red is assigned if end-of-period inflation is approximately 10 percent or higher, yellow if it is approximately 5 to 9 percent, and blue if it is less than 5 percent.

[3]Capital inflows refer to the latest available value relative to the 1997–2006 average of capital inflows as a percent of GDP.

[4]The indicators for credit growth, house price growth, and share price growth refer to the annual percentage change relative to output growth.

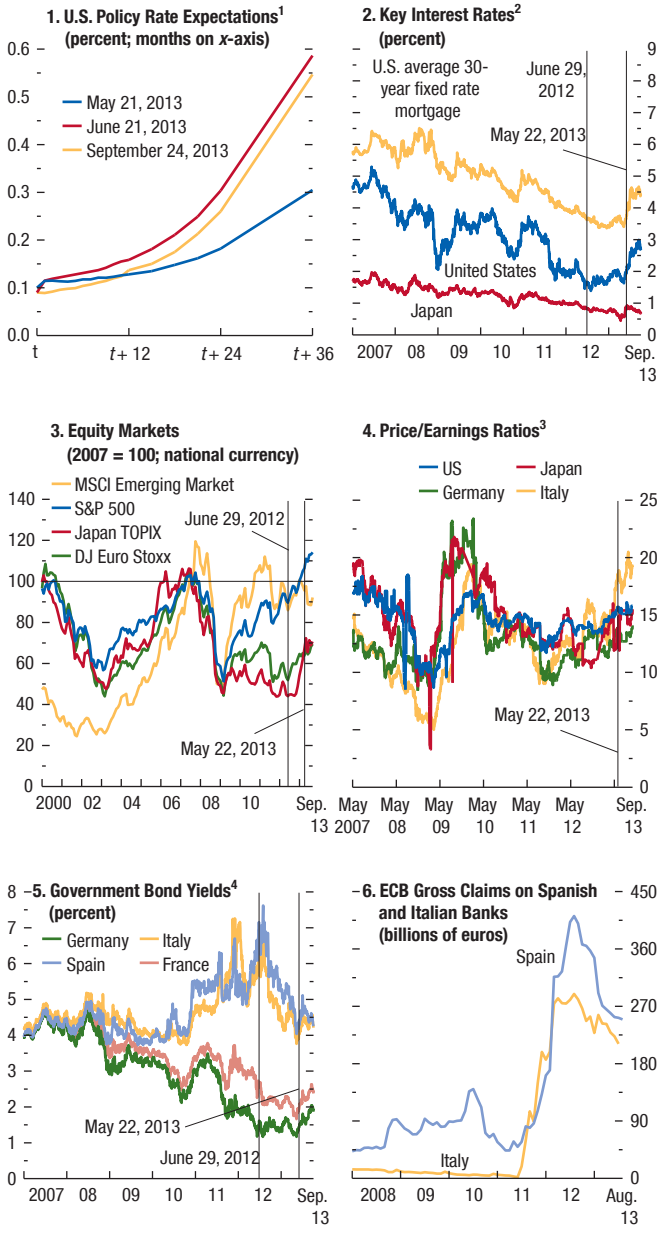
[5]Arrows in the fiscal balance column represent the forecast change in the structural balance as a percent of GDP over the period 2012–13. An improvement of more than 0.5 percent of GDP is indicated by an up arrow; a deterioration of more than 0.5 percent of GDP is indicated by a down arrow. A change in fiscal balance between –0.5 percent of GDP and 0.5 percent of GDP is indicated by a sideways arrow.

[6]Real policy interest rates below zero are identified by a down arrow; real interest rates above 3 percent are identified by an up arrow; real interest rates between zero and 3 percent are identified by a sideways arrow. Real policy interest rates are deflated by two-year-ahead inflation projections.

[7]The data for Argentina are officially reported data. The IMF has, however, issued a declaration of censure and called on Argentina to adopt remedial measures to address the quality of the official GDP and CPI-GBA data. Alternative data sources have shown significantly lower real growth than the official data since 2008 and considerably higher inflation rates than the official data since 2007. In this context, the IMF is also using alternative estimates of GDP growth and CPI inflation for the surveillance of macroeconomic developments in Argentina.

Figure 1.8. Financial Market Conditions

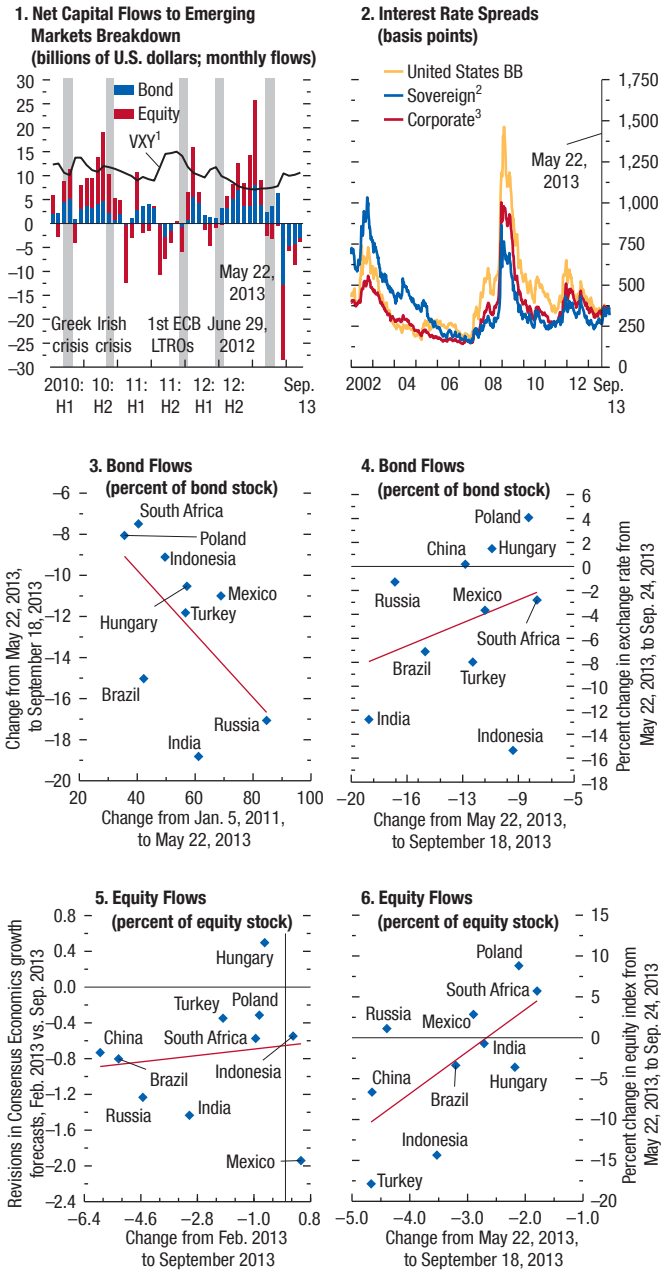
Financial conditions have become more volatile again, as expectations about U.S. monetary policy tightening have been pulled forward. Equity markets have been buoyant. Long-term U.S.bond yields are up, but those in Japan and core Europe have increased to a much lesser extent. Spreads on euro area periphery sovereign bonds have moved up modestly; periphery banks have continued to repay ECB loans.



Sources: Bloomberg, L.P.; Capital Data; *Financial Times;* Haver Analytics; national central banks; Thomson Reuters Datastream; and IMF staff calculations.
Note: ECB = European Central Bank; US = United States.
[1]Expectations are based on the federal funds rate for the United States; updated September 24, 2013.
[2]Interest rates are 10-year government bond yields unless noted otherwise.
[3]Some observations for Japan are interpolated because of missing data.
[4]Ten-year government bond yields.

Figure 1.9. Capital Flows

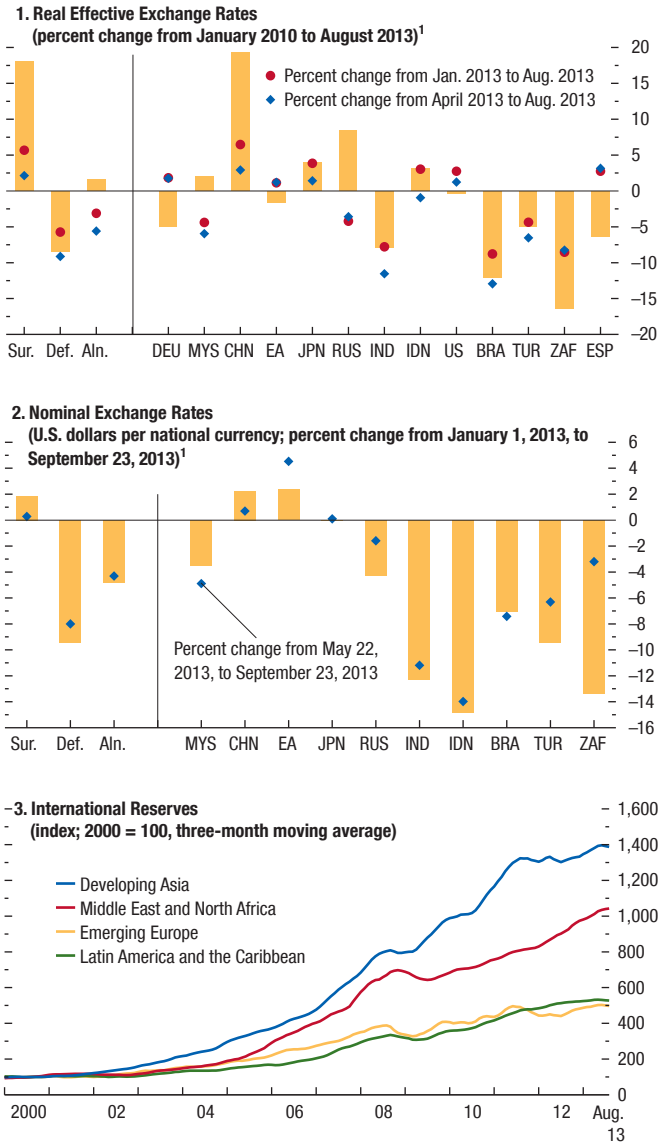
Expectations for earlier U.S. monetary policy tightening and slowing growth in emerging market economies prompted major capital outflows from emerging markets during June 2013. These typically led to a widening of risk spreads and equity market losses. The latter were larger in economies that previously saw larger downward revisions to their growth projections. Bond and equity outflows were bigger from economies that previously saw bigger inflows—these are typically the deepest and most liquid emerging markets. Large outflows came with exchange rate depreciations.



Sources: Bloomberg, L.P.; *Consensus Forecast;* EPFR Global/Haver Analytics; *Financial Times;* national central banks; and IMF staff calculations.
Note: ECB = European Central Bank; LTROs = longer-term refinancing operations.
[1]JPMorgan emerging market volatility index.
[2]JPMorgan EMBI Global Index spread.
[3]JPMorgan CEMBI Broad Index spread.

Figure 1.10. Exchange Rates and Reserves

Nominal exchange rates of various emerging market economy currencies have depreciated significantly as their economies have weakened—since the beginning of the year, the Brazilian real, Indian rupee, and South African rand have depreciated by 8–16 percent against the U.S. dollar. For Brazil and India, much of the weakening occurred concomitantly with the recent reassessment about prospects for U.S. monetary policy. In general, currencies that were considered overvalued relative to medium-term fundamentals depreciated, while those that were considered undervalued appreciated. Reserves accumulation has recently picked up again in developing Asia.



Sources: Global Insight; IMF, *International Financial Statistics;* and IMF staff calculations.
Note: Aln. = aligned emerging market economies; BRA = Brazil; CHN = China; Def. = deficit emerging market economies; DEU = Germany; EA = euro area; ESP = Spain; IDN = Indonesia; IND = India; JPN = Japan; MYS = Malaysia; RUS = Russia; Sur. = surplus emerging market economies; TUR = Turkey; US = United States; ZAF = South Africa.
[1]Classifications are based on IMF (2013a).

in the October 2013 *Global Financial Stability Report* (GFSR).

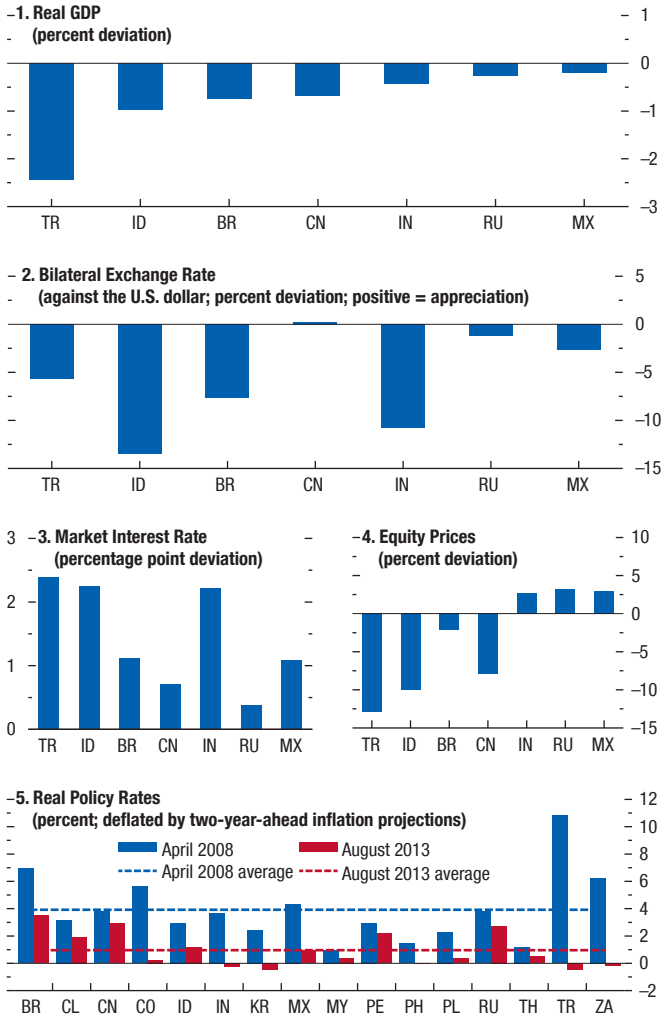
The WEO projections assume that the recent repricing of emerging market bonds and equities was largely a one-time event but there is a lot of uncertainty about this at the moment. The resulting tighter external financial conditions and lower net capital inflow levels should reduce activity in emerging market economies, all else equal.

Model-based estimates suggest that in most of the major emerging market economies the externally induced tightening since late May 2013, should it persist, could reduce GDP by ¼ to 1 percent (Figure 1.11). However, exchange rate depreciation can do much to buffer externally induced tightening. Further considerations include the following:

- Although the U.S. recovery is set to accelerate, based of the Federal Reserve's forward guidance, WEO projections continue to assume that the first U.S. policy rate hike will not take place before 2016. The reasons are that inflation is forecast to remain below 2½ percent, inflation expectations to stay well anchored, and the unemployment rate to remain above 6½ percent until then. The forecasts assume that Federal Reserve asset purchases are scaled back very gradually starting later this year. The effect of the purchases on activity was widely estimated to have been limited, and their termination is not expected to have a major effect. Accordingly, the projected path for longer-term government bond yields in 2014 has been raised modestly, by some 40 basis points relative to the April 2013 WEO. In short, the assumptions are for U.S. monetary and financial conditions to generate a benign, growth-friendly environment. Markets, however, see a significant probability of earlier tightening (see Figure 1.8, panel 1), and, as discussed below, a less benign trajectory for financial conditions is a distinct risk.
- Markets continue to expect a prolonged period of low interest rates and unconventional monetary support for the euro area and Japan (Figure 1.4, panel 1). In Japan, further monetary easing may be needed to drive up inflation (excluding consumption tax hikes) to 2 percent by 2015. In the euro area, the dominant concern is still sluggish activity and low inflation, including disinflation or deflation pressure in the periphery. The projections assume no material changes to sovereign spreads in the periphery. They

Figure 1.11. Financial Conditions in Emerging Markets since May 2013

Since the end of May, Federal Reserve communications indicating that tapering of asset purchases could begin later this year have had a substantial impact on financial markets. Interest rates have increased, equity prices have declined, and exchange rates have depreciated relative to the U.S. dollar in many emerging market economies. Here the G20 Model (G20MOD) is used to estimate the potential macroeconomic implications of these developments. It is assumed that the changes in interest rates,[1] equity prices, and exchange rates observed between the end of May and September 20 are maintained for a full year in G20 economies.[2] The estimates are generated assuming that monetary policy in all countries and regions cannot respond to these developments. The changes in financial market prices and their resulting impact on activity in G20 emerging market economies are presented in the bar charts below. The emerging markets considered experience a decline in GDP, ranging from roughly 2½ percent in Turkey to ¼ percent in Mexico. Those countries estimated to experience smaller declines in GDP have the impact of higher interest rates partially offset by both currency depreciation and improvements in equity prices. Those countries estimated to experience the largest declines have the impact of higher interest rates compounded by declines in equity prices.



Sources: Haver Analytics; and IMF staff calculations.
Note: BR = Brazil; CL = Chile; CN = China; CO = Colombia; ID = Indonesia; IN = India; KR = Korea; MX = Mexico; MY = Malaysia; PE = Peru; PH = Philippines; PL = Poland; RU = Russia; TH = Thailand; TR = Turkey; ZA = South Africa.
[1]For all countries except India, the 10-year government bond rate is used to capture the change in interest rates. For India, the 1-year government bond rate is used because it is a better proxy for the tightening that has occurred in financial conditions in India since end-May.
[2]Some of the changes in interest rates, exchange rates, and equity prices likely reflect some country-specific factors in addition to expectations of U.S. monetary policy.

also assume that some tightening of credit conditions will continue (see Figure 1.4, panel 3). The major factor is banks' concerns about the economic environment and their need to improve their balance sheets.

Medium-Term Prospects for Emerging Market Economies Are Weaker

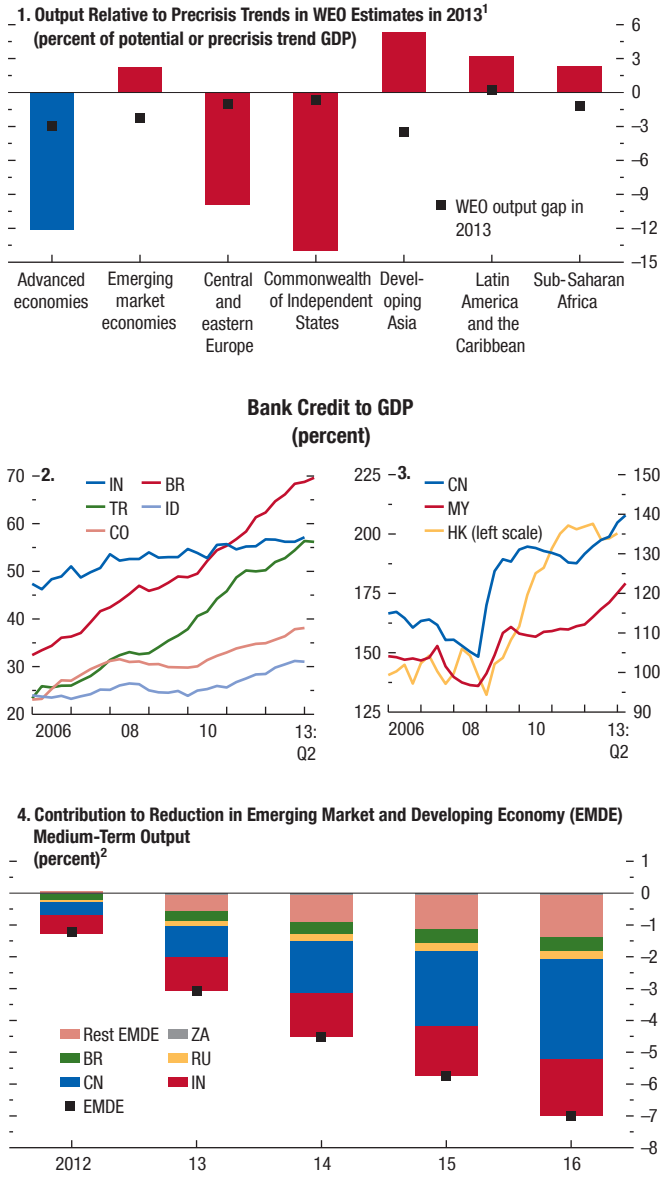
Emerging market and developing economy growth rates are now down some 3 percentage points from 2010 levels, with Brazil, China, and India accounting for about two-thirds of the decline (see Figure 1.1, panel 2). Together with recent forecast disappointments, this growth decline has prompted further downgrades to medium-term output projections for emerging market economies. Projections for 2016 real GDP levels for Brazil, China, and India have been successively reduced by some 8 to 14 percent over the past two years. Together, the downward revisions for these three economies account for about three-quarters of the overall reduction in projections for medium-term output for the emerging market and developing economies as a group (Figure 1.12, panel 4).

Postcrisis WEO projections typically assumed that the emerging market and developing economies of Latin America and Asia would avoid the large, permanent output losses that were predicted for the crisis-hit economies (Figure 1.13). The pessimistic April 2009 WEO projections, made in the wake of the Lehman Brothers collapse, were repeatedly upgraded for these economies (Figure 1.13, panels 5 and 6). Subsequently, however, the projections were revised downward. Among the other regions, large downgrades materialized only in the euro area periphery as it fell into crisis (Figure 1.13, panel 4). Thus, it seems that domestic factors have played a major role in the slowdown of the emerging market and developing economies. The specific reasons for lower growth differ, and clear diagnoses are hard to obtain. IMF staff analysis suggests that cyclical and structural factors are at play. This seems to be the case for Brazil, India, China, and South Africa (Box 1.2).

- Following the Great Recession, most of these economies enjoyed vigorous, cyclical rebounds. Expansionary macroeconomic policies helped buffer the loss of demand from the advanced economies. Financial factors amplified the cyclical rebound from the recession. In China, credit policy was used deliberately to inject stimulus in the face of flag-

Figure 1.12. Capacity and Credit in Emerging Market Economies

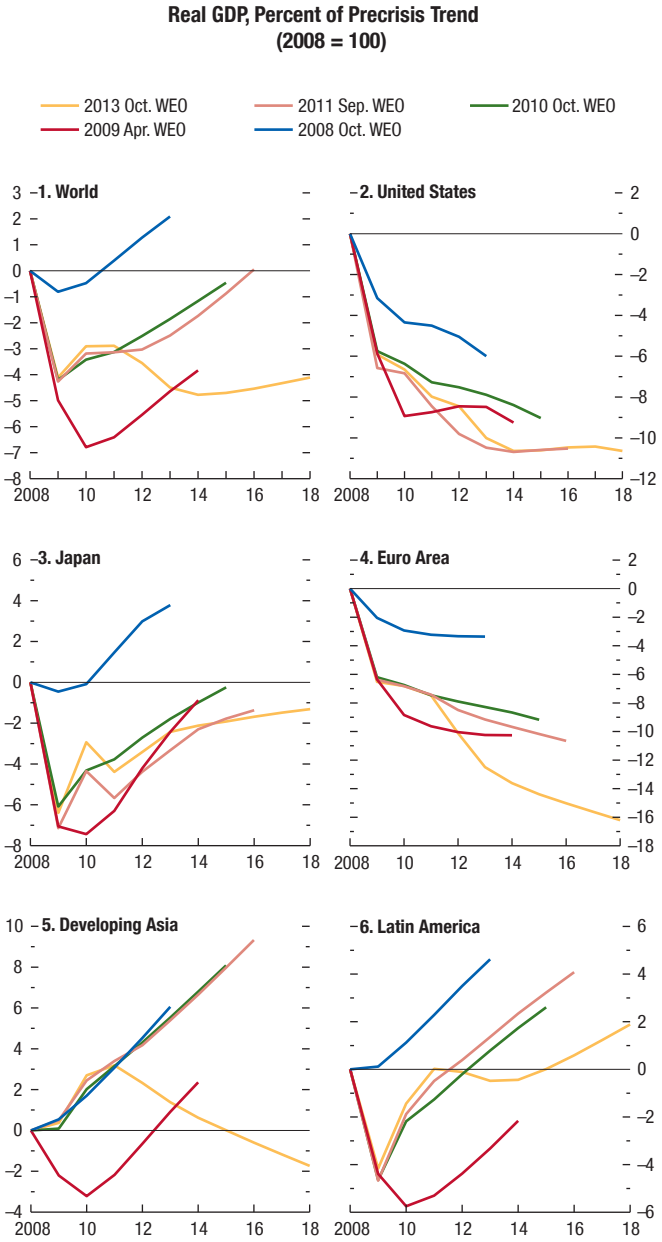
Output in developing Asia, Latin America, and sub-Saharan Africa is still above precrisis trends, but WEO output gaps do not point to output running beyond capacity. Credit in these economies has run up sharply relative to output; in some economies, it continues to do so at a time of slowing growth. In response to repeated disappointments during the past two years, IMF country desks have revised down their estimates of the level of output in 2016. The downward revisions are particularly large for Brazil, China, and India.



Sources: Haver Analytics; IMF, *International Financial Statistics;* and IMF staff estimates.
Note: BR = Brazil; CN = China; CO = Colombia; HK = Hong Kong SAR; ID = Indonesia; IN = India; MY = Malaysia; RU = Russia; TR = Turkey; ZA = South Africa.
[1]Precrisis trend is defined as the geometric average of real GDP level growth between 1996 and 2006.
[2]Relative to the September 2011 WEO.

Figure 1.13. Real GDP Projections: Past and Current

An assessment of past WEO forecasts reveals that those made in September 2008, just before the Lehman failure, have proved too optimistic for all economies; the forecasts that came soon afterward, in April 2009, were too pessimistic for the emerging market economies in Asia, Latin America, and sub-Saharan Africa. During October 2010–October 2011, forecasts settled broadly around their current profile, with two notable exceptions. First, the euro area fell into a crisis, which started with Greece in spring 2010 and broadened in 2011. Second, after forecast upgrades during 2010, emerging market economies experienced serial growth disappointments.



Source: IMF staff estimates.
Note: Precrisis trend is defined as the geometric average of real GDP level growth between 1996 and 2006.

ging foreign demand. Capital inflows attracted by higher yields and better growth prospects than in the advanced economies supported the expansion of credit and activity. By 2010, three out of these four economies (the exception was South Africa) operated above capacity. During 2011–13, policies changed course and growth decelerated.

- Although the growth rate declined, headline inflation did not. In several of these economies, core inflation actually increased, suggesting that part of the 3 percentage point decline in growth since 2010 is due to lower potential output and is consistent with reports about bottlenecks in labor markets, infrastructure, energy, real estate, and financial systems in most of these economies. The deeper reasons for the structural slowdowns are discussed further in the 2013 Article IV consultation reports for these economies. Suffice it to say here that in China the credit policy contributed to an investment boom that has created a good deal of excess capacity, since capital accumulation has been running well ahead of domestic demand. In Brazil and India, infrastructure and regulatory bottlenecks slowed output supply in the face of still-strong domestic demand. As a result, external pressures have grown in these economies (see Figure 1.7).

Looking ahead, medium-term growth in the emerging market and developing economies is projected to reach 5½ percent. In historical context, this forecast is still well above the 3¾ percent growth rate for the decade leading into the 1997–98 Asian crisis. Likewise, the current forecasts for developing Asia, Latin America, and sub-Saharan Africa place output above the favorable 1996–2006 trends. Even if current projections turn out to be somewhat optimistic, these economies will still have achieved a continual and fairly rapid convergence of per capita incomes toward those of the advanced economies.

External Sector Developments

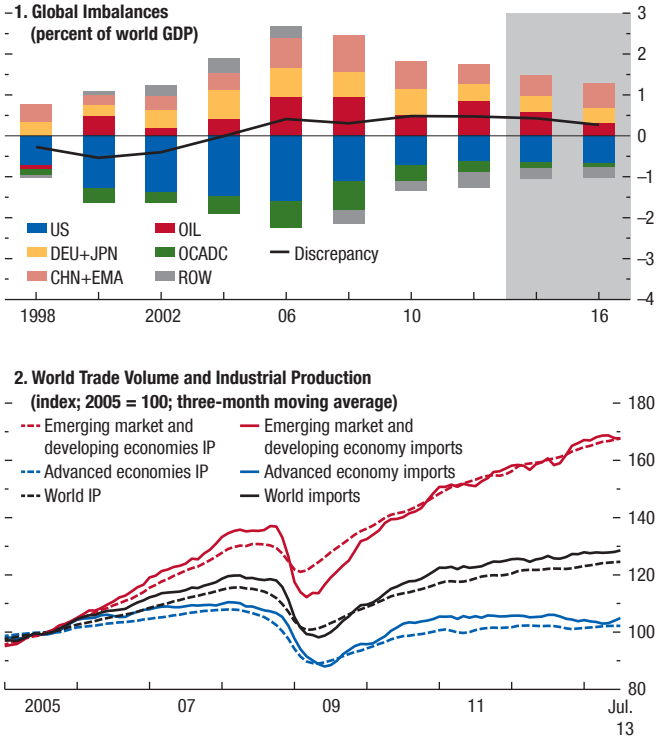
World trade reflects the weak momentum in global activity (Figure 1.14, panel 2). Although there is some concern that slow trade growth could also reflect diminishing productivity gains from trade liberalization under the World Trade Organization umbrella, there is no strong evidence yet to support this.

Global current account imbalances narrowed in 2011–12 and are projected to decrease modestly in the medium term, helped by lower surpluses among the energy exporters (Figure 1.14, panel 1). During the past few years, a notable development has been the larger-than-projected increase in the current account surplus of the euro area. This increase reflects import compression and some relative price adjustment in the economies of the periphery (Box 1.3). However, rebalancing of demand in the core current account surplus economies remains limited.

Policy has played a limited role in narrowing global imbalances. In the future, fiscal consolidation in deficit economies would hold back the cyclical recovery of import demand. Achieving stronger growth in major surplus economies will thus require that these economies promote a sustained expansion of their domestic

Figure 1.14. Global Trade and Imbalances

The latest slowdown in global trade is broadly consistent with the slowdown in global GDP. It has meant that global imbalances have declined modestly again. Whether imbalances stay narrow or widen again in the medium term depends on the extent to which output losses relative to precrisis trends are largely permanent: WEO projections assume they largely are consistent with historical evidence.



Sources: CPB World Trade Monitor; Haver Analytics; and IMF staff estimates.
Note: CHN+EMA = China, Hong Kong SAR, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan Province of China, Thailand; DEU+JPN = Germany and Japan; IP = industrial production; OCADC = Bulgaria, Croatia, Czech Republic, Estonia, Greece, Hungary, Ireland, Latvia, Lithuania, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Turkey, United Kingdom; OIL = oil exporters; ROW = rest of the world; US = United States.

demand, in particular of private consumption in China and investment in Germany.

Exchange rate movements—appreciation in surplus economies, depreciation in deficit economies—have generally supported rebalancing (Figure 1.10, panel 1). The 2013 *Pilot External Sector Report*'s assessment of exchange rate levels suggest that the real effective exchange rates of the largest economies are not far from levels consistent with medium-term fundamentals. In particular, any undervaluation of the Japanese yen that may have emerged recently would be corrected if strong medium-term fiscal consolidation and structural reforms are implemented.

The recent, substantial nominal exchange rate depreciations against the U.S. dollar in some emerging market currencies are broadly consistent with corrections in exchange rate overvaluations (Figure 1.10, panel 2). In real effective terms, the depreciations have been more moderate, partly reflecting higher inflation than in trading partners. Many economies intervened in foreign exchange markets (Brazil, India, Indonesia, Peru, Poland, Russia, Turkey), and some also resorted to capital flow management measures to discourage outflows (India) or encourage inflows (Brazil, India, Indonesia).

Downside Risks Persist

Risks to the WEO projections remain to the downside. An important concern is prolonged sluggish growth. Quantitative indicators point to no major change to risks over the near term. However, after considerable improvement before the April 2013 WEO, the qualitative assessment is that uncertainty has increased again. The main reason is that financial conditions have tightened in unexpected ways, while prospects for activity have not improved. This has raised concerns about emerging market economies. In the meantime, many risks related to the advanced economies have not been addressed. Moreover, geopolitical risks have returned. Nonetheless, risks remain better balanced than in October 2012 because confidence has risen in the sustainability of the U.S. recovery and the long-term viability of the euro area.

A quantitative risk assessment

The fan chart for the world GDP growth forecast through 2014 is narrower than that in the April 2013 WEO, largely because of lower "baseline uncertainty" as the time span of the forecast has decreased by six months (Figure 1.15, panel 1). It remains appreciably narrower than that for an equal-length horizon in the October 2012 WEO. For example, the probability of global growth falling to less than 2 percent in 2014 is quite low, at about 6 percent, whereas in October 2012, the equivalent probability, through 2013, stood at 17 percent.

The IMF staff's Global Projection Model also shows a major improvement relative to one year ago. For the period 2013:Q2–2014:Q1 the probability of recession is close to 30 percent in the euro area; for the United States, it has dropped to about 10 percent; in Japan it is very low (Figure 1.16, panel 1). Moving into 2013:Q3–2014:Q4, the probability jumps to about 20 percent for Japan, assuming considerable fiscal tightening does take place. Deflation risks remain elevated in Japan, despite the new inflation target, and in the euro area, particularly in the periphery (Figure 1.16, panels 2 and 3).

A qualitative risk assessment

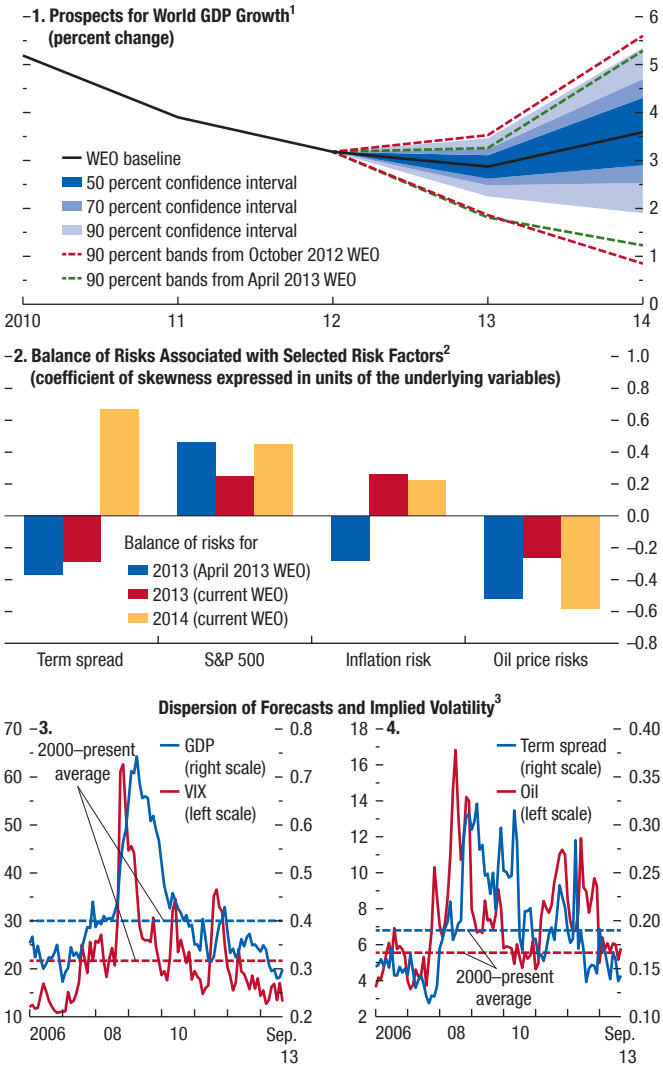
Two risks identified in the April 2013 WEO have materialized already: the U.S. budget sequester and lower growth prospects and capital outflows for emerging market economies. In the meantime, some unanticipated risks related to U.S. monetary conditions and emerging market economies have come to pass.

Short-term risks

- *Adjustment fatigue and general policy backtracking in a financially fragmented euro area:* A specific concern was that the events in Cyprus could amplify financial fragmentation. Although further fragmentation did not happen, progress in reintegrating financial markets has been very limited. At the same time, signs of adjustment fatigue are evident in political disagreements. Absent a true banking union, including a strong single resolution mechanism backed by a common fiscal backstop, financial markets remain highly vulnerable to shifts in sentiment.
- *The U.S. budget sequester, federal government shutdown, and debt ceiling:* Contrary to the U.S. fiscal policy assumptions in the April 2013 WEO, which envisaged that the budget sequester would be replaced with back-loaded measures at the end of fiscal year 2013 (September 30, 2013), the sequester is now likely to remain in effect in the coming fiscal year. As a result, U.S. growth for 2013–14 has been revised

Figure 1.15. Risks to the Global Outlook

The recent bout of financial volatility has not come with an appreciable widening of the fan chart, which indicates the degree of uncertainty about the global outlook. The chart remains noticeably narrower than in October 2012. For 2013, oil markets and analysts' forecasts of the term spread indicate downside risks. For 2014, the skew of analysts' forecasts for the term spread switches and signals an upside risk, while the downside risk from oil markets increases. Equity markets, as captured by options prices on the S&P 500, and the skew of analysts' forecasts for inflation suggest upside risks across both years.



Sources: Bloomberg, L.P.; Chicago Board Options Exchange; Consensus Economics; and IMF staff estimates.

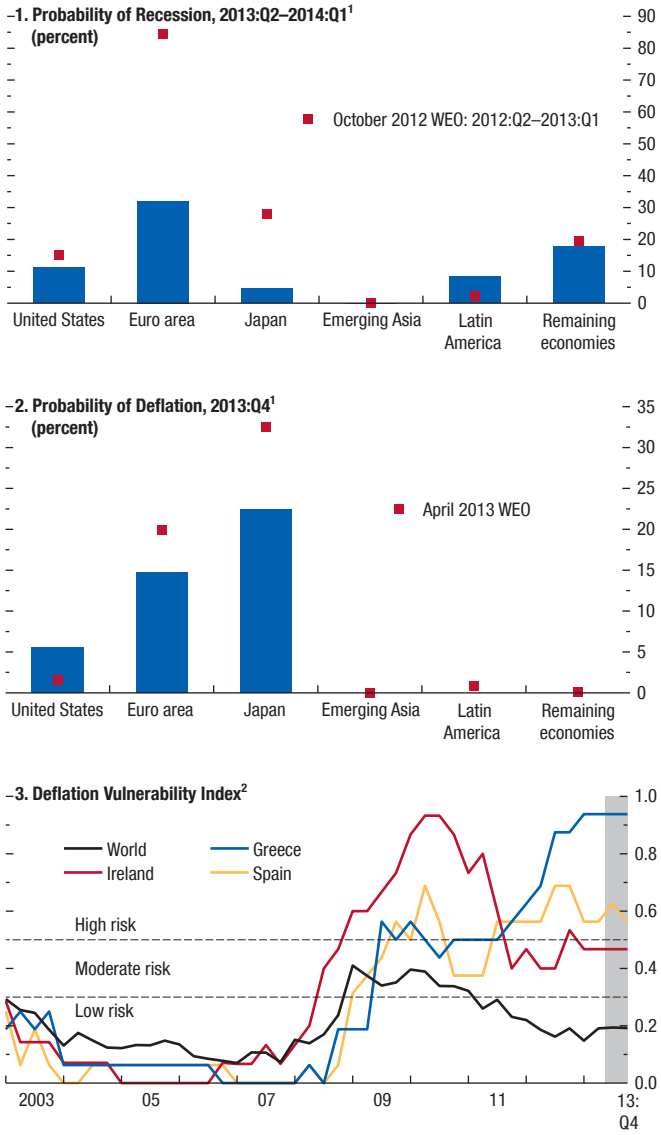
[1]The fan chart shows the uncertainty around the WEO central forecast with 50, 70, and 90 percent confidence intervals. As shown, the 70 percent confidence interval includes the 50 percent interval, and the 90 percent confidence interval includes the 50 and 70 percent intervals. See Appendix 1.2 of the April 2009 WEO for details. The 90 percent bands from the October 2012 and April 2013 WEOs for the current-year and one-year-ahead forecasts are shown relative to the current baseline.

[2]Bars depict the coefficient of skewness expressed in units of the underlying variables. The values for inflation risks and oil price risks are entered with the opposite sign since they represent downside risks to growth. Note that the risks associated with the S&P 500 for 2014 are based on options contracts for June 2014.

[3]GDP measures the purchasing-power-parity-weighted average dispersion of GDP forecasts for the G7 economies (Canada, France, Germany, Italy, Japan, United Kingdom, United States), Brazil, China, India, and Mexico. VIX = Chicago Board Options Exchange S&P 500 Implied Volatility Index. Term spread measures the average dispersion of term spreads implicit in interest rate forecasts for Germany, Japan, United Kingdom, and United States. Oil measures the dispersion of one-year-ahead oil price forecasts for West Texas Intermediate crude oil. Forecasts are from Consensus Economics surveys.

Figure 1.16. Recession and Deflation Risks

The IMF staff's Global Projection Model (GPM) suggests that recession and deflation risks have dropped in the advanced economies. However, they continue to bear watching. For Japan, the GPM suggests that they will still rise appreciably in 2014.



Source: IMF staff estimates.

[1]Emerging Asia: China, Hong Kong SAR, India, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan Province of China, Thailand; Latin America: Brazil, Chile, Colombia, Mexico, Peru; Remaining economies: Argentina, Australia, Bulgaria, Canada, Czech Republic, Denmark, Estonia, Israel, New Zealand, Norway, Russia, South Africa, Sweden, Switzerland, Turkey, United Kingdom, Venezuela.

[2]For details on the construction of this indicator, see Kumar (2003) and Decressin and Laxton (2009). The indicator is expanded to include house prices.

downward in the July WEO Update, but the drag could be larger than expected given tighter financial conditions. The damage to the U.S. economy from a short government shutdown is likely to be limited, but a longer shutdown could be quite harmful. Even more importantly, the debt ceiling will need to be raised again later this year; failure to do so promptly could seriously damage the global economy.

- *Risks related to unconventional monetary policy:* The April 2013 WEO saw those risks mainly for the medium term (see below). But statements by the Federal Reserve about tapering asset purchases later this year caused a surprisingly large tightening of U.S. monetary conditions. A further surprise is the jump in emerging market local bond yields, which is roughly three times the level consistent with the U.S. monetary tightening scenario of the April 2013 WEO. The current WEO projections assume that the tightening of financial conditions since May in the United States and in many emerging market economies was largely a one-time event and that the actual tapering of purchases will further tighten conditions only modestly. However, a less benign scenario is a distinct risk to the extent that international capital flows were driven more by low yields in advanced economies than better growth prospects in emerging market economies.
- *More disappointments in emerging markets:* The risk of more disappointments could interact with the "unwinding" risks. Although net capital flows to emerging market economies are projected to remain sizable in the WEO forecast, policymakers must be mindful of risks of an abrupt cutoff and severe balance of payments disruptions. Fixed-income and emerging market asset quality may have passed the peak, and the leveraged positions that were built up during the period of low policy rates and high emerging market growth might well be unwound more rapidly than expected. Adverse feedback loops could emerge between further growth disappointments, weakening balance sheets, and tighter external funding conditions—especially in economies that relied heavily on external funding to support credit-driven growth.
- *Geopolitical risks*: A short-lived, small disruption to oil production with an oil price spike of 10 to 20 percent for a few weeks would only have minor effects on global growth, if it is clear at the outset that it will be short-lived (see the Special Feature). If not, confidence and uncertainty effects would also weigh on activity. Larger, longer-lasting production outages and price spikes would have bigger effects on growth, as other, amplifying transmission channels would come into play, including investor flight to safety and significant corrections in stock markets. Emerging market economies that are already seeing a pullback of investors and weak domestic fundamentals could be hit hard.

Medium-term risks

The medium-term risks discussed in detail in the April 2013 WEO are as relevant as they were then and tilt to the downside: (1) very low growth or stagnation in the euro area; (2) fiscal trouble in the United States or Japan—for Japan, the October 2013 GFSR specifically discusses a tail risk scenario of "disorderly Abenomics"; (3) less slack than expected in the advanced economies or a sudden burst of inflation; and (4) less potential output in key emerging market economies plus capital outflows.

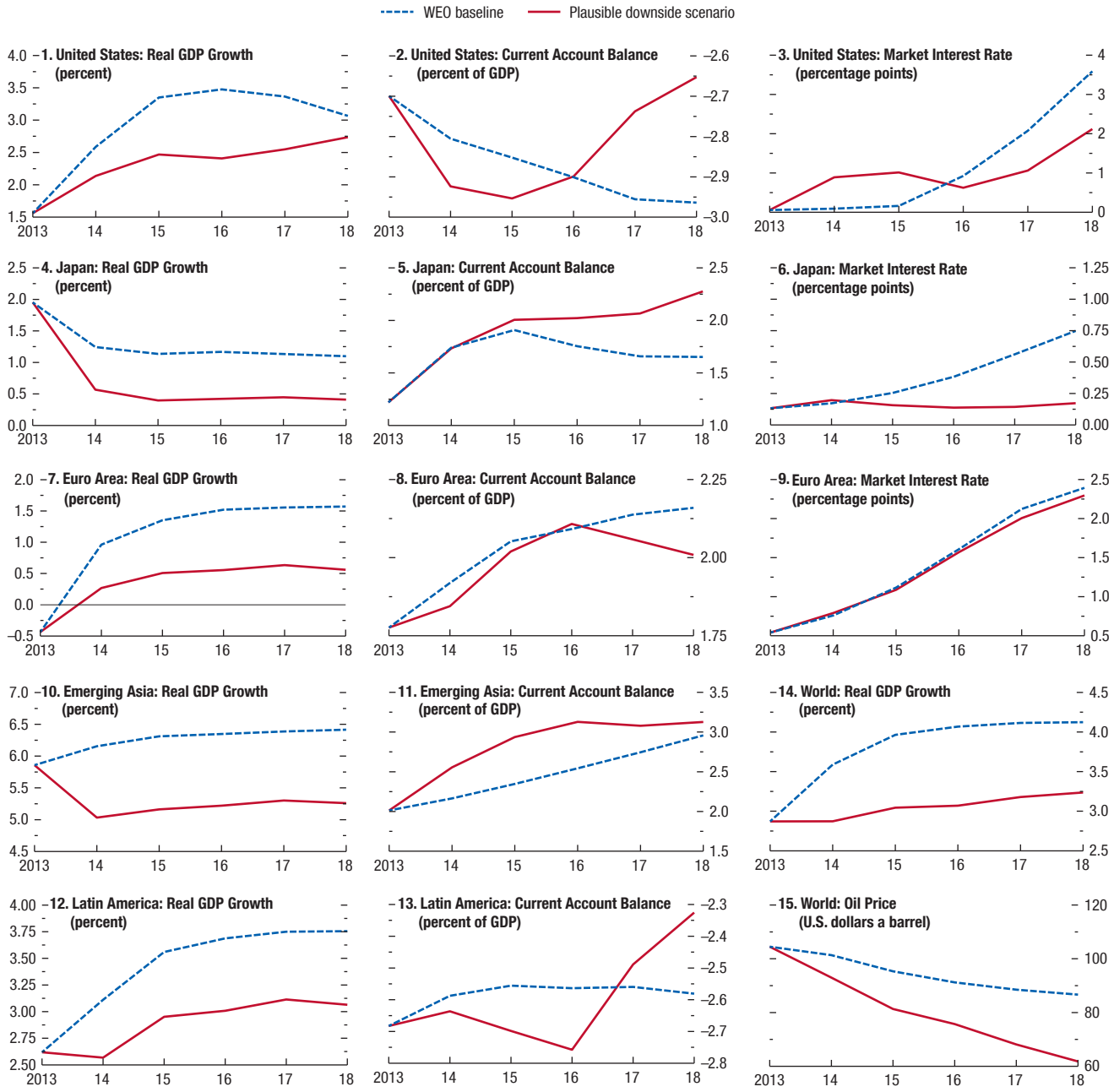
A plausible downside scenario

A likely scenario for the global economy is one of continued, plausible disappointments everywhere. These disappointments could include the following (Figure 1.17):

- Investment and growth stay weak in the euro area, as policies fail to resolve financial fragmentation and fail to inspire confidence among investors.
- Growth in emerging market and developing economies softens further, and growth in China is lower in the medium term as the shift toward consumption-driven growth proves more complicated than expected. This has repercussions via trade and lower commodity prices.
- Policy implementation in Japan is incomplete. In particular, the scenario incorporates shortfalls in structural reforms, a failure of inflation expectations to durably move up to 2 percent, and consequently, more fiscal tightening to contain the debt-GDP ratio and prevent sharp increases in the risk premium on Japanese government bonds.
- U.S. financial conditions tighten more than assumed in the WEO forecast over the coming year. Also, private investment does not recover as forecast, and, consequently potential growth turns out lower than expected. Tighter financial conditions than assumed in the WEO projections are already partly priced into markets, and the scenario assumes that market rates increase further when the Federal Reserve tapers its asset purchases. Such overtightened financial conditions may be difficult to reverse in a timely manner because damage to the economy is observed

Figure 1.17. Plausible Downside Scenario

This scenario uses The Euro Area Model (EUROMOD) to consider a plausible downside scenario. The scenario is based on four main drivers. First, the market is assumed to misperceive the future pace of tightening in U.S. monetary policy and delivers higher-than-baseline interest rates, notably in the first few years of the WEO horizon when there is little or no scope for the monetary policy rate to be easing to offset it. In addition, the recovery in investment in the United States is more subdued relative to the WEO baseline and, consequently, productivity growth is slower over the entire WEO horizon. Second, weaker than expected macro outcomes in the euro area, owing primarily to weaker investment and heightened fiscal sustainability concerns, lead to rising risk premiums and additional fiscal tightening. This process is ongoing, with continued surprises each year of the WEO horizon and growth outcomes that are weaker than expected. Third, emerging market economies do not recover to their precrisis growth paths. In emerging Asia, particularly China, slower growth would be driven by weaker investment and would translate into weaker employment, incomes, and consumption, possibly driven by either policy measures to help shift to more sustainable growth or by weaker export prospects. In other emerging markets, slower growth in the euro area and emerging Asia and the repercussions via lower commodity prices will slow investment and growth. Overall, lower growth in emerging market economies will lead to mild capital outflows and tightening in financial conditions, with the United States benefiting marginally. Finally, in Japan, less than successful implementation of the three-pronged recovery strategy will diminish growth. Less will be done on the structural reform front, and even tighter fiscal conditions will be required to help stabilize public debt and prevent a sharp increase in the risk premium, which, in turn, will undermine achievement of the new inflation target. The zero-interest-rate floor binds in 2014 for the United States, the euro area, and Japan. Beyond 2014, monetary policy rates are allowed to ease only as much as the policy space permits in the WEO baseline.



Source: IMF staff estimates.

with a lag and a resumption of asset purchases could be politically difficult.
- International financial markets experience further turbulence as all these factors raise risk perceptions and thus the returns demanded by investors.

In this plausible downside scenario, global growth would be lower, monetary policy rates in advanced economies would stay even longer at the zero bound, and inflation would be subdued.
- Euro area growth would take a number of years to inch back above ½ percent, as activity in the periphery barely creeps out of the recession. The euro area's current account surplus would be slightly smaller.
- In Japan, growth would fall back below ½ percent, and the current account surplus would widen again, exceeding 2 percent of GDP. Inflation would fall far short of the 2 percent target, and fiscal troubles would build.
- China would see growth below 6 percent in the medium term and a widening of the current account surplus from 2½ percent to almost 5 percent of GDP by 2018. For emerging Asia as a whole, growth would drop by more than 1 percentage point in 2014, to under 5¼ percent, and then move sideways.
- Latin America would see growth rates fall slightly after 2013, contrary to the baseline projection, and subsequently recover only modestly above 3 percent. The current account deficit would see little improvement.
- The United States would grow by about 2½ percent over the medium term. In the short term, higher interest rates weigh on activity, but over the medium-term activity resumes as lower growth induces policymakers to keep rates on hold for longer than under the baseline.

The world would be much less prosperous under this scenario than in the WEO baseline, and the policy challenges would be tougher. The number of jobs lost in the scenario relative to WEO baseline would be just under 20 million. Unemployment rates would stay at record highs for many years in the euro area periphery, and concerns about debt sustainability in various economies would return to the fore. Because growth in many emerging market economies would not pick up, it would be harder to satisfy demands for better public services and social safety nets. Such unmet demands could trigger further social tension in these economies. In advanced economies, monetary and fiscal policy space would be much more restricted. Therefore, the global economy would be more vulnerable to much worse scenarios. In the United States and Japan, for example, low growth rates could ultimately raise questions about the strength of the sovereign. It is, unfortunately, a world that could plausibly materialize unless policymakers take stronger action to address the important issues.

Policy Challenges

The major economies are seeing increasingly different growth dynamics and some downside risks have become more prominent. As a result, new policy challenges are arising, and policy spillovers may pose greater concern. However, if all economies adopt strong policies to boost their medium-term growth prospects, a more sustainable global growth trajectory can be achieved. Even with strong policies, the growth trajectory would not be much higher than the trajectory in the WEO forecast. But better policies would help avoid the plausible downside scenario or even worse outcomes and would set the stage for stronger growth beyond the WEO horizon.

U.S. Macroeconomic Policy at an Inflection Point

U.S. economic policy is set to change in the coming year. The authorities face two major macroeconomic policy challenges:
- *Begin to unwind unconventional monetary policy:* This unwinding will have to be a function of the strength of the recovery and inflation pressure, both of which have so far been subdued. Moreover, the expansionary program has not undermined financial stability. House prices are still far below their previous peaks (see Figure 1.4, panel 5); bank credit is still hard to come by for many agents (see Figure 1.4, panel 2); equity valuations are within historical ranges (see Figure 1.8, panel 4); and domestic investment has only just begun to strengthen on a broad front. Nonetheless, the GFSR underscores that excesses in some financial markets bear close monitoring and that there are risks of interest rates overshooting in response to the unwinding, as illustrated by recent developments. With these considerations in mind, the best way to exit to a less easy stance is gradually and with caution—and with clear communication about the policy strategy.

- *Improve fiscal policy:* The budget sequester has been an excessive and inefficient way to consolidate public finances. Looking ahead, the automatic cuts need to be replaced with a strong medium-term plan that includes entitlement and tax reform and better targeted expenditure measures. Otherwise the debt-GDP ratio, after decreasing temporarily from a peak of 107 percent in 2014, will increase again after 2020.

U.S. monetary and fiscal policies are likely to have important spillover effects on the rest of the world, as discussed in Chapter 3. The April 2013 WEO considered three scenarios for rising U.S. interest rates: (1) faster-than-expected U.S. recovery, which would likely come with appreciation of the U.S. dollar—a net plus for the rest of the world; (2) higher U.S. inflation, which would also come with appreciation of the U.S. dollar but would hinder global growth as U.S. monetary policy slows U.S. demand; and (3) a reassessment of U.S. sovereign risk, which would likely involve depreciation of the U.S. dollar—negative for the rest of the world as rising risk aversion causes global investment to slump. The latest development falls into none of these categories. Neither U.S. growth nor inflation outcomes surprised on the upside, nor were WEO or *Consensus Economics* projections for either marked up. Policy rates stayed put and long-term interest rates jumped, but the real effective exchange rate of the U.S. dollar did not move appreciably. These developments can be seen as a correction of a previous overshooting of the term spread; an actual tightening of U.S. monetary policy; or a perceived tightening of U.S. monetary policy. Be that as it may, in the near term they are negative for U.S. and global growth.

Similar complications could arise again and trigger further increases in term and risk premiums, not only in emerging market economies but also in other advanced economies. The reason is that the nature of the policy unwinding that lies ahead is unprecedented, and investor positioning in response to the prolonged environment of low interest rates may have created risks to financial stability. Financial fragility in the euro area adds to these concerns, as do deteriorating growth prospects and asset quality in emerging market economies. The improved and more transparent policy and communications tools now at the disposal of the Federal Reserve should help limit transition-related market volatility. In any event, careful calibration of the monetary policy shift and clear communication from the central bank will be essential.

Inaction on fiscal policy could produce large international spillovers. Although the global impact of the budget sequester was limited, failure to raise the debt ceiling could be very damaging. In the medium term, unless entitlement spending is reformed and deficits are scaled back further, there could be a loss of confidence in the U.S. sovereign. A scenario in the April 2013 WEO showed that reassessment of U.S. sovereign risk could reduce global output by several percentage points of GDP. Determined and early action on fiscal policy—notably the adoption of a comprehensive medium-term plan—would greatly help put the U.S. and global economies on a more sustainable growth trajectory.

Euro Area Policy in Search of More Growth

The issue facing euro area policymakers is what more they can do to support growth while advancing with adjustment and structural reforms. The answer depends on what is holding back the euro area economy. There are several forces:

- *Fiscal adjustment:* Fiscal adjustment has likely played a role (see the October 2012 WEO). However, the pace of adjustment is now set to drop off, to about ½ percent of GDP in 2014. For the euro area as a whole this seems broadly appropriate; economies posting large deficits are doing more and the others less, while automatic stabilizers are being allowed to play freely. Policymakers should further improve the quality of fiscal adjustment by broadening the tax base (see the October 2013 *Fiscal Monitor*) and reforming entitlements. Although there has been some progress on the latter, it is small compared with the challenges presented by population aging and the revenue losses caused by the Great Recession.
- *A weak, fragmented financial system:* Banks continue to shed assets to reduce leverage. Bank surveys signal that the dominant concern is the weak economic environment, rather than funding difficulties or capital shortfalls. However, despite significant progress, market-value-to-book-value ratios for many banks suggest that their capital buffers are still not strong enough to support much risk taking. The ECB's 2014 balance sheet assessment provides a critical opportunity to put the system on a sounder

footing. However, if the exercise is not credible, and if a common backstop for capital—such as through the European Stability Mechanism—is not available, the review could backfire. In the meantime, the ECB could mitigate financial fragmentation and thereby stem balance sheet deterioration in the periphery with targeted credit and liquidity support (for example, long-term refinancing operations for small and medium enterprises), less-onerous haircuts on collateral, or private asset purchases.

- *High private debt, uncertainty, and depressed confidence:* Record unemployment, depressed disposable incomes and wealth, and high indebtedness in some countries have been weighing on households' behavior, and the recovery in private consumption is likely to be very slow. Meanwhile, uncertainty about growth prospects continues to play a role in firms' investment decisions. An additional concern underscored in the October 2013 GFSR is a corporate debt overhang in the periphery that is interacting with vulnerable bank balance sheets. To bolster confidence, policymakers will need to demonstrate that they can act on a variety of fronts. Strengthening the currency union with a strong banking union will be critical and must include a single supervisory and resolution mechanism, with a common fiscal backstop for emergency assistance. At the national level, clear medium-term fiscal and structural reform plans are needed, along with more predictable policies. Furthermore, judiciary reforms and other measures are needed to speed up the resolution of bad debts in some countries.
- *Monetary policy:* Adjusted for tax changes and commodity price fluctuations, inflation has been running below the ECB's medium-term inflation objective of slightly less than 2 percent and is projected to stay around 1½ percent over the forecast horizon (see Figure 1.6, panels 2 and 3). Thus, the ECB should consider additional monetary support, through lower policy rates, forward guidance on future rates (including long-term refinance operations at fixed rates), negative deposit rates, or other unconventional policy measures.

Since these factors reinforce each other, a vigorous response on all fronts offers the best way forward. The response needs to be supported with comprehensive reforms to labor, financial, and product and services markets, as recommended in the IMF's 2013 euro area Article IV consultation report. In the absence of a comprehensive policy response, matters could easily worsen more than in the plausible downside scenario presented here. The April 2013 WEO explained how a failure to build a banking union and repair the area's financial systems could lead to long-term stagnation in the euro area, including years of recession in the periphery and negative spillovers to the rest of the world.

Sustaining the Recovery in Japan

Bold monetary easing and new fiscal spending to support growth and combat deflation have boosted growth (Box 1.4). Output is now forecast to be about 1 percent higher in 2013–14 relative to the pre-Abenomics baseline. About half of the 20 percent real effective depreciation of the yen since late 2012 is attributed to monetary easing this year. For the rest of the world, the monetary easing would be slightly negative for growth. If comprehensive structural and fiscal reforms are implemented, higher growth in Japan and easier global financing conditions from fiscal reforms could, over time, more than offset this negative impact on trading partners.

However, the policymakers' work is far from done. Long-term inflation expectations are still well below 2 percent (see Figure 1.6, panel 2), and the issue now is what would move these expectations up, considering that inflation is not very sensitive to activity. Also, activity is more likely to disappoint than to exceed projections, given external risks and prospects for a major fiscal tightening in 2014. If expectations fail to move up further in the course of 2014, achievement of the Bank of Japan's 2 percent target will be increasingly implausible, making it even harder to attain. These factors have important implications for policy. First, the Bank of Japan needs a plan B in case inflation expectations prove stickier than expected: this may have to include scaling up asset purchases or adjusting their composition and clarification of the bank's plans to raise expectations. Second, with the gross debt-GDP ratio closing in on 250 percent, the consumption tax increase must be implemented, and the government urgently needs to specify a strong plan with specific measures for medium-term fiscal consolidation and entitlement reform. The recently announced decision to implement the first stage of the consumption tax increase to 8 percent in April 2014 is a welcome step forward. The planned additional stimulus for 2014 to mitigate the growth impact of this measure puts a premium on developing concrete and credible

measures to consolidate the public finances over the medium term as quickly as possible. Without such a plan, already high fiscal vulnerabilities would rise further. Third, the government must craft and shoot the third arrow of Abenomics—structural reforms to lift potential growth. Delivering on all these fronts is vital for the sustainable success of the recent measures. Failure to deliver could put Japan on the path of the plausible downside scenario or worse. As discussed in the April 2013 WEO, if the fiscal risks materialize, output will fall well below the pre-Abenomics baseline in the medium term.

The key priority is to maneuver a smooth shift to more sustainable, private-consumption-based growth. This shift would require liberalizing interest rates to allow effective pricing of risk; a more transparent, interest-rate-based monetary policy framework; a more flexible exchange rate regime; reforms for better governance and quality of growth; and strengthened financial sector regulation and supervision. Fiscal policy space, while narrowing, is still adequate to maintain social and priority spending and to address downside contingencies. But the government should curtail quasifiscal programs.

Managing the Transition to Private-Consumption-Driven Growth in China

Growth in China has been on a decelerating path. Activity has been supported by a huge expansion in credit-fueled investment—in 2012 investment reached close to 50 percent of GDP and credit reached almost 200 percent. Although this expansion spurred financial deepening and provided a timely global growth impulse after the Great Recession, policymakers are now reluctant to continue stimulating the economy given the risks of inefficiency, deteriorating asset quality, and financial instability. Off-budget spending by local governments has also raised contingent fiscal liabilities, with the augmented fiscal deficit now estimated to be 10 percent of GDP. Moreover, imbalances between private consumption and investment have intensified, even as the economy's external imbalances have narrowed. A decisive move to contain these imbalances may be accompanied by lower medium-term growth than achieved by China in recent decades, but this is a trade-off worth making, since it is likely to usher in permanently higher living standards than under the extension of the status quo.

More subdued growth in China would affect the rest of the world through lower import demand and lower commodity prices, but the net effect should be positive if the right policies are in place. First, because China accounts for only 8 percent of global consumption, the negative spillovers would not be unmanageable. Second, better policies and more balanced growth sharply reduce the risk of a hard landing. For example, the 2013 IMF *Spillover Report* highlights that failure to rebalance growth is likely to lead to a sharp and prolonged growth slowdown, whose spillover could lead to a reduction in global GDP of about 1.5 percent.

Engineering Soft Landings in Emerging Market and Developing Economies

Following a period of rapid domestic demand and credit growth, emerging market and developing economies need to tackle two new challenges.

- *Tighter external financing conditions and lower capital inflows over the WEO horizon:* These will come with the strengthening of the recovery in advanced economies and the normalization of U.S. monetary policy. Moreover, there is a risk of further bouts of volatility in capital flows and, for some economies, of severe balance of payments disruptions.
- *Some slowing in potential growth and a cooldown from cyclical peaks:* Accordingly, negative output gaps are small in most emerging market economies in Asia, Latin America, and Europe.

As noted, the net effect of the tighter financial conditions on activity is expected to be negative in the near term in most economies, notwithstanding recent currency weakening. For the appropriate policy response, the three crucial questions are whether to use policy buffers to stabilize activity and, if so, what policies to use; whether to fight the recent currency depreciation; and how to manage risks from renewed capital outflows. In general, the policy responses should feature exchange rate depreciation to smooth activity; measures to safeguard financial stability; and structural reforms to boost growth. Within this broad picture, the appropriate policy mix and pace of adjustment will differ across economies in view of the differences in output gaps and inflation pressure, central bank credibility, room for fiscal policy maneuvering, and the nature of the vulnerabilities.

Exchange rate depreciation: Exchange rates should be allowed to depreciate in response to changing

fundamentals but policymakers need to guard against disorderly adjustment. Both structural and cyclical slowdowns in activity call for a depreciation of the real exchange rate, all else equal. Such a move would also help redress current account deficits in a few major emerging market economies whose deficits are larger than warranted by fundamentals and desired policies (Brazil, Indonesia, Turkey, South Africa).

Liquidity provision and exchange market intervention: This may be needed to maintain orderly conditions when very rapid flows lead to financial market disruption. Risks of disorderly conditions in currency markets are likely to be less acute for those economies that have strong policy frameworks, deeper financial markets, sound balance sheets, and limited non-resident portfolio investment. While some intervention to smooth current market volatility may be appropriate in countries with adequate reserves, it should not forestall underlying external adjustment for those economies where external deficits exceed levels warranted by fundamentals and desired policies. In economies with pegged currencies, running down reserves is the natural response. However, even in those cases it should serve to ease but not postpone needed adjustments.

Monetary policy: Cyclical weakening of activity, in principle, calls for easing of monetary policies or, in economies where real interest rates are still low, less tightening than earlier planned. But, responses will need to consider inflationary pressures and policy credibility. In a number of economies, including Brazil, India, and Indonesia, more tightening may well be needed to address continued inflation pressure from capacity constraints, which will likely be reinforced by recent currency depreciation.

Prudential policies: Hefty exchange rate depreciation could lead to some increased solvency risk, especially for firms in the nontradables sectors, which do not enjoy a natural currency hedge in the form of export sales. Strong regulatory and supervisory policy efforts are needed to ensure that banks address credit quality and profitability problems, whether from legacy effects as a result of recent rapid credit growth in an environment with lower potential growth or from lower capital flows.

Fiscal policy: Policymakers should generally allow automatic stabilizers to respond freely but eschew stimulus, except when a major slowdown threatens. In many emerging market economies, growth is expected to remain fairly strong by historical standards. At the same time, room for fiscal policy maneuvering has generally declined. Fiscal deficits remain appreciably above precrisis levels (see Figure 1.5, panel 2). Moreover, while public debt ratios have mostly stabilized at relatively low levels, the debt dynamics are now projected to turn less favorable, given that real government bond yields are already some 100 basis points higher than expected at the time of the April WEO. Against this backdrop, there now is a broad need for policymakers to rebuild fiscal space in emerging market economies. As discussed in the October 2013 *Fiscal Monitor*, the urgency for action varies across economies: early, decisive steps are desirable in a few economies where public debt is already elevated (Brazil, Egypt, Hungary, India, Jordan, Poland, Malaysia). In some economies, increased contingent risks to budgets and public debt from substantial increases in quasifiscal activity and deficits reinforce the need to rebuild fiscal space (Brazil, China, Venezuela).

Structural reforms: Structural reforms to enhance productivity growth are a general priority, given the diagnostics of the growth slowdown. The latter is in part a reflection of recent achievements in many emerging market economies. First, unlike the large advanced economies, many of these economies have been operating near full capacity. Second, their incomes have been converging toward those in advanced economies, and as this income gap closes, growth in the emerging market economies is eventually bound to decline. Even so, there is simultaneously a need for even more catching up in incomes ("convergence") and a risk that some of the capacity bottlenecks could create a middle-income trap, wherein relative wage increases end up reducing the competitiveness of these economies and thereby stalling growth. Many emerging market economies must focus on strengthening productivity in domestic services and other nontradables sectors, where there has been less progress than in tradables sectors, and on improving their investment regimes.

Many *low-income economies* have succeeded in maintaining strong growth during the weak global recovery. Structural policies fostering favorable business and investment regimes have been major contributors to this outcome, as have better macroeconomic policies. With the decline in commodity prices and the increased costs of external financing, the external environment for these countries has become less favorable (see the Special Feature). Given these adverse changes,

timely adjustments to fiscal policies will be important; otherwise, external debt could build up again, as in past episodes.

Rebalancing Global Demand

What are the potential benefits from stronger policies? Policy simulations suggest that over the WEO horizon, the main benefit will be growth that is more balanced and sustained but not necessarily higher. An upside scenario examines the effects of stronger policies. The scenario is essentially the same scenario as in the 2013 *Spillover Report*, except that it also considers stronger policies in other emerging market economies, as follows:

- In the near term, temporary measures in the United Kingdom (fiscal and monetary) and the United States (fiscal) help support demand. In addition, the European authorities adopt measures to reduce financial fragmentation and implement a banking union. These actions reduce the cost of funding for the private and public sectors and stimulate investment.
- In the medium term, fiscal policy changes raise public saving in India, Japan, Russia, South Africa, and the United States. Tax reforms in India increase the incentives to work and invest. In addition, increased public investment in infrastructure in South Africa stimulates private investment, increased efficiency in public spending in Russia allows for increased infrastructure investment, and pension reforms in Brazil and Russia support saving and investment. Fiscal and financial reforms in China reduce both public and private saving and help rebalance demand toward private consumption and away from investment. Finally, structural reforms are undertaken in Brazil, the euro area, India, Japan, Russia, South Africa, and the United Kingdom that boost productivity and the labor supply.

At the global level, these reforms have little impact on growth because above-baseline growth in advanced economies and in Latin America in the near term is roughly offset by lower growth in emerging Asia, primarily China, because of the rebalancing. In the medium term, growth in China and emerging Asia returns to baseline, but the effects are offset by below-baseline growth in the United States and Japan owing to fiscal adjustment (Figure 1.18).

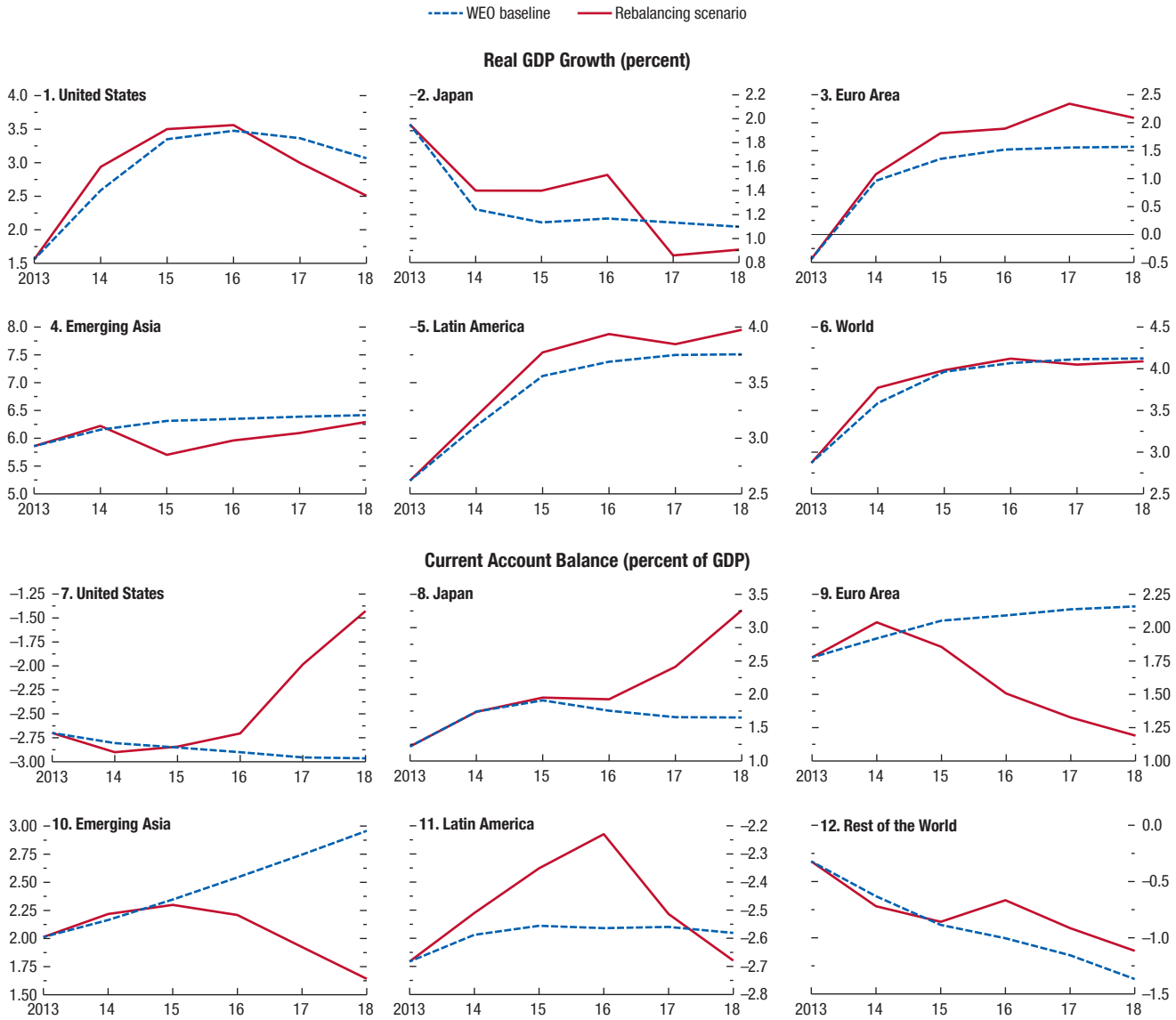
Although these policy measures have a negligible impact on global growth over the WEO horizon, they do reduce external imbalances. This, in turn, would make for a safer global economic environment, and help set the stage for more sustained and stronger growth in the long term.

Figure 1.18. Rebalancing Scenario

This scenario uses the Euro Area Model (EUROMOD) and the G20 Model (G20MOD) to examine the global implications of major advanced and emerging market economies implementing policies aimed at strengthening their medium-term fundamentals while in some cases also supporting growth in the short term. In the near term, temporary stimulus measures in the UK (fiscal and monetary) and the US (fiscal) help support demand. In addition, measures by the ECB to reduce financial fragmentation and implement a banking union reduce the cost of funding for the private and public sectors, providing additional near-term support for activity. Looking to the medium term, increases in public savings occur in India, Japan, Russia, South Africa, and the US with tax reform in India increasing the incentives to work and invest. In addition, increased public investment in infrastructure in South Africa further stimulates private investment, increased efficiency in public spending in Russia allows for increased infrastructure investment, and pension reforms in Russia further stimulate labor supply.

Fiscal and financial reforms in China reduce both public and private savings and help rebalance demand toward consumption and away from investment. Structural reforms are undertaken in Brazil, the euro area, India, Japan, South Africa, and the UK that raise productivity and labor supply and stimulate investment.

At the global level, these reforms have little impact on growth as above-baseline growth in advanced economies and Latin America in the near term is roughly offset by lower growth in emerging Asia, primarily China. In the medium term, a return to baseline growth in China and emerging Asia is offset by below-baseline growth in the US and Japan. Although the impacts on global growth of these policy measures are negligible over the WEO horizon, they notably reduce external imbalances and set the stage for strong balanced growth in the long term.



Source: IMF staff estimates.
Note: ECB = European Central Bank; UK = United Kingdom; US = United States.

Special Feature: Commodity Market Review

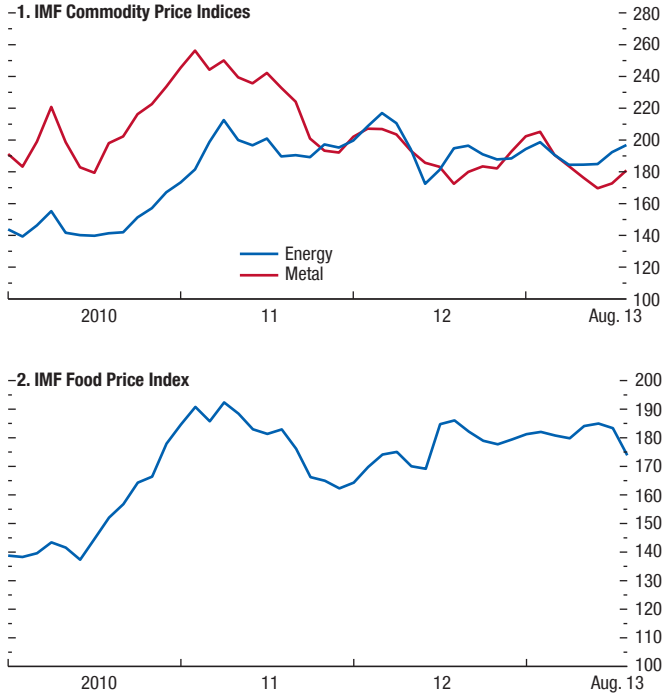
The impact of slowing emerging market growth is being felt on commodity prices, particularly metals. The first section of this special feature discusses likely first-round impacts of these declines on trade balances and the short-term challenges from a more balanced and sustainable growth path in China for metal and energy exporters. It concludes with the price outlook and risks. The second section studies the impacts of the U.S. energy boom. Although the boom has disrupted relationships between some energy prices, impacts on U.S. output and the current account will be modest.

Recent Developments and Impact of the Emerging Market Slowdown

Metal and food prices have declined while energy prices have edged up. The IMF's Primary Commodities Price Index is unchanged from March 2013, with declines in metal and food prices offset by small gains in energy prices (Figure 1.SF.1).[1]

The steep fall in metal prices owes much to a continuing rise in metals mine supplies in recent years and some signs of a slowing real estate sector in China. Oil demand growth has slowed, particularly in China, India, and the Middle East. Although coal and natural gas prices have fallen, oil spot prices have remained above $105 a barrel, reflecting various supply outages and renewed geopolitical concerns in the Middle East and North Africa. In addition, new pipeline infrastructure in the United States has allowed surplus crude oil in the mid-continent to reach coastal refineries and U.S. crude prices to rise.[2] Elevated crude oil prices have played a role in keeping food prices relatively high because energy is an important cost component

Figure 1.SF.1. IMF Commodity Price Indices
(2005 = 100)



Source: IMF, Primary Commodity Price System.

(Baffes and Dennis, 2013). Despite slowing growth, demand for food has remained high in China, and is particularly reliant on world markets for oilseeds—imports accounted for nearly 60 percent of total oilseed consumption in 2013.[3]

A slowdown in economic activity in emerging markets is an important driver of commodity price declines (IMF, 2011; and Roache, 2012). The correlation between growth in commodity prices and growth in macroeconomic activity in emerging markets is very high; the correlation between the first principal components of the two is 0.8. Moreover, declines in economic

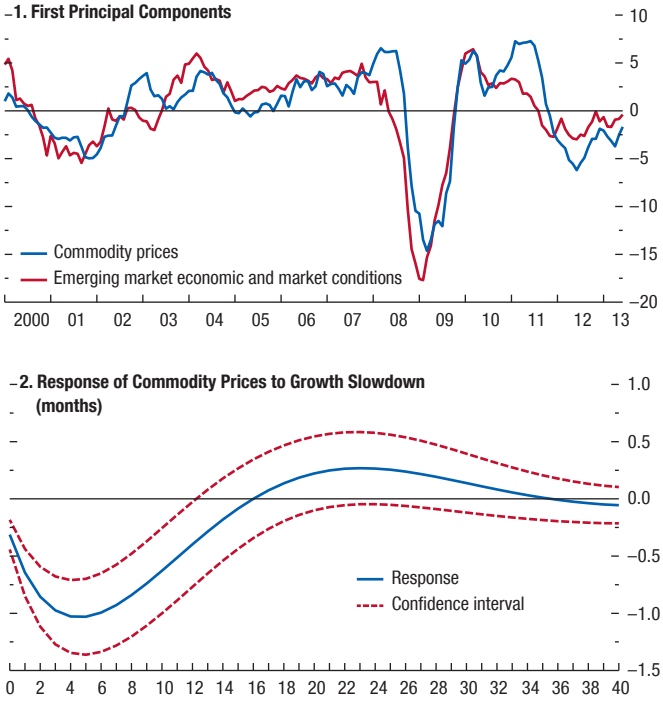
The authors of this feature are Rabah Arezki, Samya Beidas-Strom, Prakash Loungani, Akito Matsumoto, Marina Rousset, and Shane Streifel, with contributions from Daniel Ahn (visiting scholar) and research assistance from Hites Ahir, Shuda Li, and Daniel Rivera Greenwood. Simulation results based on the IMF's Global Economy Model (GEM) were provided by Keiko Honjo, Ben Hunt, René Lalonde, and Dirk Muir.

[1]Recent developments are described in greater detail in the IMF's Commodity Market Monthly: www.imf.org/external/np/res/commod/pdf/monthly/092013.pdf.

[2]Beidas-Strom and Pescatori (2013) provide vector-autoregression-based evidence on the relative importance of demand, supply, and speculative forces (including precautionary demand) as drivers of oil prices.

[3]To secure future imports of oilseeds, China has offered loans to Argentina for rail infrastructure improvements and has approved imports of genetically modified corn and soybean crops from Brazil and Argentina. To satisfy China's oilseed demand, producing countries may reallocate land and other resources away from other crops, contributing to tightness in grain markets.

Figure 1.SF.2. Commodity Prices and Emerging Market Economic Activity



Source: IMF staff calculations.

growth lead to substantial declines in commodity price growth for several months (Figure 1.SF.2).[4]

Commodity price declines can have important and disparate effects on trade balances across and within regions. The estimated direct (first-round) effects on trade balances from commodity price declines of the magnitude seen during the past six months can be important for some regions.[5] As shown in Table 1.SF.1, a 30 percent decline in metal prices and a 10 percent decline in energy prices would broadly lead to deterioration in balances for the Middle East, economies in the Commonwealth of Independent States, Latin America, and Africa, offset by improvements in Asia and Europe. Within regions, the impacts are heterogeneous—for example, in Africa, the Western Hemisphere, and the Middle East (Figure 1.SF.3).[6]

A more balanced and sustainable growth path in China in the medium to long term could imply less volatile but still robust commodity demand (Ahuja and Myrvoda, 2012; Ahuja and Nabar, 2012; and IMF, 2012a). However, in the short term, as demand shifts away from materials-intensive growth, some commodity exporters could be vulnerable. There is particular concern about the spillover effects of demand rebalancing in China given the assessment that a substantial share of their slowdown may be in potential growth.

Figure 1.SF.4 illustrates rough estimates of the impacts of a slowdown in Chinese growth from an average of 10 percent during the previous decade to an average of 7½ percent over the coming decade. The numbers shown in the figure are the declines in net revenues (as a percent of GDP, adjusted for purchasing power parity) for various commodity exporters as a result of lower Chinese demand.[7] For example, Mongolia's GDP level in 2025 is estimated to be about 7 percent lower than otherwise, primarily as a result of slower Chinese demand for coal, iron ore, and copper. To the degree that the Chinese slowdown is anticipated in forward-looking prices, some of this slowdown may already have begun to affect exporters. Nevertheless this chart provides an approximate and illustrative ranking of countries that, in the absence of policy responses or offsetting favorable shocks, might be some-

[4]Principal components analysis extracts key factors that account for most of the variance in the observed variables. The correlation and the impulse response are based on monthly data from 2000 to the present and use the first principal component. Macroeconomic activity is measured using industrial production indices, purchasing managers' indices, and equity returns as proxies for global economic activity, economic sentiment, and asset market performance, respectively. Note that the impulse response shown is for the growth rate of commodity prices, which indicates a persistent decline in the level of commodity prices.

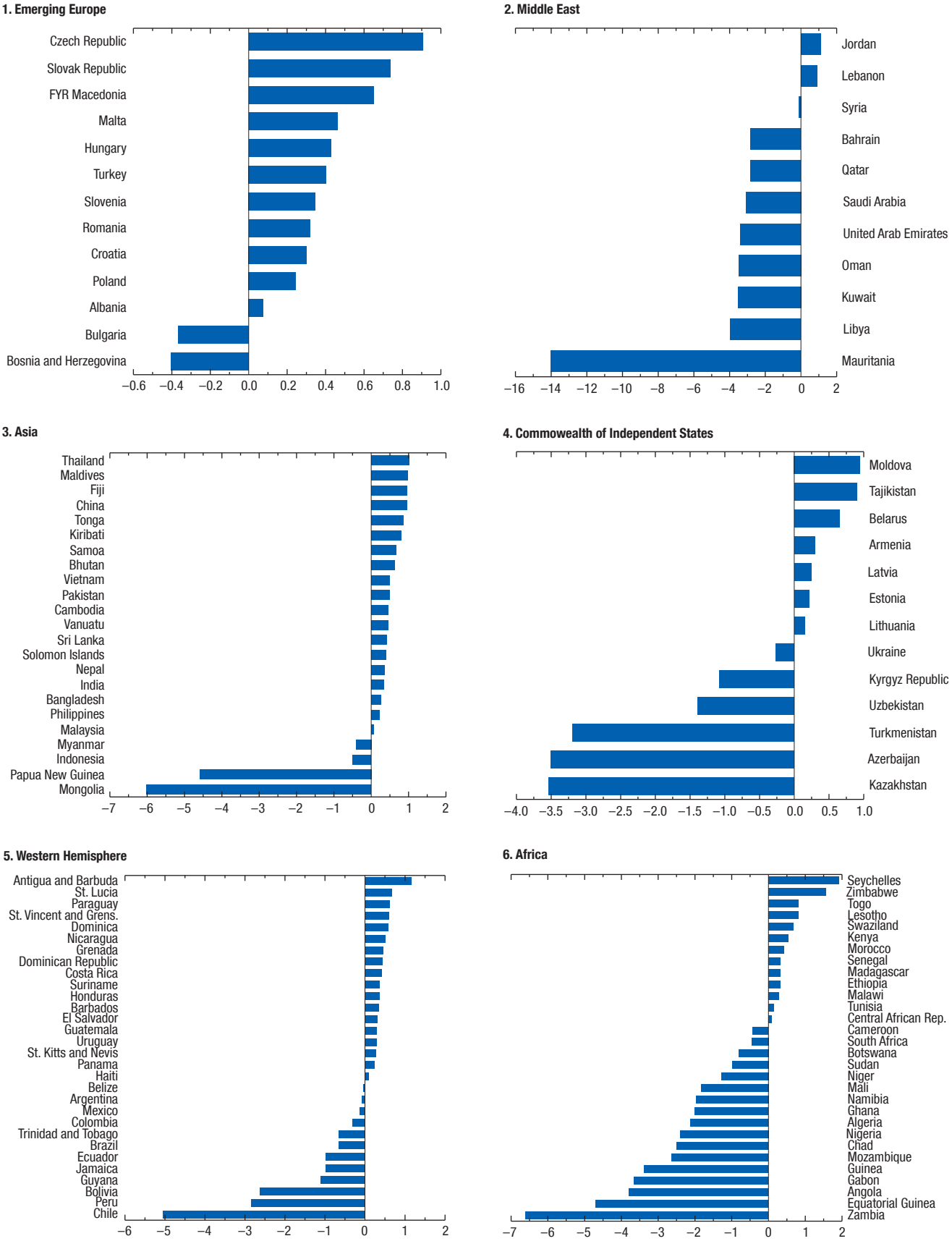
[5]The estimates are derived from a partial equilibrium exercise in which changes in trade balances for 2013 and 2014 are computed under two scenarios, the April 2013 baseline and under the assumed declines of 10 percent in energy prices and 30 percent in metal prices. The numbers in Table 1.SF.1 and Figure 1.SF.4 are the difference between the two scenarios. The estimates thus show the impact on trade balances of a fall in commodity prices compared with what was assumed in the April *World Economic Outlook* baseline prices.

[6]These estimates are illustrative and prone to caveats (for example, using 2012 or 2013 data, the deterioration in Chile's trade balance is closer to 3–4 percent).

[7]The procedure used is to (1) calculate China's share of demand growth for various commodities during 1995–2011; (2) assess how much impact this demand growth from China has had on the respective commodity prices; and (3) calculate the net revenue loss for various commodity exporters caused by the volume and price changes. The procedure implicitly assumes that, over the long term, commodity markets are globally integrated and fungible so that the impact on prices of slower Chinese growth affects all exporters. Lack of data precludes including countries such as Myanmar that otherwise would have ranked high on the list. The calculation does not take into account any supply effects resulting from the Chinese slowdown nor the sources of Chinese rebalancing and their differing commodity intensity. For some estimates of the impacts of slower Chinese investment see the 2012 IMF spillover report. Commodity price declines also pose risks to the fiscal balance in low-income commodity exporters.

Figure 1.SF.3. Trade Balance Impacts of Energy and Metals Price Declines

(Percent of 2009 GDP)



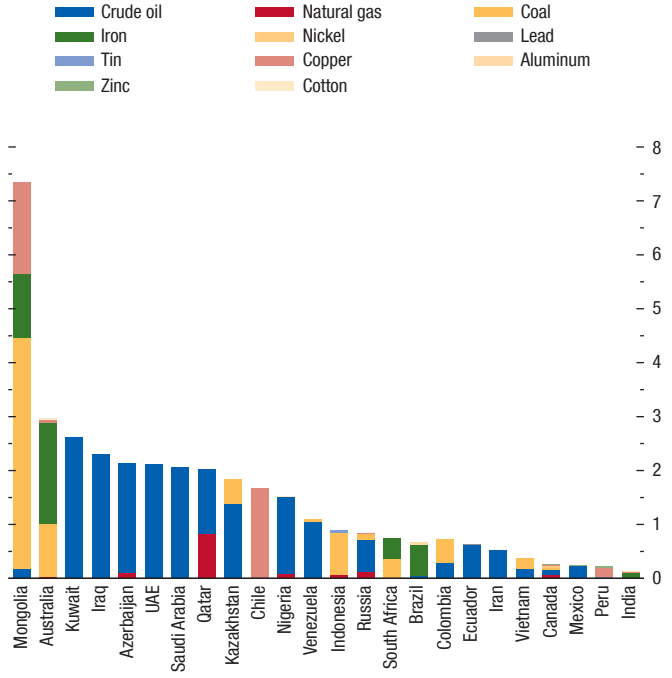
Source: IMF staff calculations.

Table 1.SF.1. First-Round Trade Balance Impact from Changes in Commodity Prices
(Changes from March 2013 baseline in percent of 2009 GDP)

	2013	2014
Advanced Economies	**0.1**	**0.1**
United States	0.2	0.1
Japan	0.4	0.2
Euro Area	0.3	0.2
Emerging Market and Developing Economies	**–0.1**	**–0.1**
Africa	–1.2	–0.9
Sub-Saharan Africa	–1.3	–1.0
Sub-Saharan Africa Excluding Angola, Cameroon, Côte d'Ivoire, Gabon, Nigeria, Sudan	–0.6	–0.6
Emerging Asia	**0.7**	**0.3**
China	1.0	0.4
Asia excluding Brunei, Malaysia, Vietnam	0.7	0.4
Emerging Europe	0.4	0.2
Commonwealth of Independent States Excluding Russia	–1.3	–0.8
Middle East, North Africa, Afghanistan, and Pakistan	–2.9	–1.9
Western Hemisphere	–0.7	–0.5
MERCOSUR	–0.9	–0.5
Andean Region	–1.2	–1.2
Central America and Caribbean	0.2	0.0
Oil-Exporting versus Oil-Importing Economies		
Oil-Exporting Economies	–0.9	–0.7
Oil-Importing Economies	0.2	0.1

Source: IMF staff calculations.
Note: Country export and import weights by commodity were derived from trade data for 2005–08. MERCOSUR = Southern Common Market.

Figure 1.SF.4. Illustrative Impact of Chinese Demand Slowdown on Commodity Exporters
(Percent of GDP)



Source: IMF staff calculations.
Note: UAE = United Arab Emirates.

what vulnerable in the short term to Chinese demand rebalancing. In addition to oil exporters, countries that appear vulnerable by this metric include Australia, Brazil, Chile, and Indonesia.[8,9]

Price Outlook and Risks

The IMF's average petroleum spot price a barrel is projected at $104.5 in 2013 and $101.4 in 2014. These prices reflect seasonally strong refinery demand and supply outages. The food price index is also projected to increase slightly in 2013, but then decline by about 6 percent in 2014, on a favorable supply outlook. Metal prices are projected to decrease by about 4 and 5 percent in 2013 and 2014, respectively.

Despite rising spot oil prices, futures markets are broadly signaling declines over the outlook period (Figure 1.SF.5). Markets expect U.S. natural gas prices

[8]Not only have oil price declines been reversed during the late summer, but in addition, such a ranking is illustrative and not necessarily a good indicator of vulnerability. For example, in Chile the current account is narrowed by compensatory accrued foreign direct investment profits.

[9]Many recent IMF country reports discuss the importance of energy and metal exports for the respective economies, and some focus on the role of China. Examples include the discussions of Qatar's natural gas market (IMF, 2013i, p. 35); Saudi Arabia's systemic role (IMF, 2013j, p. 4); impacts of decline in copper prices on Chile's GDP in the short term (IMF 2013b, pp. 16–17); the impact of a hard landing in China on Colombia's commodity exports (IMF, 2013c, p. 32); and Nigeria's petroleum industry (IMF, 2013g, p. 59).

to rise from recently depressed levels, while most metal prices are expected to remain subdued. Food prices also show upside risks mainly due to weather-related supply uncertainty.

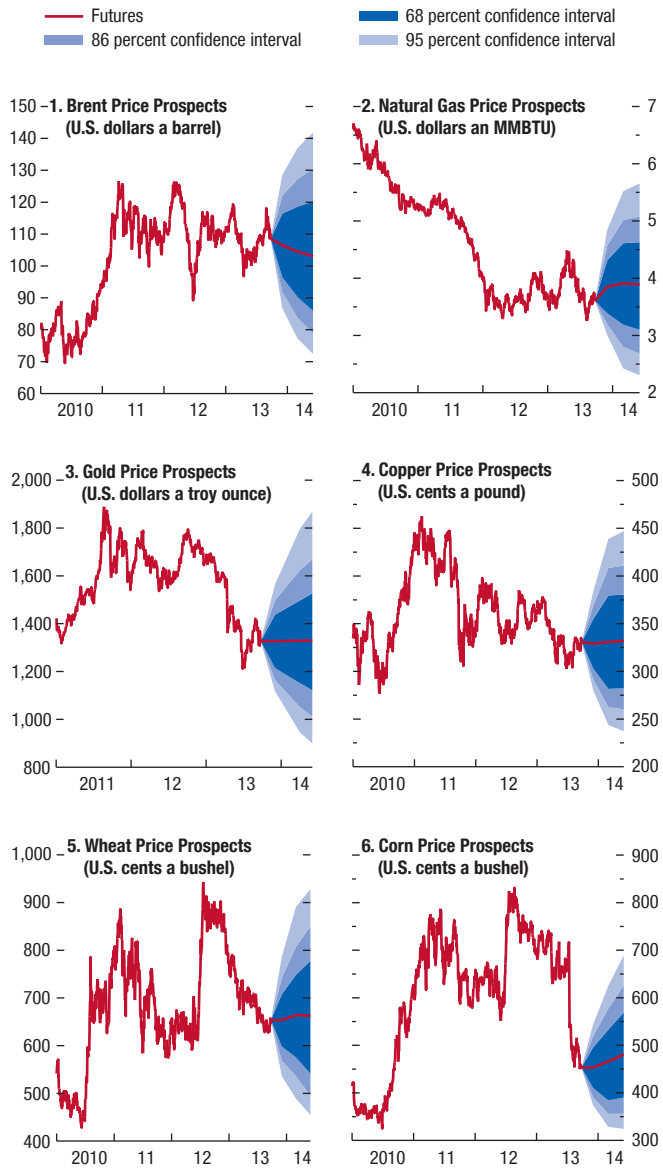
Recently, risks of a spike in oil prices have risen because of the threat of disruptions due to increasing unrest and geopolitical tensions in the Middle East and North Africa. Given these rising tensions, three oil price scenarios are considered to illustrate possible impacts on the global economy—simulated with the GEM, which is a six-region general equilibrium model of the world economy (Table 1.SF.2). The first scenario is a short-lived oil production disruption whereby oil prices spike 10 to 20 percent for a few weeks. This has only a small impact on the global economy. A larger production disruption assumes that the Syria conflict spills over, for example by halting Iraqi oil exports. Saudi Arabia's spare capacity compensates, but with a lag, and possible quality problems, depending on the grades lost. This second scenario—a larger disruption during which oil prices spike to $150 a barrel for two quarters—assumes that the global oil market still functions efficiently via higher prices. Nevertheless, it reduces global growth by 0.13 percentage point in 2014 and raises other risks. In the third scenario—given the present difficulties for the global economy—the same $150 a barrel price spike is accompanied by greater adverse effects on confidence, with capital retreating to safe havens and a persistent decline in equity prices. In this case, the impact on global growth will be much larger—about 0.5 percentage point lower in 2014.

Economic Impacts of the U.S. Energy Boom

The United States is experiencing a boom in energy production. Natural gas output increased 25 percent, and crude oil and other liquids increased 30 percent during the past five years, reducing net oil imports by nearly 40 percent. The U.S. Energy Information Administration (EIA, 2013) baseline scenario shows U.S. production of tight oil increasing until 2020 before falling off during the next two decades.[10] The baseline also shows U.S. shale gas production increasing steadily until 2040 (Figure 1.SF.6). The United States is expected to be a net exporter of natural gas in the 2020s.

[10]Tight oil is petroleum found in formations of low permeability, generally shale or tight sandstone.

Figure 1.SF.5. Balance of Risks



Sources: Bloomberg, L.P.; and IMF staff estimates.
Note: MMBTU = million British thermal units. Price prospects derived from prices of futures options on September 23, 2013.

Table 1.SF.2. Temporary Oil Price Shock Impact on GDP and Current Accounts: Scenarios 1, 2, and 3

	Scenario 1 Small Oil Price Shock		Scenario 2 Large Oil Price Shock		Scenario 3 Large Oil Price and Equity Market Shocks	
	2013	2014	2013	2014	2013	2014
GDP Growth Rate (percentage point difference from baseline)						
World	0.05	0.01	–0.18	–0.13	–0.85	–0.45
United States	0.03	0.02	0.09	–0.19	–0.77	–0.55
European Union	0.03	0.04	0.05	–0.26	–0.67	–0.59
Japan	0.03	0.03	0.06	–0.24	–0.77	–0.67
Emerging Asia	0.05	0.02	–0.13	–0.24	–0.82	–0.56
Latin America	0.04	0.00	–0.11	–0.10	–0.80	–0.39
Rest of the World	–0.13	0.07	–0.59	0.29	–1.23	0.04
Current-Account-to-GDP ratio (percentage point difference from baseline)						
United States	0.07	0.02	–0.32	0.12	–0.38	0.03
European Union	–0.14	0.05	–0.66	0.27	–0.77	0.13
Japan	–0.14	0.05	–0.67	0.23	–0.70	0.19
Emerging Asia	–0.22	0.10	–1.05	0.46	–0.93	0.42
Latin America	0.08	0.02	0.35	0.09	0.41	0.01
Rest of the World	0.34	–0.13	1.54	–0.58	1.51	–0.64

Source: IMF staff calculations based on Global Economy Model and Flexible System of Global Model simulations.
Note: Emerging Asia comprises China, Hong Kong SAR, Indonesia, India, Korea, Malaysia, Philippines, Singapore, Taiwan, and Thailand. Latin America comprises Brazil, Chile, Colombia, Mexico, and Peru.

GEM simulations suggest modest impacts of the energy boom on U.S. output.[11] In the GEM, energy is produced by combining capital and labor with a fixed factor, which can be thought of as known reserves. As discussed above, the EIA expects production of tight oil and shale gas to increase in coming years but there is uncertainty about the duration and extent of the increase. The model is simulated under the assumption that there is an increase in energy production over the next 12 years, so that by the end of this time horizon production has increased by 1.8 percent of GDP.[12] Figure 1.SF.7 shows the results from the model simulations.

The main finding is that U.S. real GDP increases by about 1.2 percent at the end of 13 years and employment increases by 0.5 percent. This is under the assumption that the increase in energy production is fully anticipated by households and firms. The corresponding increase in domestic demand is about 1.8 percent. The decline in the cost of energy induces firms to employ more capital and labor. Adjustment costs in investment encourage firms to start putting capital in place even before all the declines in energy prices materialize. In addition to the increase in investment, consumption also rises because of rising household real incomes and wealth. The impacts on GDP levels in other country blocs are also positive, with the exception of a very small decrease in the GDP of other energy-exporting countries (see Figure 1.SF.7).

The main reason for the modest impact on U.S. GDP is that the share of energy in the economy remains quite small even after factoring in the additional production.[13] The impacts are greater when the economy exhibits slack because in this case monetary policy does not need to lean against the resulting increase in aggregate demand.

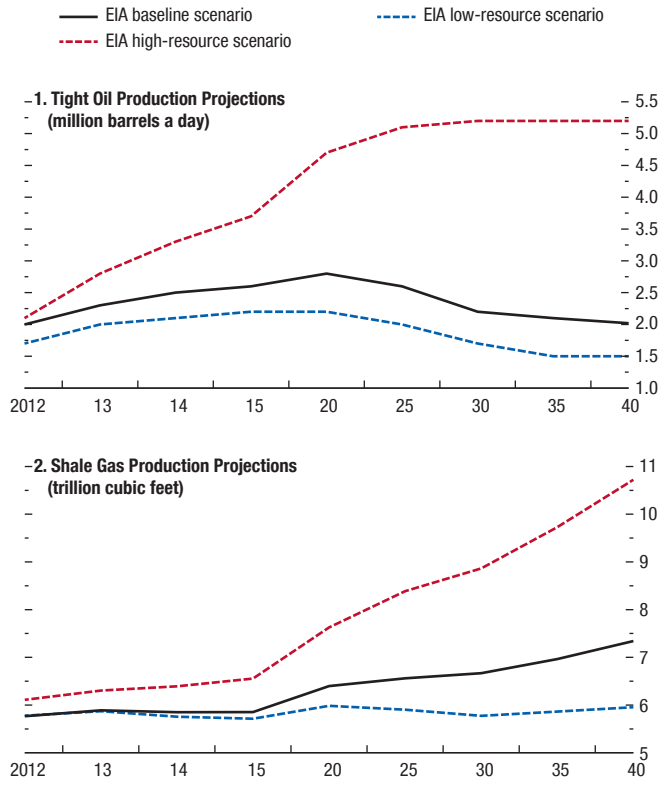
Simulation results also suggest small impacts on the U.S. current account, with the direction of the impact depending on whether the increase in energy supplies is anticipated or comes as a surprise. In both cases, the improvement in the energy component of the trade balance is offset by a decline in the nonenergy balance. In the case in which the increase in energy supplies is fully anticipated, U.S. households and corporations temporarily increase borrowing from abroad to support

[11]This discussion is taken from Hunt and Muir (2013).

[12]This scenario is implemented in the GEM by gradually increasing the fixed factor in oil production over the 12-year period by enough that, once capital and labor have responded endogenously, U.S. energy production has increased by 1.8 percent of GDP. IMF (2013k) presents the results from a scenario in which the increase in energy production is 0.45 percent of GDP; the results are similar to those presented here, except that the magnitude of the effect on GDP is roughly a fourth of that shown here.

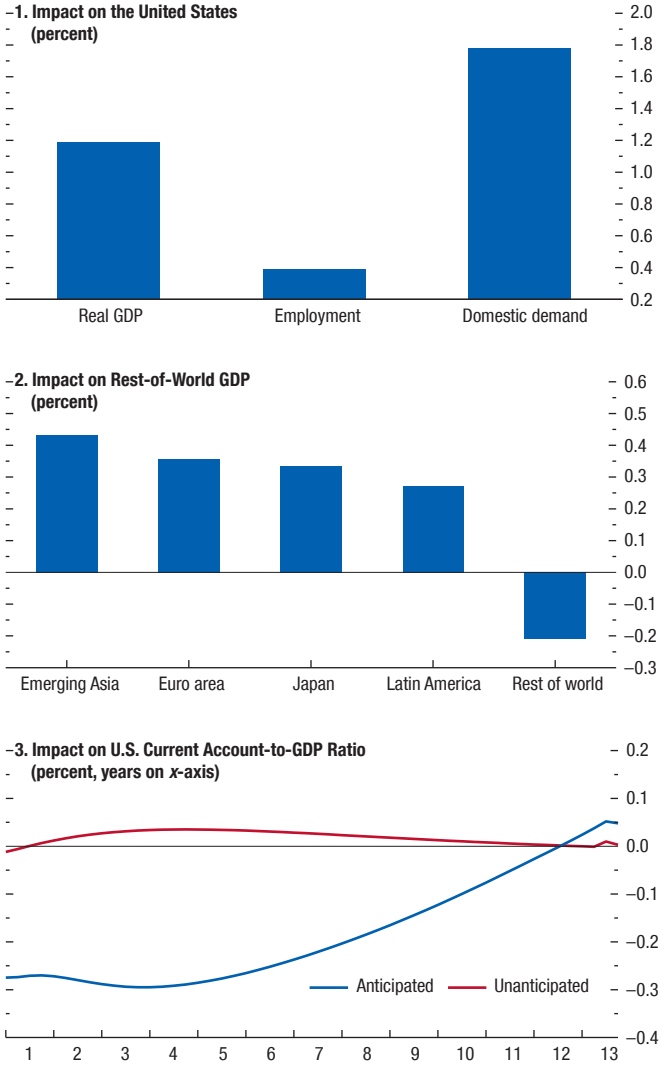
[13]This can also be seen from back-of-the-envelope calculations of the annual revenue impact of the higher energy production in coming years. The annual revenue from tight oil will be about $80 billion, or ½ percent of U.S. GDP, if future prices are in line with EIA projections. A similar calculation, even allowing for the possibility that natural gas prices rise from their current depressed levels, yields a revenue impact from natural gas production of about 1¼ percent of GDP. In sum, the total annual revenue impact will be less than 2 percent of GDP.

Figure 1.SF.6. U.S. Oil and Gas Production Projections



Sources: U.S. Energy Information Administration (EIA); and IMF staff calculations.

Figure 1.SF.7. Medium-Term[1] Impact of U.S. Energy Boom



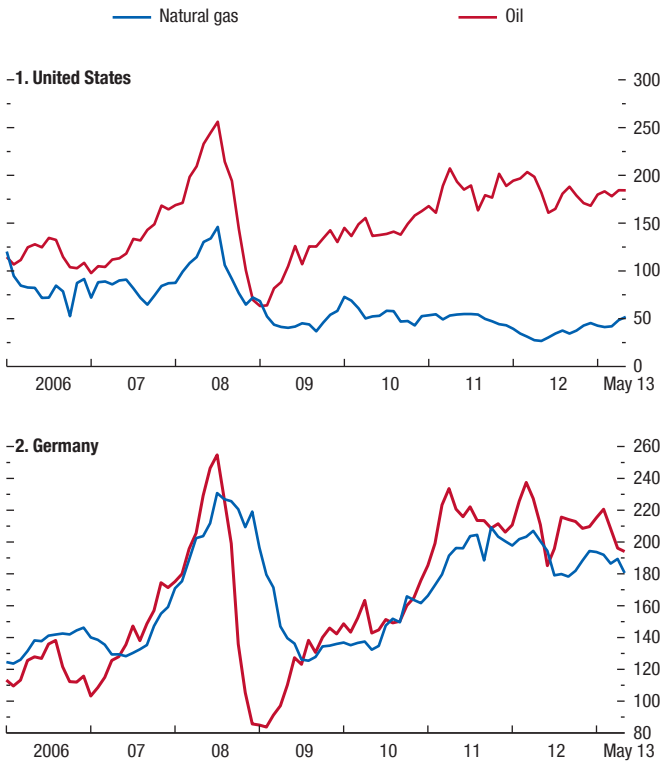
Source: IMF staff calculations.
[1]Medium-term impact refers to impact after 13 years.

higher consumption (anticipating the wealth increase from higher energy production) and investment. The appreciation of the U.S. dollar reduces import prices and also contributes to the increase in the nonenergy balance. Overall, the result is a small decline in the current account balance.

In the case in which the increase in energy production comes as a surprise each year, consumption and investment respond more gradually because households do not anticipate the magnitude of the increase in their wealth and firms do not anticipate the extent of the decline in the cost of production. With domestic demand responding more gradually, the increase in nonenergy imports is also smaller, and it is offset by the increase in the energy balance. Econometric evidence on the impact of giant discoveries of oil and gas on the current account is presented in Box 1.SF.1.

Though its aggregate effects on output are likely to be small, the energy boom has disrupted historical relationships between energy prices. Brent and West Texas Intermediate, two major pricing benchmarks for crude oil, have moved together for three decades, but have diverged in recent years (Box 1.SF.2). Oil and natural gas prices have also moved in tandem within and across

Figure 1.SF.8. Natural Gas and Oil Prices in the United States and Germany
(2005 = 100)



Sources: U.S. Bureau of Labor Statistics; Statistisches Bundesamt; and IMF staff calculations.

countries as a result of substitution and international arbitrage. Since 2009, however, U.S. natural gas prices have decoupled from U.S. oil prices, while prices elsewhere continue to move together, as shown for Germany (Figure 1.SF.8). Restoration of the law of one price could take several years, particularly given regulatory and technological barriers to U.S. exports and the link to oil prices in Asia and Europe.[14]

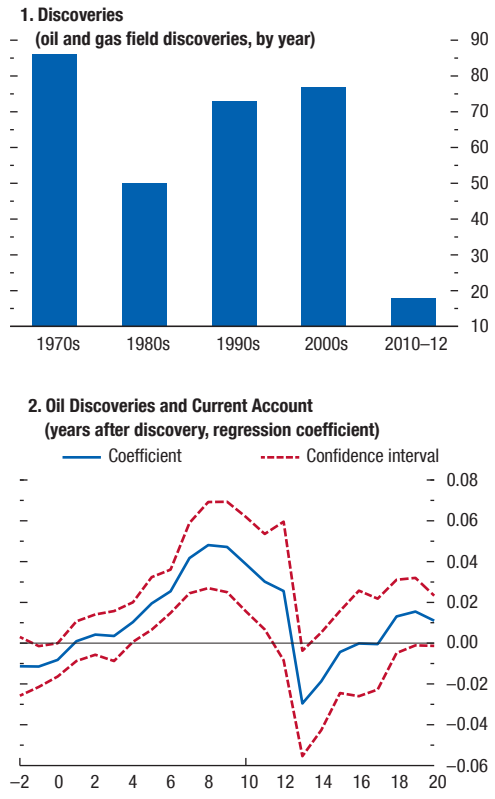
[14]As discussed in Loungani and Matsumoto (forthcoming), over time more consumers will be able to make the initial investment needed to switch their energy sources from crude oil (or coal) to natural gas. Natural gas price differentials across countries will also diminish if other countries start to extract their own shale gas reserves or if environmental concerns slow extraction in the United States. In June 2013, the EIA released estimates suggesting that shale *oil* resources worldwide would add roughly 10 percent to global oil reserves, while shale *gas* resources would nearly double the world's supply of natural gas resources.

Box 1.SF.1. Energy Booms and the Current Account: Cross-Country Experience

Discoveries of giant oil and gas fields—fields containing ultimate recoverable reserves equivalent to at least 500 million barrels—have been relatively widespread across countries since the 1970s. These discoveries constitute a unique source of exogenous future income shocks. Regression results, using a panel of 178 countries over the period 1970 to 2012, show that the effect of these discoveries was first to decrease the current account balance and then to increase it before the effect leveled off (Figure 1.SF.1.1).[1] Hence, the pattern of the effect is similar to the case of the unanticipated increase in energy production shown in IMF Global Economic Model (GEM) simulations. The regression estimates imply that a discovery equal to the size of proven reserves in U.S. unconventional energy in the United States would lead at its peak to about a 0.1 percent of GDP increase in the U.S. current account balance.

The effect thus is small, as also suggested by the GEM simulations. There are cases in which oil and gas discoveries have had larger effects on the current account, but the size of those discoveries was larger than the expected increase in the case of the United States. For instance, the share of North Sea oil discoveries in U.K. GDP was about 6 to 7 percent at its peak. After initially moving in line with the sharp increase and decline in oil revenues, the U.K. current account decoupled from oil revenues, which have remained low and stable at about 1½ percent of GDP since 1990. The impact on the current account was larger in Norway because of the much larger share of the gas and oil extraction sector in the economy—nearly 25 percent—and the country's fiscal policy of keeping most of the oil revenues in a special fund.

Figure 1.SF.1.1. Giant Oil and Gas Discoveries and the Current Account



Source: IMF staff calculations.

The author of this box is Rabah Arezki.

[1]Details are given in Arezki and Sheng (forthcoming).

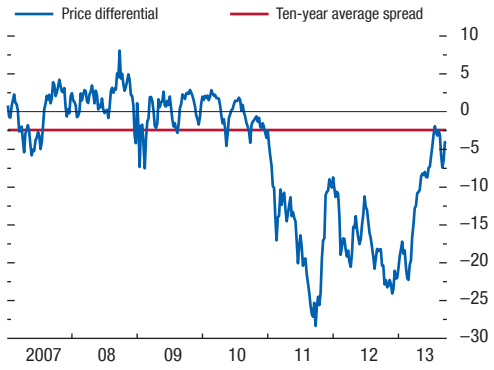
Box 1.SF.2. Oil Price Drivers and the Narrowing WTI-Brent Spread

In recent years, West Texas Intermediate (WTI) prices fell substantially below Brent prices as a supply surge from unconventional energy sources in the United States and Canada, and difficulties in moving this supply to U.S. refining hubs, led to a buildup of inventories. But the differential has narrowed this year (Figure 1.SF.2.1).

To understand fundamental oil price drivers, a sign-restricted structural vector autoregressive model is estimated using four variables: global crude oil production, global industrial production, the real price of Brent crude oil, and Organization for Economic Cooperation and Development crude oil inventories (to proxy speculative demand) for the period 1983:Q1–2013:Q3 (see Beidas-Strom and Pescatori, 2013). Speculation motives include both decisions to adjust oil inventories in anticipation of future price movements and behavior induced by possible mispricing in financial (oil derivatives) markets. Figures 1.SF.2.2 and 1.SF.2.3 show that Brent prices are largely driven by flow demand and speculative demand shocks (blue and green bars, respectively).[1] Brent competes more closely with North and West African and Middle Eastern crude oil varieties, hence its price is more exposed to precautionary demand stemming from geopolitical risk. Risk premiums and the prevailing Brent futures term structure also attract financial investors.

Figure 1.SF.2.1. WTI–Brent Price Differentials

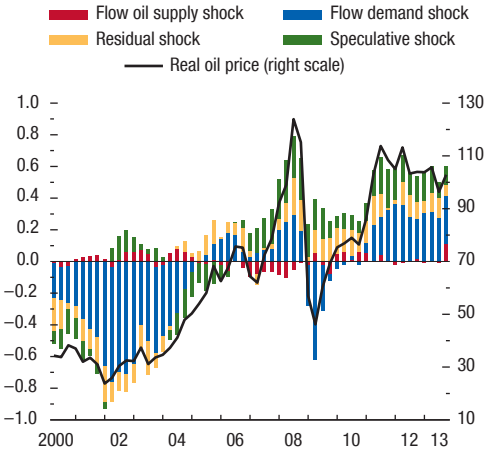
(U.S. dollars a barrel)



Sources: Bloomberg, L.P.; and IMF staff calculations.

Figure 1.SF.2.2. Brent SVAR Historical Decomposition

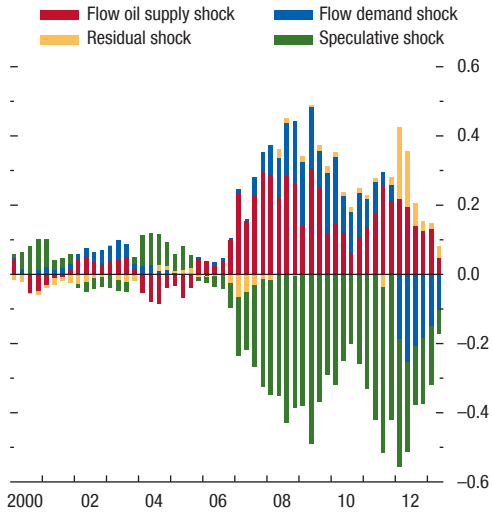
(Left axis: contribution of shocks, percent; right-axis: U.S. dollars a barrel)



Source: IMF staff calculations.
Note: SVAR = structural vector autogression.

Figure 1.SF.2.3. WTI–Brent Differential Historical Decomposition

(Contribution of shocks, percent)



Source: IMF staff calculations.

The author of this box is Samya Beidas-Strom.

[1]If the sum of the bars is increasing over time, shocks exert upward pressure on the oil price, and vice versa.

Box 1.SF.2 *(continued)*

Replacing Brent with WTI prices, the model suggests that before 2007 the drivers of the two leading benchmark prices are almost identical. However, since 2007, WTI prices have been influenced more by global supply conditions (burgundy bars)—particularly the boom in North American supply and crude oil transportation constraints since 2009—and less by speculative demand. More recently, infrastructure bottlenecks have eased (yellow bars) and speculative and seasonal demand increased, raising WTI and narrowing the spread. But this narrowing may not prove durable. Seasonal U.S. demand will dissipate in the third quarter, and sufficient crude oil infrastructure to carry oil from the middle of the United States to the Gulf coast will not be reconfigured and completed until late next year. Therefore, downward pressure on WTI could continue, altering the WTI futures term structure and lowering recent investor interest.

Box 1.1. Taper Talks: What to Expect when the United States Is Tightening

The U.S. Federal Reserve's communication in late May about a future tapering of asset purchases appears to have been a wake-up call to markets that the exceptionally accommodative U.S. monetary policy could soon reach a turning point. By August, U.S. 10-year yields had risen by more than 80 basis points, and many emerging markets experienced capital outflows, higher bond yields, and lower equity prices, which were partly offset by some exchange rate depreciation (see the main text of the chapter). Bond yields declined modestly after the Federal Reserve recently communicated its decision not yet to begin tapering of asset purchases, but they still remain above pre-taper-talk levels.

A key question is how markets will respond when U.S. monetary stimulus is eventually withdrawn. This box sheds light on the question by drawing on previous turning points in U.S. monetary policy since 1990 and assessing whether the consequences for emerging markets may be different this time.[1]

The analysis indicates that no broad-based deterioration in global economic and financial health occurred at the onset of previous episodes of U.S. monetary policy tightening since 1990. Each of the three previous episodes of sustained U.S. federal funds rate hikes—starting in February 1994, June 1999, and June 2004—was motivated by strong economic growth. The international consequences were limited in 1999 and 2004, and global growth continued to be strong. However, the 1994 episode was followed by deteriorating financial conditions in emerging market economies—reflecting some ongoing crises and preexisting imbalances that widened further in the context of fixed exchange rates after interest rates rose globally—and some crises and recessions afterward.

The analysis also suggests that the recent tightening in global financial markets was not exceptional by historical standards. Even in previous episodes, long-term U.S. bond yields rose before policy rates were raised, in anticipation of stronger economic conditions and tighter monetary policy. Still, some similarities between the current and the 1994 episode are a concern. Both involved large capital inflows to emerging market economies prior to the event, cyclical divergences between the U.S. and emerging market economies, and marked declines in equity prices and increases in long-term bonds yields at the onset of the event. However, policy frameworks in emerging market economies are stronger today, with greater exchange rate flexibility and higher foreign exchange reserve buffers. They should, thus, be better prepared to weather a tightening in external financing.

Historical turning points in U.S. monetary policy

This box focuses on the post-1990s period, when U.S. inflation was relatively low and stable, and identifies three distinct phases of U.S. monetary policy tightening (Figure 1.1.1):[2]

- *February 1994 to July 1995:* The federal funds rate, which had been held constant for more than a year, was raised on February 4, 1994, motivated partly by a stronger-than-expected pace of growth of the U.S. economy.[3] Rates were raised by a cumulative 300 basis points within 12 months, to 6 percent from 3 percent. Long-term yields (on 10-year Treasuries) rose sharply until late 1994 but declined thereafter, given stabilized inflation expectations.
- *June 1999 to December 2000:* After continuous rate cuts since the second half of 1998, the first rate hike in the next tightening phase occurred on June 30, 1999. The policy rate was raised by 175 basis points during the next 19 months, to 6.5 percent from 4.75 percent. Long-term yields rose at a slower pace than in 1994 and began declining after six months.
- *June 2004 to August 2007:* The policy rate was raised on June 30, 2004, after rate cuts throughout the previous three years, and gradually increased during the next three years, to 5.25 percent from

The authors of this box are Michal Andrle and Rupa Duttagupta, with support from Shan Chen, Serhat Solmaz, and Bennet Voorhees.

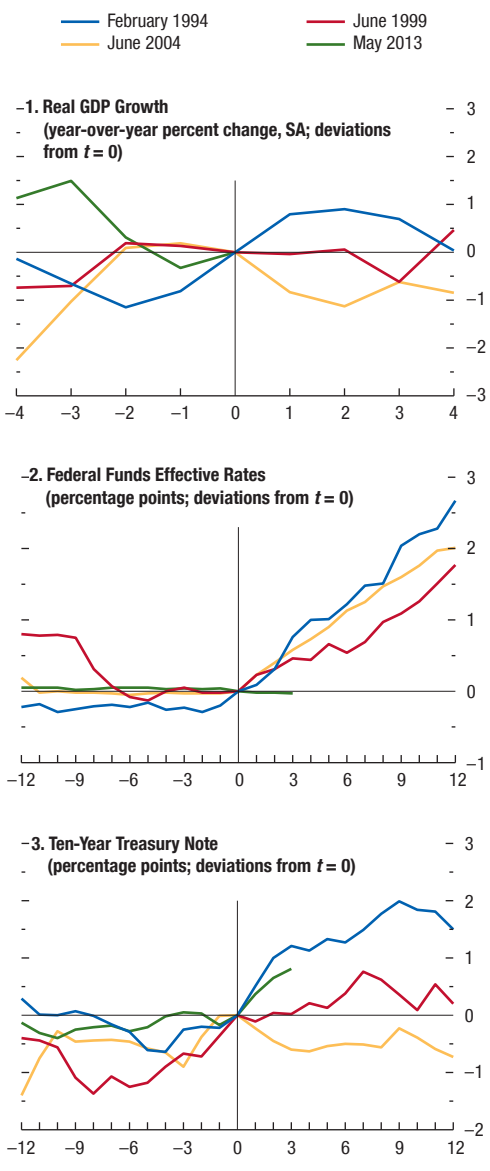
[1]The stylized facts presented here are associations between various indicators and a tight U.S. monetary policy stance and should not be interpreted as the causal effect of the latter on the former. For an identification of the causal effects of a rise in U.S. interest rates, see Chapter 3 of this *World Economic Outlook* (WEO) and Chapter 4 of the April 2011 WEO.

[2]The following criteria are used to identify a tightening phase in U.S. monetary policy: the federal funds target rate is raised after at least six months of unchanged or declining rates, followed by increases for at least six months. Figures 1.1.1, 1.1.2, and 1.1.3 trace the evolution of alternative indicators in the months (quarters) before and after the month (quarter) of the monetary policy turning point.

[3]Inflation was maintained at below 3 percent during this period, and the move to announce the intended federal funds rate established greater credibility and transparency in the policy framework (see Goodfriend, 2003).

Box 1.1 *(continued)*

Figure 1.1.1. U.S. Growth and Financial Indicators



Source: IMF staff calculations.
Note: SA = seasonally adjusted. The *x*-axis for panel 1 (panels 2–3) shows the number of quarters (months) away from time $t = 0$; $t = 0$ is February 1994 (1994:Q1), June 1999 (1999:Q2), June 2004 (2004:Q2), and May 2013 (2013:Q2).

1 percent. However, long-term yields declined through much of this period, a phenomenon famously known as the "Greenspan conundrum."

International economic and financial consequences

Global growth was generally strong in the aftermath of these episodes, although to varying degrees across regions given differences in economic cycles (Table 1.1.1, and Figure 1.1.2, panels 1 and 2):

- In 1994, the U.S. economy was on a cyclical upswing, and its output gap was declining. In contrast, many advanced economies (Japan and advanced Europe) were still recovering at a subdued pace from the recessions of the early 1990s. Their recovery continued at a modest pace through 1995. Growth in emerging markets was buoyant in 1993–94, but with rising overheating pressure in Latin America.[4] Asia largely managed a soft landing in 1995, but growth declined sharply in Latin America.
- In 1999, the U.S. output gap had closed, but there was still economic slack in some advanced economies and in emerging markets recovering from the 1997–99 financial crises.[5] Thus, domestic policies elsewhere remained supportive despite the U.S. tightening, and growth continued to pick up in 2000.
- In 2004, advanced and emerging market economies were broadly synchronized with the U.S. economy. For emerging markets, the U.S. monetary tightening coincided with a gradual deceleration from very strong growth levels achieved earlier.

Gross capital flows to emerging markets declined after U.S. monetary tightening in 1994 and in 1999. Developments in the 1994 episode stand out, however (Figure 1.1.3). Flows had accelerated to sizable levels in the run-up to the episode, in part reflecting increasing financial and capital account liberalization in many countries but also relatively low U.S. interest rates and perceived strong economic fundamentals in emerging markets.[6] Against this backdrop, the capital flow reversals in 1994 coincided with growing domestic vulnerabilities (notably, Mexico) and ongoing crises

[4]For example, many economies in Latin America were characterized by overvalued exchange rates in the context of fixed exchange rate regimes, recent lending booms, widening fiscal and current account deficits, and low foreign reserves (see Sachs, Tornell, and Velasco, 1996).

[5]See Chapter 3 of the October 1999 WEO.

[6]See Calvo, Leiderman, and Reinhart (1996).

Box 1.1 *(continued)*

Table 1.1.1. Real GDP Growth
(Percent)

	1993	1994	1995	1996
World	2.2	3.4	3.3	3.8
Advanced Economies[1]	1.3	3.2	2.7	2.8
Euro Area	–0.8	2.5	2.9	1.5
United States	2.7	4.0	2.7	3.8
EMDEs Including NIEs	3.6	3.8	4.3	5.3
Emerging Asia Including NIEs	8.8	9.3	8.7	8.1
Latin America and the Caribbean	4.0	4.8	1.4	3.6
	1998	1999	2000	2001
World	2.6	3.6	4.7	2.3
Advanced Economies[1]	2.9	3.4	3.8	1.4
Euro Area	2.8	2.9	3.8	2.0
United States	4.5	4.8	4.1	0.9
EMDEs Including NIEs	2.1	3.9	5.9	3.7
Emerging Asia Including NIEs	2.4	6.8	6.8	5.3
Latin America and the Caribbean	2.3	0.1	3.7	0.6
	2003	2004	2005	2006
World	3.8	5.1	4.7	5.2
Advanced Economies[1]	2.1	3.0	2.6	2.8
Euro Area	0.7	2.2	1.7	3.2
United States	2.8	3.8	3.4	2.7
EMDEs Including NIEs	6.1	7.6	7.1	8.1
Emerging Asia Including NIEs	7.6	8.1	8.7	9.6
Latin America and the Caribbean	2.1	6.0	4.7	5.6

Source: IMF staff calculations.
Note: EMDEs = emerging market and developing economies; NIEs = newly industrialized Asian economies (Hong Kong SAR, Korea, Singapore, Taiwan Province of China). Shaded column is year of U.S. monetary policy tightening.
[1]Excluding NIEs.

(for example, a currency crisis erupted in Turkey in late 1993). Overall, there were more financial crises in emerging market and developing economies in the 1994 episode than in other episodes. That said, the frequency of emerging market financial crises was generally high in the early 1990s, even before the rise in U.S. policy rates, according to the financial crisis chronology of Laeven and Valencia (2012). In the 1999 episode, capital flows were small after the Asian and other emerging market financial crises in 1997–98. In the 2004 episode, there was only a short-lived decline in capital flows to emerging markets.

Despite the fall in capital inflows in 1994, real exchange rates depreciated gradually, primarily because many emerging markets maintained pegged exchange rate regimes (Figure 1.1.2, panels 3 and 4). However, in some economies, the pegs could not be sustained after financial and external imbalances started rising with the higher global interest rates, and sharp exchange rate adjustments followed. A prominent example is Mexico, which abandoned its pegged regime in January 1995 during the "tequila" crisis. Real exchange rates were broadly stable in most emerging market economies in 1999 and even appreciated for the floaters during 2004.

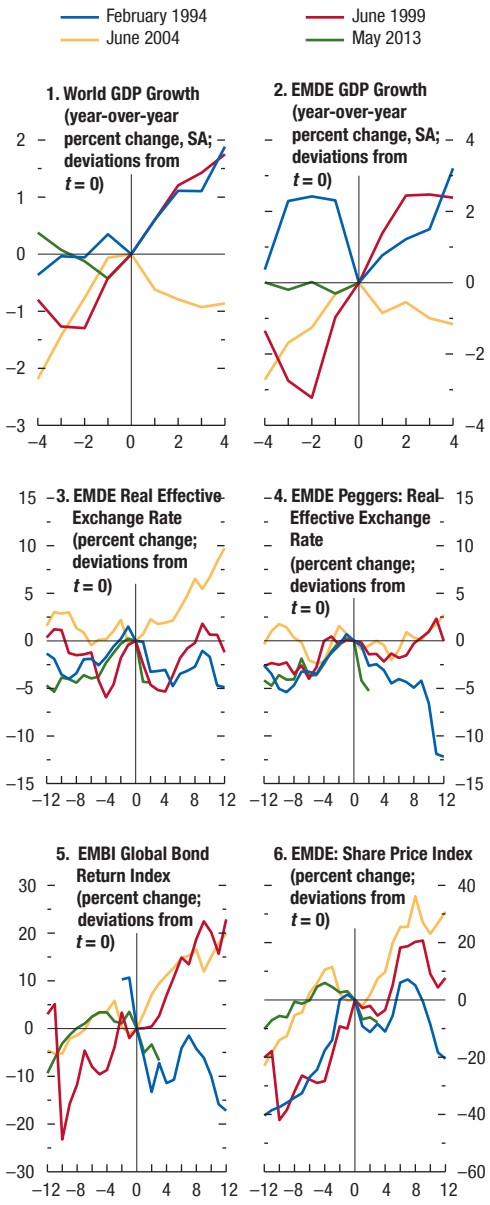
Sovereign bond yields and equity prices deteriorated significantly only in the 1994 episode (Figure 1.1.2, panels 5 and 6). In 1999, emerging market bonds continued to gain ground, and equity prices suffered only a temporary setback. In 2004, bond and equity prices rallied for several months after the U.S. monetary tightening, despite the growth deceleration in emerging markets, likely because their economic fundamentals were perceived to be strong.

The current episode of financial tightening is similar to that of 1994 in many ways. First, capital inflows to major emerging markets prior to the event were sizable. Second, the U.S. long-term yield has risen almost as sharply as it did in 1994, even without a similar rise in the policy rate.[7] Third, global financial market conditions (equity prices, long-term bond prices) deteriorated as well, suggesting that worsening domestic fundamentals were at play. However, one key difference is that, unlike in 1994, large real exchange rate depreciations—close to 5 percent on average since May 2013 compared with virtually no change during a similar period in the 1994 episode—may help mitigate the effects on growth.

[7]However, the underlying factors behind the increase in the 10-year U.S. Treasury bonds may have been different. With the Federal Reserve's unconventional monetary policy largely concentrated on longer-term paper, the yield curve has steepened only beyond the one-year tenor, whereas the 1994 tightening was transmitted across the entire yield curve.

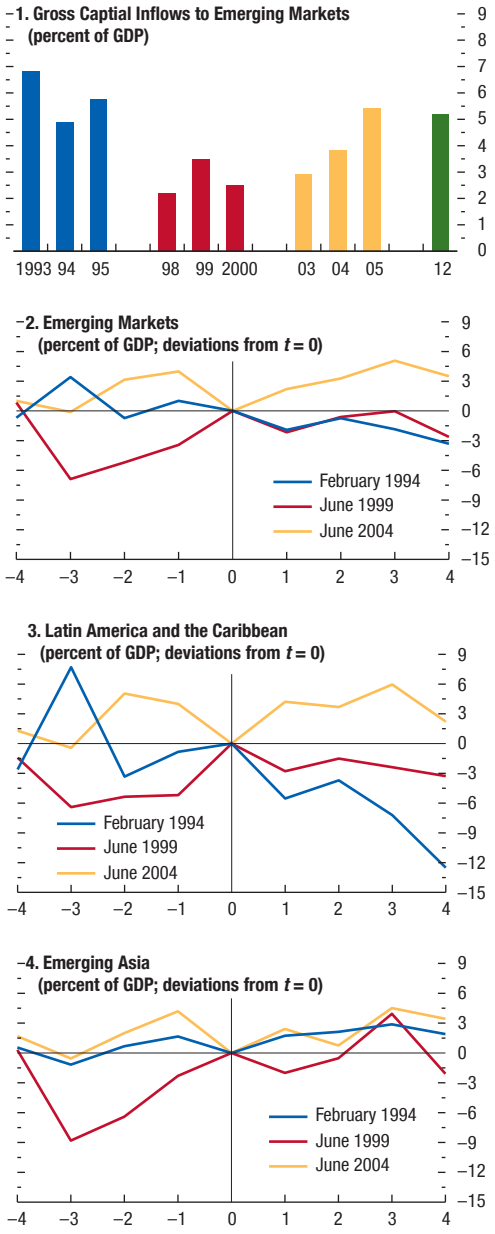
Box 1.1 *(continued)*

Figure 1.1.2. Global Economic and Financial Conditions during U.S. Monetary Policy Tightening



Source: IMF staff calculations.
Note: EMDE = emerging market and developing economy; SA = seasonally adjusted. The *x*-axis for panels 1 and 2 (panels 3–6) shows the numbers of quarters (months) away from time $t = 0$; $t = 0$ is February 1994 (1994:Q1), June 1999 (1999:Q2), June 2004 (2004:Q2), and May 2013 (2013:Q2).

Figure 1.1.3. Gross Capital Inflows to Emerging Markets



Source: IMF staff calculations.
Note: The *x*-axis for panels 2–4 shows the numbers of quarters from time $t = 0$. Sample comprises Argentina, Brazil, Chile, Indonesia, Korea, Mexico, Peru, Philippines, Russia, South Africa, Thailand, and Turkey. Brazil and Russia are excluded from the 1994 episode because of data gaps.

Box 1.1 *(continued)*

Lessons from history

- History suggests that the world economy did not fall apart in previous U.S. monetary tightening episodes. Other than for a few economies, the cross-border consequences were largely benign, and global growth continued to be strong.
- When difficulties arose, as during the 1994 episode, they typically reflected prevailing vulnerabilities that proved to be unsustainable in a changing global environment.
- The potential consequences of the eventual tightening of U.S. monetary policy will depend on its magnitude and pace and on how broadly the tightening affects financial conditions. For instance, although historical trends suggest that the U.S. 10-year sovereign rate would rise by more than 200 basis points to reach close to 5 percent over the medium term, the increase could be smaller if medium-term growth and inflation in the United States do not return to historical averages.

With many emerging market economies slowing after a cyclical peak in 2010–11, they will need to achieve a soft landing as the external financing environment tightens. Many of them have adopted stronger policies during the past decade, have higher reserves, and flexible exchange rate regimes, although in some countries fiscal imbalances have widened in recent years (see the October 2013 *Fiscal Monitor)*, and the share of nonresident holdings of locally issued debt has increased (see the October 2013 *Global Financial Stability Report*). If these economies rebuild their policy buffers while times are still good, and use their exchange rates as shock absorbers while containing inflation and financial stability risks, they should be better able to endure a tightening in financial conditions than in 1994.

Box 1.2. What Explains the Slowdown in the BRICS?

For some time, global growth has been boosted by the BRICS—Brazil, Russia, India, China, and South Africa. But over the past couple of years, growth in these economies has begun to sputter, raising some fundamental questions. Why have the BRICS simultaneously slowed? Are the slowdowns merely cyclical or are they structural, with more profound implications for the global economy?

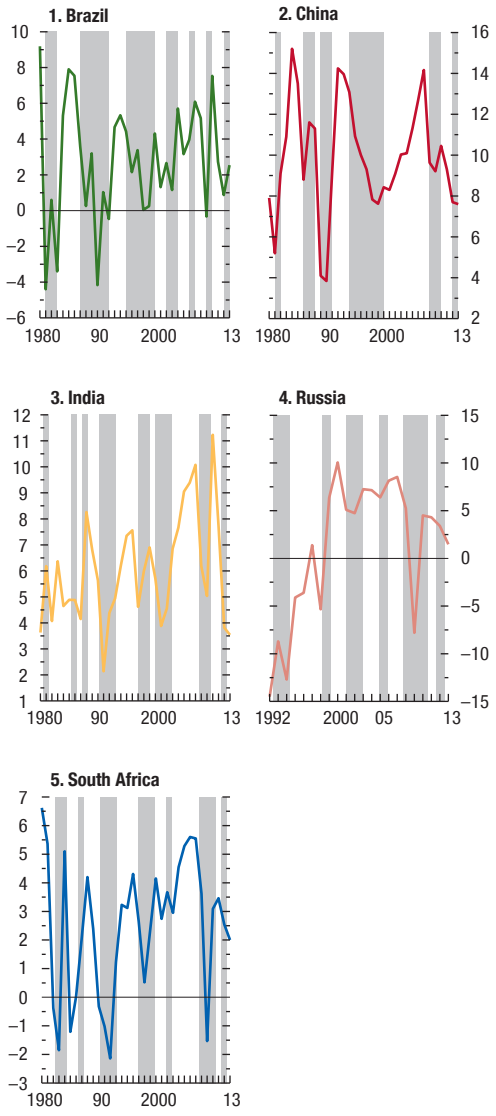
This box uses a new model-based approach to shed some light on these questions. Broadly, the analysis indicates that cyclical factors have played a large, perhaps underappreciated role. At the same time, potential growth *has* fallen, but the IMF staff expects the associated drop in growth rates to prove durable in only two economies: China and Russia.

Without doubt, the slowdown in the BRICS has been quite sizable. Growth for South Africa, China, Russia, and India is projected in the *World Economic Outlook* (WEO) to be 1½ to 4¼ percentage points lower in 2013 than it was in 2011.[1] Brazil's economy has slowed only marginally over this period, but only because growth fell by nearly 5 percentage points in 2011.

That said, the slowdowns are hardly unprecedented, as shown in Figure 1.2.1. For some of the BRICS, they are not even unusual. Brazil's latest growth slowdown is actually mild compared with earlier two-year slowdowns (since 1980, shaded periods). For South Africa, the slowdown is smaller than two-thirds of the earlier slowdowns. Similarly, for China, the current slowdown is (so far) smaller than the decelerations seen in the late 1980s and 1990s.

Perhaps the main reason the current slowdowns have attracted so much attention is that their severity was unanticipated. The BRICS economies were always expected to decelerate as they settled back to more moderate growth rates from the bounce-back levels that prevailed after the global financial crisis, but growth rates have fallen much further than expected. Comparing the fall 2011 with the fall 2013 WEO, projected growth in 2013 has been marked down 1½ to 2½ percentage points for Brazil, China, Russia, and South Africa and about 4½ percentage points for India. Does this mean that potential growth has fallen?

Figure 1.2.1. Real GDP Growth
(Percent; shaded areas indicate years of growth slowdown)[1]



Source: IMF staff calculations.
[1]A year of growth slowdown occurs when the difference in growth rates between year *t* and year *t* – 2 is negative. Growth is shown on a calendar year basis.

The authors of this box are Patrick Blagrave, John Bluedorn, Joshua Felman, Roberto Garcia-Saltos, Douglas Laxton, and Junior Maih, with support from Daniel Rivera-Greenwood and Fan Zhang.

[1]Growth throughout the box is calculated and shown on a calendar year basis. Elsewhere in the WEO, growth figures for India are on a fiscal year basis.

Box 1.2 *(continued)*

Table 1.2.1. The Slowdown of Real and Potential Growth in the BRICS

Economy	Year	Real Growth	Potential Growth	Cyclical Growth	Output Gap
Brazil	2011	2.7	3.2	–0.5	0.8
	2013 Projection[1]	2.7	2.8	–0.1	–1.1
	Change	0.0	–0.4	0.4	–1.8
China	2011	9.3	8.9	0.4	0.9
	2013 Projection[1]	7.7	8.0	–0.3	–0.6
	Change	–1.6	–0.9	–0.7	–1.4
India	2011	7.4	7.3	0.2	0.6
	2013 Projection[1]	4.3	5.7	–1.4	–1.9
	Change	–3.1	–1.6	–1.6	–2.7
Russia	2011	4.3	2.5	1.7	–0.8
	2013 Projection[1]	1.2	2.0	–0.8	–0.7
	Change	–3.1	–0.5	–2.6	0.1
South Africa	2011	3.5	2.6	0.9	–0.3
	2013 Projection[1]	2.1	2.4	–0.3	–0.5
	Change	–1.4	–0.2	–1.2	–0.2

Source: IMF staff calculations.

[1] Real growth in 2013 is the forecast from the IMF's Global Projection Model (GPM) as of September 13, 2013, which may differ from the official WEO forecast. See Carabenciov and others (2013) for details on the GPM.

Note: Growth rates are shown on a calendar year basis. Estimates of potential and cyclical growth and the output gap come from the multivariate filter described in the text. Real and potential growth are defined as the year-over-year change of the underlying log-level series (× 100). Cyclical growth is defined to be the difference between real and potential growth. Numbers need not sum exactly due to rounding. The output gap is given by the difference between log potential output and log real output (× 100); a negative number indicates deflation pressure. Change indicates the difference between the 2013 and 2011 estimates.

Before attempting to answer this question, the concept of potential growth needs to be clarified. Following Okun (1962), potential output is taken to be the level of real output consistent with stable inflation; its growth rate, then, is potential growth. There are alternative concepts of potential output, including, among others, the trend component of output, typically identified using purely statistical methods like the popular Hodrick-Prescott filter, and the maximum feasible level of output, computed using a supply-side aggregate production function. The potential output concept selected, and its associated estimation approach, will depend on the particular application and data availability.[2]

Unlike a purely statistical concept of potential output, Okun's definition has economic content because it relates the output gap (the difference between potential and actual output) to the behavior of inflation. When there is slack in the economy (a negative output gap), inflation will tend to fall, while if the economy has little spare capacity (a positive output gap), inflation will tend to rise. This Phillips-curve-like relationship is a key component of the model-based approach used here to estimate potential output.[3] Put simply, if growth is slowing but inflation is not, this suggests that potential growth has fallen.

The inflation-output gap relationship plus descriptions of how potential output and the output gap may evolve over time together form a simple macroeconomic model for each economy. Using the model's structure, a multivariate filter is constructed that leverages the information in observed output, inflation, and expectations of inflation and growth (from *Consensus Forecasts)* to infer potential growth, both historically and in real time.[4] The cyclical component of real growth is then simply the difference between real growth and estimated potential growth. The multivariate filter's limited data requirements mean that it can be estimated for a wide array of economies.

Table 1.2.1 displays the multivariate filter's estimates, and Figure 1.2.2 shows them graphically. Note that the 2013 growth projections differ from those

[2]The potential output concept and approach followed here need not coincide with that used elsewhere. For example, IMF country desks typically estimate potential output using a mixture of judgment and empirical methods tailored to a specific purpose, such as the assessment of a broader set of imbalances than that signaled by variable inflation. For example, see Box 8 in IMF (2012c) for estimates of potential output based on a production function approach.

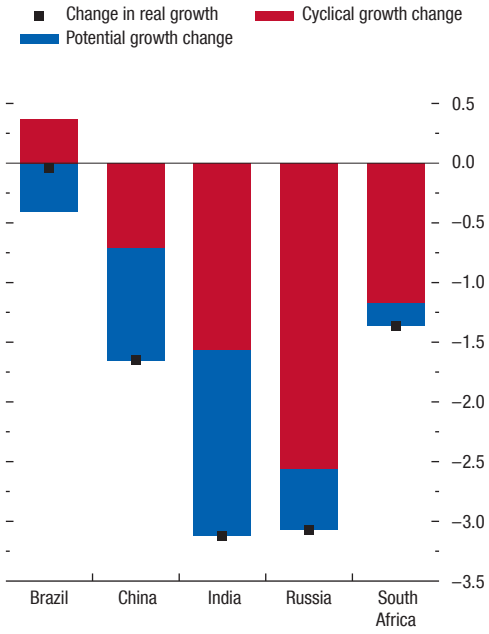
[3]The Phillips curve, named in light of the seminal work by Phillips (1958), traditionally relates the inflation rate to the deviation of the unemployment rate from its natural rate (the unemployment gap). Substituting in Okun's Law (1962), which relates the unemployment gap to the output gap, we recover the relationship that we use in our model-based approach.

[4]Inflation and growth expectations from *Consensus Forecasts* help anchor the model, reducing its sensitivity to data revisions and extensions (the famous endpoint problem that afflicts two-sided filters). See Benes and others (2010) for a more detailed discussion of the multivariate filter's structure and how it is estimated.

Box 1.2 *(continued)*

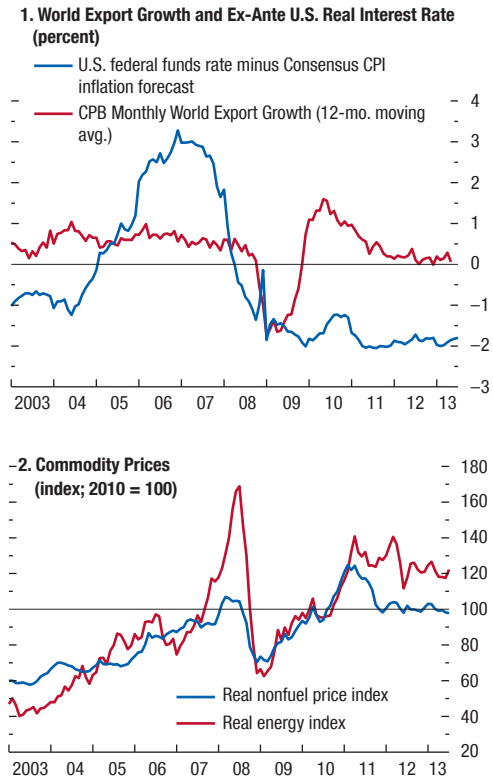
Figure 1.2.2. Composition of 2011–13 Growth Changes[1]

(Percentage points)



Source: IMF staff calculations.
[1]Multivariate filter estimates of the composition. See Table 1.2.1.

Figure 1.2.3. World Export Growth, U.S. Real Interest Rate, and Commodity Prices



Sources: Consensus Economics; CPB Netherlands; Haver Analytics; IMF Primary Commodity Price System; and IMF staff calculations.
Note: CPI = consumer price index.

of the WEO, as they are based on the IMF's Global Projection Model. Also note that India's data are for the calendar year, whereas elsewhere in the WEO they are on a fiscal year basis. Contrary to popular impression, the cooling down of cyclical factors is an important part of the story, accounting for the bulk of the deceleration in Russia and South Africa, and about half of it in India and China.

The role of unwinding cyclical factors can also be seen in the estimated output gaps. Although growth in the BRICS had already moderated in 2011 from the 2010 bounce-back, output was still estimated to be nearly 1 percent above potential in Brazil, China, and India. Only in Russia and South Africa was output estimated to be below potential, as it had been ever since the global recession hit in 2009. In 2013, by contrast, the output gap is assessed to be negative in all the BRICS. The gap is largest for Brazil and India (between 1 and 2 percent of potential), and smallest for China, Russia, and South Africa (at about ½ percent of potential).

What explains the simultaneous, large cyclical downturn in these economies? Most likely, common factors have been at work (Figure 1.2.3). In the wake of the global financial crisis, authorities in these economies provided exceptionally large monetary and fiscal stimulus, notably in China but also in the other economies. At the same time—partly as a result of the BRICS' stimulus—the global economy started to recover, providing further lift, as exports rebounded sharply, global interest rates fell, and commodity prices increased, benefiting Russia (energy) and Brazil and South Africa (nonfuel commodities). But starting in 2011, these factors began to fade: the effects of the stimulus wound down, global export demand slowed, and commodity prices began to weaken.

Coincident with the waning of cyclical factors, potential growth began to fall. The reduction is about ¼ to ½ percentage point for South Africa, Russia, and Brazil and about 1 to 1½ percentage points for China

Box 1.2 *(continued)*

and India. These last two are significant reductions. For the limited time span over which potential growth estimates from the multivariate filter exist (basically, post-2000), the declines in China and India are among the largest these countries have experienced.

These reductions in potential growth point to some serious structural impediments. For example, India's potential has been undermined by supply bottlenecks arising from problems in the regulatory framework for mining, energy, telecommunications and other sectors; a consequent slowdown in permits and project approvals; and overstretched corporate balance sheets.

Still, the reductions in potential growth need to be placed in context. They do not necessarily imply that there has been a permanent fall in the longer-term, steady-state growth rate. That is because potential growth can and does vary from year to year, reflecting the evolution of short-term aggregate supply. Consequently, to assess whether the recent reductions in growth are expected to last, information from outside the model needs to be brought to bear. The five-year-ahead WEO forecasts provide such an insight. For Brazil, India, and South Africa, these show that growth is projected to remain roughly in line with (or higher than) their average of the past 15 years (Table 1.2.2). There are two exceptions, however: China and Russia, where growth is forecast to be markedly lower.

Why are China's and Russia's longer-term growth rates expected to fall? In both cases, it is essentially because time is running out on their current growth model. So far, China has relied on extensive growth, with policies devoted to expanding the economy through capital accumulation and the migration of labor from the countryside to urban factories.[5] But the extraordinarily high rates of investment, nearly half of GDP, have resulted in excess capacity and diminishing returns. At the same time, demographic trends imply that the labor force will start declining after 2014, with surplus labor becoming exhausted around 2020. Moreover, total factor productivity growth will likely decline as China progresses toward the ranks of high-income countries. As a consequence, without fundamental reform to rebalance the economy toward consumption and stimulate productivity growth through deregulation, growth is likely to slow considerably.

Table 1.2.2. Five-Year-Ahead Forecast Growth and Average Growth from 1998–2013 in the BRICS
(Percentage points)

Economy	Average Growth (1998–2013)	Five-Year-Ahead Forecast Growth
Brazil	2.9	3.5
China	9.6	7.0
India	6.9	6.7
Russia	4.4	3.5
South Africa	3.2	3.5

Source: IMF staff calculations.
Note: Five-year-ahead forecast growth is from the October 2013 WEO (estimate for 2018 growth; for India, shown on a fiscal year basis).

The story in Russia is similar.[6] For some time, the country has been held back by inadequate physical infrastructure, including the transportation and electricity networks; overreliance on commodities; and a weak business climate. The economy has nonetheless managed to grow, on the back of rising oil prices and by using up spare capacity. But this model now seems exhausted, and growth will be further constrained by negative demographics.

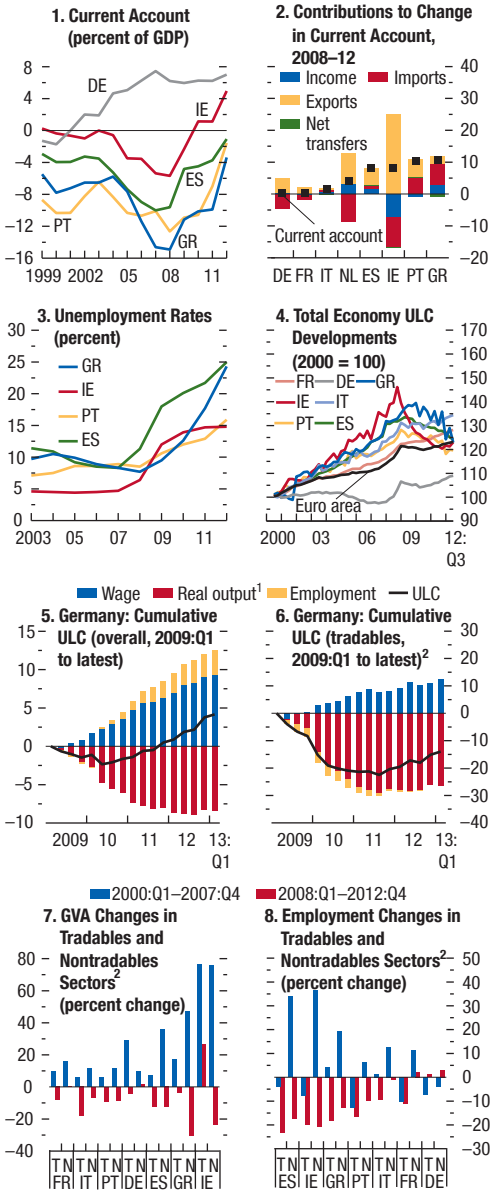
We are now in a position to answer the question posed at the outset: is the slowdown structural or cyclical? It seems that much of the fall in growth can be attributed to an unwinding of earlier positive cyclical factors. Potential growth has also deteriorated. But only China and Russia are expected to have persistently lower rates of economic growth.

[5]See Box 5 in IMF (2013h) for an analysis of the long-term challenges that China is facing.

[6]See IMF (2012d) for deeper discussion of the structural issues confronting Russia.

Box 1.3. External Rebalancing in the Euro Area

Figure 1.3.1. Developments in External Balance



Sources: Eurostat; Haver Analytics; and IMF staff calculations.
Note: DE = Germany; ES = Spain; FR = France; GR = Greece; IE = Ireland; IT = Italy; NL = Netherlands; PT = Portugal; GVA = gross value added; T = tradables; N = nontradables; ULC = unit labor cost.
[1]Negative sign indicates increase in real output.
[2]Tradables sectors include manufacturing (industry, excluding construction for Greece). Nontradables sectors include construction; trade, travel, accommodation, and food; financial; insurance; and real estate.

Throughout the financial crisis, large external imbalances within the euro area have been a source of concern, notwithstanding substantial declines. In particular, progress has been asymmetric and has not been accompanied by a return to internal balance. The asymmetry relates to the fact that current account balances in member countries with external deficits have improved significantly amid market pressure, whereas current account surpluses in other member countries have not declined because of sluggish domestic demand (Figure 1.3.1, panels 1 and 2). Consequently, the euro-area-wide current account position has reversed into surplus. As for internal balance, output remains below potential and unemployment rates are close to record highs in deficit countries, implying that further substantial adjustment is needed for external balance to be maintained when the crisis is over (Figure 1.3.1, panel 3).

This box reviews progress on external rebalancing in the euro area and assesses how much further the adjustment process needs to go—particularly, in deficit economies—to restore both internal and external balance.[1] Its main conclusion is that continued adjustment by deficit countries ("internal devaluation") is needed to bolster their external competitiveness and to prevent a reemergence of large current account deficits as their economies recover. Meanwhile, growth in surplus economies should be more domestically driven. Stronger domestic demand in surplus economies is critical to support stronger demand in the euro area as a whole and help sustain a rebound in exports from deficit economies.

In the context of the euro area, relative changes in the competitiveness of deficit countries have to take place through changes in relative prices, without possible adjustments in the nominal exchange rate at the country level. These changes involve two dimensions: (1) a fall in the price of nontradable goods relative to tradable goods to help reorient domestic production toward tradables; and (2) a decline in the price of domestic tradable goods relative to foreign tradable goods to help boost external competitiveness and exports. In other words, a relative price adjustment with respect to trading partners would bolster

The authors of this box are Joong Shik Kang, Jay Shambaugh, Thierry Tressel, and Shengzu Wang, with support from Tingyun Chen.

[1]See IMF (2013e) and Kang and others (forthcoming) for more detailed discussions.

Box 1.3 *(continued)*

the competitiveness and health of the external sector (external balance), while the reallocation of resources from the nontradables to the stronger tradables sectors would stimulate the overall economy to help it reach full employment (internal balance). In monetary unions that are also organized as banking and fiscal unions (unlike the euro area currently), greater risk sharing also mitigates the impact of current account imbalances among member countries on macroeconomic and financial stability.

Progress in reducing the relative prices of nontradable and tradable goods[2]

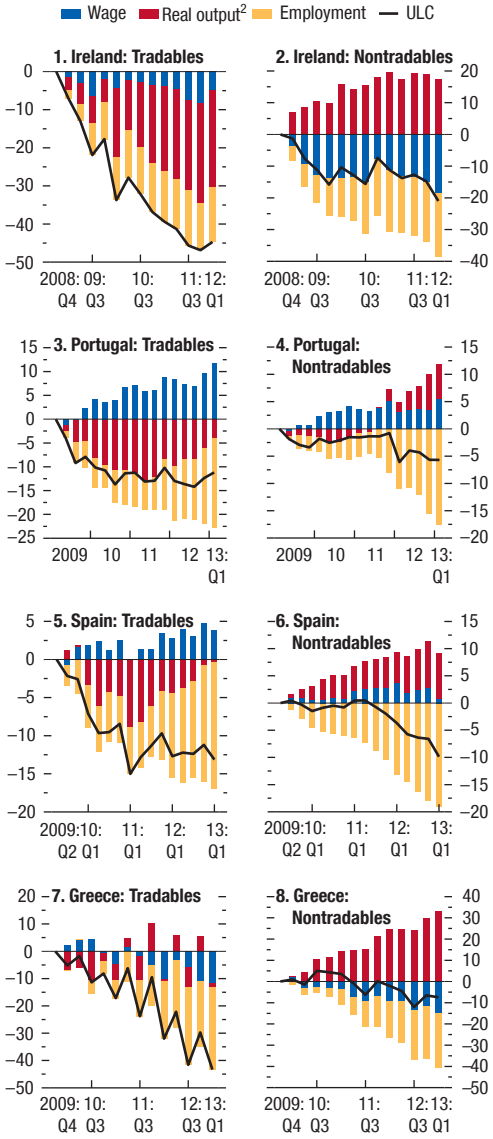
Some adjustment has occurred through a lowering of costs (Figure 1.3.1, panel 4). Unit labor costs have fallen significantly in deficit countries since they began adjustment, with more substantial adjustments in countries such as Greece and Ireland, on the back of both productivity gains (as labor shedding generally exceeded the decline in output) and wage declines (Figure 1.3.2). During this period, overall unit labor costs in Germany increased moderately, which helps rebalancing (Figure 1.3.1, panels 5 and 6).

In terms of the reallocation of resources between sectors, the dynamics of adjustment show significant variation among deficit countries (Figure 1.3.1, panels 7 and 8). Ireland, where unit labor costs started to decline in both the tradables and nontradables sectors earlier than in the other euro area members, has begun to experience a recovery of output in the tradables sector, but it has not yet led to improved wages and employment (Figure 1.3.2, panels 1 and 2). In Portugal and Spain, output fell in the recent period and employment has continued to decline, with little in the way of wage cuts until recently (Figure 1.3.2, panels 3–6). In Greece, adjustments are being made through wage cuts and labor shedding in the absence of output recovery (Figure 1.3.2, panels 7 and 8). Overall, there have been no output gains except in Ireland, which reflects in part the general collapse of domestic demand in the euro area, and employment remains below precrisis levels in both the tradables and nontradables sectors.

[2]The four deficit countries (Greece, Ireland, Portugal, Spain) with the largest precrisis external deficits as of the end of 2007 are the focus of this detailed relative price adjustment analysis.

Figure 1.3.2. Cumulative Unit Labor Cost Adjustment

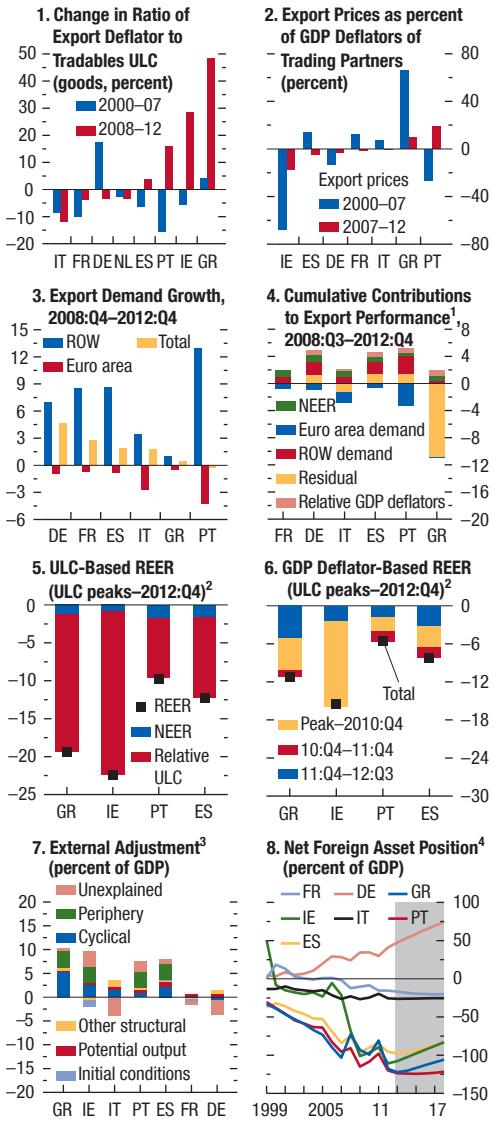
(Percent, peak to latest)[1]



Sources: Eurostat; Haver Analytics; and IMF staff calculations.
Note: Tradables sectors include manufacturing (industry, excluding construction for Greece). Nontradables sectors include construction; trade, travel, accommodation, and food; financial; insurance; and real estate.
[1]Peaks are 2009:Q4 for Greece, 2008:Q4 for Ireland, 2009:Q1 for Portugal, and 2009:Q2 for Spain (based on ULCs). Latest is 2013:Q1.
[2]Negative sign indicates increase in real output.

Box 1.3 *(continued)*

Figure 1.3.3. Export Performance and External Adjustment



Sources: Eurostat; Haver Analytics; IMF, *Direction of Trade Statistics;* and IMF staff estimates.
Note: DE = Germany; ES = Spain; FR = France; GR = Greece; IE = Ireland; IT = Italy; NL = Netherlands; PT = Portugal; NEER = nominal effective exchange rate; REER = real effective exchange rate; ROW = rest of the world; ULC = unit labor cost.
[1]IMF staff estimates are based on export regression analysis.
[2]Peaks are 2009:Q4 for Greece, 2008:Q4 for Ireland, 2009:Q1 for Portugal, and 2009:Q2 for Spain (based on ULCs). Latest is 2013:Q1.
[3]Contributions to change in current account, 2007–12. IMF staff estimates are based on current account regression analysis.
[4]Net foreign asset position in percent of GDP implied by WEO projections, assuming no future valuation effects.

Progress in improving the price of tradables relative to trading partners

In the wake of these cost adjustments, export price competitiveness has started to improve, although modestly. This is because in Greece, Ireland, Portugal, and to some extent in Spain, the margins of exporters (export prices relative to unit labor costs) have risen since the crisis. This suggests that firms in the tradables sector have started to rebuild their profitability, which should increase the attractiveness of the tradables sector and shift production toward export-oriented sectors (Figure 1.3.3, panels 1 and 2).

Export recovery after the crisis has benefited from these relative price adjustments as well as from strong export demand from outside the euro area. An econometric analysis of quarterly exports between the third quarter of 2008 and the fourth quarter of 2012 shows that external demand from the rest of the world has so far been the main driver of export performance, contributing about 40 to 50 percent of the export recovery in Germany and Spain and up to 140 percent in Portugal (Figure 1.3.3, panels 3 and 4). However, external demand within the euro area has been so weak that it had a negative impact on export performance. This negative impact was particularly large in Italy and Portugal.

Export recovery has also been helped by domestic price adjustment relative to trading partners. Real effective exchange rates (based on both unit labor costs and GDP deflators) have depreciated significantly (Figure 1.3.3, panels 5 and 6). The conclusion is that adjustment efforts are starting to pay off. Meanwhile, Germany's exports also benefited from a decline in its GDP deflator relative to its trading partners.

However, one question remains: how much of the current account adjustments in the euro area will be lasting? In other words, does the adjustment reflect mainly structural improvements or just cyclical factors driven by the large increase in output gaps? A method building on the IMF's 2013 External Balance Assessment analysis suggests that cyclical factors explain a significant share of the current account reversals in these economies (especially in Greece and Ireland), whereas the impact of measured structural factors (potential output, demographics, and the like) has generally been modest except in a few countries, including Germany (Figure 1.3.3, panel 7).The adjustment in the periphery of the euro area also involved a number of common mechanisms—including the sharp

Box 1.3 *(continued)*

reversal in capital flows following the crisis—that arguably reflect both structural and cyclical driving forces. The implication is that current account deficits could widen again significantly when cyclical conditions, including unemployment, improve, unless competitiveness improves further.

In the future, it will be very challenging to reduce external vulnerabilities by relying on net foreign assets to converge to more stable levels. Reducing net external liabilities to levels considered healthy elsewhere would likely require much larger relative price adjustments than implied by the need to reverse past unit labor cost appreciation or to achieve current account surpluses. Under the baseline *World Economic Outlook* projections, without valuation effects, the net foreign asset positions of Greece, Ireland, Portugal, and Spain are expected to remain below minus 80 percent in 2018, implying that it will take a long time to undo the deterioraration of the net foreign asset position during 2000–12. Germany is expected to continue to accumulate external surpluses (Figure 1.3.3, panel 8).

Box 1.4. Abenomics: Risks after Early Success?

"Abenomics" is an ambitious new policy framework announced for Japan in December 2012, which has three main elements or "arrows": monetary easing, flexible fiscal policy, and structural reforms. The goals of Abenomics are ending deflation, raising growth in a durable manner, and reversing the rising debt. The initiative has already buoyed Japan's near-term outlook, but medium-term inflation expectations are still substantially below the 2 percent inflation target, highlighting risks that the target will not be met by 2015 as currently envisaged without more policy stimulus. But more stimulus could jeopardize the achievement of the other main elements and could also set back much-needed reductions in fiscal vulnerability. This box analyzes these risks to Abenomics and reviews its achievements so far. There are two key takeaways. First, full and timely implementation of the three arrows of Abenomics is essential to meet its overall goals. Second, structural reforms will be critical to open up the additional policy space that may be needed to bring inflation up to the 2 percent target.

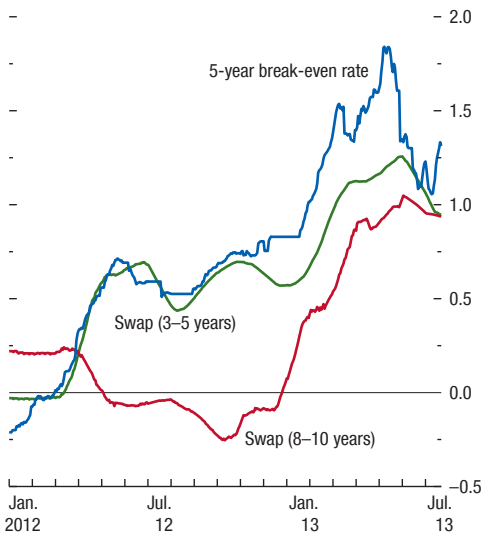
The first arrow of the new policy framework is is the *new* Quantitative and Qualitative Monetary Easing (QQME) framework, with which the Bank of Japan seeks to end deflation and achieve its 2 percent inflation target by 2015. The second arrow is flexible fiscal policy: (1) a stimulus amounting to 1.4 percent of GDP in new debt-financed spending in 2013–14; and (2) fiscal consolidation starting in 2014, with a goal of halving the primary deficit by fiscal year 2015 from its fiscal year 2010 level of 6.6 percent of GDP and achieving a primary surplus by fiscal year 2020. The third arrow is a combination of structural reforms, as part of a comprehensive growth strategy that aims to boost investment, employment, and productivity.

The new policy framework had an immediate financial market impact. From December 2012 to June 2013, the Nikkei equity price index rose by about 30 percent and the exchange rate depreciated strongly, in real effective terms, by 17 percent. Bond yields declined briefly to historic lows, but subsequently rebounded slightly.

The package has already lifted growth and boosted the near-term outlook. IMF staff estimates suggest that the new policy framework explains between a third and half of the 3.9 percent GDP growth (seasonally adjusted annual rate) in the first half of 2013, after two quarters of negative or low growth. The total effect of the package on real GDP growth for 2013 as a whole is expected to be about 1.3 percentage points. Some of this increase is due to wealth effects from rising equity prices, which are estimated to increase consumption and output by about 0.3 and 0.2 percent, respectively. Another 0.4 percentage point of the output effect is due to the depreciation of the exchange rate; the remainder represents effects through other channels. Reflecting these developments, the current *World Economic Outlook* baseline projections incorporate the effects of aggressive monetary easing as well as expected fiscal policy adjustments through 2015.

Despite these achievements, there is no guarantee of the longer-term success of Abenomics, particularly in increasing inflation. Although medium-term inflation expectations increased, they are still below the 2 percent inflation target (Figure 1.4.1).[1] In an

Figure 1.4.1. Inflation Expectations[1]
(Year-over-year percent change)



Source: IMF staff calculations based on data from Bloomberg, L.P.
[1]Estimated as a one-month moving average of implied consumer price index based on inflation swap bid and ask prices.

The authors of this box are Dennis Botman, Benjamin Hunt, Zoltan Jakab, and René Lalonde.

[1]Survey-based measures show some modest increase in inflation expectations. The one-year-ahead measure increased to

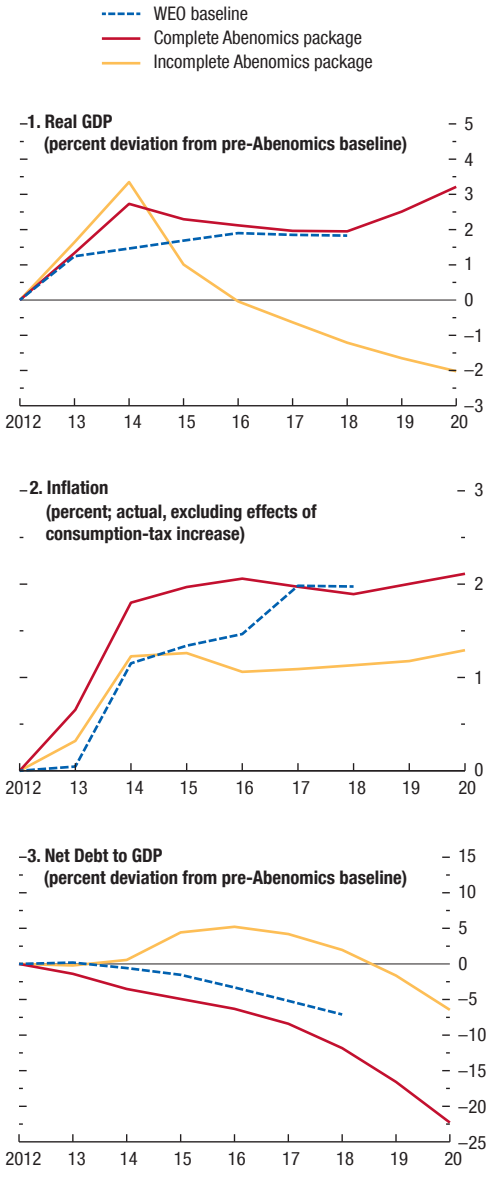
Box 1.4 *(continued)*

environment of disinflation, medium-term inflation expectations are often slow to adjust, particularly when accompanied by low growth and high unemployment. Similarly, nominal wages have not yet started to rise, which is not unexpected, given lags due to existing labor contracts and other factors.

The critical question therefore is whether Japan will achieve and sustain the high growth that will likely be needed to overcome deflation. If not and if inflation expectations fail to increase further, more policy stimulus will be needed. If the scope for more monetary policy stimulus is limited, this will mean additional fiscal measures. But such measures require fiscal space, and there are few degrees of freedom for implementing Abenomics. Increasing the consumption tax rate in two stages (in 2014 and 2015), as envisaged before Abenomics, is essential to containing fiscal vulnerability. But higher consumption taxes could hurt growth and inflation expectations, even though activity is expected to remain robust—with an expected pickup in private investment and given the relatively low value-added tax multiplier—leading to delays in hitting the inflation target. Substantially slower growth could necessitate growth-friendly temporary fiscal measures (for example, temporary targeted transfers), provided they are accompanied by a credible medium-term plan ensuring fiscal sustainability.

To analyze the risks to Abenomics, the IMF staff used the IMF's new G20 Model (G20MOD) to compare the potential implications of a scenario in which the three arrows are fully implemented with those of a scenario in which they are not.[2] Both scenarios include adoption of a medium-term fiscal consolidation plan with adjustment of 1 percent of GDP each year after 2015, and the comparison is relative to pre-Abenomics baseline projections.[3]

Figure 1.4.2. Effect of Abenomics under Various Scenarios



Source: IMF staff estimates.

- In a *complete Abenomics scenario,* growth-related structural reforms boost investment and growth. Trend growth increases from 1 to 2 percent. With expectations of higher growth, inflation expectations rapidly align with the new inflation target, and inflation rises to 2 percent by 2015. Growth

about 1 percent, but this could also reflect the anticipated rise in the value-added tax. Medium-term expectations have not changed significantly.

[2]The scenarios discussed here expand on those in the 2013 IMF spillover report (IMF, 2013a). They now include sticky inflation expectations.

[3]Another scenario, which may appear unlikely in light of Japan's recent history of low or negative inflation, is analyzed in more detail in the October 2013 *Global Financial Stability Report*. In this scenario, inflation expectations increase above the target and become less anchored if fiscal consolidation is half-hearted and the risk premium on government debt rises sharply. In such a case, the central bank could encounter a form of fiscal dominance, in which it would be unable to tighten policy as much as it would otherwise prefer.

Box 1.4 *(continued)*

reforms and fiscal consolidation are mutually reinforcing. Output is substantially higher than projected under the medium-term path before Abenomics, while the public-debt ratio starts to fall rather than increasing further.

- In an *incomplete Abenomics scenario* without growth-related structural reforms, investment and growth are lower. In addition, inflation expectations respond more sluggishly to economic conditions. In this environment, the authorities need to adopt additional fiscal stimulus to close the output gap and boost inflation in the near term. But this requires more fiscal adjustment later, partly because long-term interest rates rise by more, due to higher public financing requirements and higher risk premiums. The outcome is an eventual decline in the public-debt ratio to below the pre-Abenomics baseline. But output would remain below the pre-Abenomics baseline, and the 2 percent inflation target would be missed in the medium term. In the absence of more fiscal adjustment, debt would rise further, increasing the risk of a spike in bond yields and threatening financial stability.

The simulations also suggest that negative spillover effects of Abenomics are likely to be mild. The depreciation in the exchange rate attributable to the QQME has a very small negative impact on short-term growth in the rest of the world. That said, the negative impacts are limited to a few countries (for example, China, Germany, Korea) and are on the order of 0.1 and 0.2 percentage point of GDP in the near term. Moreover, should the broader Abenomics package be successful, it would have clear positive net growth spillovers over the longer term if implemented completely. However, under an incomplete scenario these positive long-term benefits do not materialize.[4]

In sum, the analysis highlights that the authorities need to be prepared to implement additional policy stimulus to bring inflation up to the 2 percent target. It also shows that this could increase the risks to Abenomics and that full and timely implementation of the three arrows will be essential to mitigate such risks.[5] The analysis also underscores that the three arrows are closely connected. Structural reforms (for example, increasing the retirement age and the labor force participation of women and measures to raise productivity growth) are needed for stronger long-term growth and fiscal sustainability.[6] Fiscal sustainability is needed to gain fiscal space to help monetary policy bounded by the zero interest rate floor and to avoid a sharp increase in long-term real interest rates. Monetary policy easing is necessary to lower real interest rates to stimulate growth and help achieve the new inflation target, which will further enhance fiscal sustainability. The fact that fiscal consolidation may have to be delayed because of the need to maintain high growth for some time underscores the benefits of locking in longer-term fiscal gains through entitlement reform in the short term. Raising the retirement age and reforms to contain health care spending are obvious steps in this regard. Finally, the analysis suggests that in the short term, contingency plans for further unconventional monetary stimulus would be useful, given fiscal vulnerabilities.

[4]See the 2013 IMF spillover report (IMF, 2013a) for more details.

[5]Ambitious structural reforms are also required to offset underlying deflation pressure from population aging.

[6]See IMF (2013e) for more details.

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CHAPTER 2

COUNTRY AND REGIONAL PERSPECTIVES

The global growth constellation is changing. Activity in the major advanced economies has started to accelerate from subdued levels. By contrast, growth in China and many other emerging market economies in Asia and Latin America, and to a lesser extent in the Commonwealth of Independent States (CIS), has cooled, after a surge in output beyond potential following the recovery from the Great Recession. Structural factors have also played a role in the slowdown, although to varying degrees, reflecting infrastructure bottlenecks, a weak investment climate, and other supply-side constraints. Activity in the Middle East, North Africa, Afghanistan, and Pakistan (MENAP) region has been held back by ongoing difficult political transitions in many countries and, more recently, slower oil production in oil exporters. Growth in sub-Saharan Africa (SSA) is still strong, driven by domestic demand, although at a slower pace than previously anticipated.

The changing growth dynamics have brought new risks to the fore. The growing conviction in markets that a turning point in U.S. monetary policy is being reached has led to a tightening in global financial conditions since late May of this year. Many emerging markets have experienced capital outflows and currency depreciations, wider bond spreads, and declining equity prices. Although the Federal Reserve recently decided not to taper yet, there is a distinct risk that financial conditions could tighten further from their current, still supportive levels (see Chapter 1). This would create spillovers to the rest of the world. At the same time, risks identified in recent *World Economic Outlook* (WEO) reports are still relevant: the euro area could fall into stagnation; the recovery in Japan could falter in the absence of ambitious structural reforms and medium-term fiscal consolidation plans with specific measures; still weaker investment and potential output growth could result in less of a growth bounce-back in emerging markets. Some economies could even face abrupt balance of payments adjustments if domestic vulnerabilities lead to more sizable capital outflows. Finally, geopolitical risks are also resurfacing. Even if these risks materialize only partially, all would suffer, including through spillovers. Chapter 1 discusses a plausible downside scenario under which mild versions of several of these risks materialize, and the regional implications are sketched out in this chapter (see Figure 2.1).

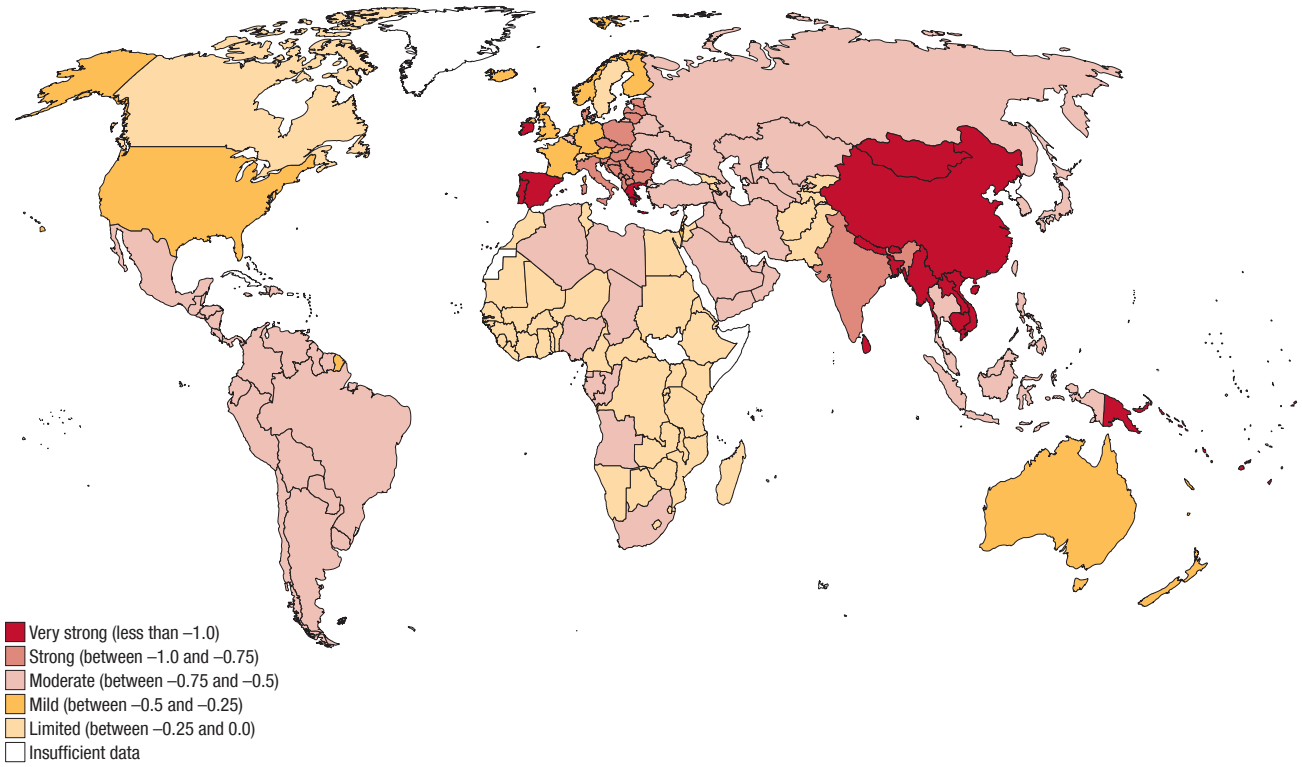
The United States and Canada: A Modest Recovery

Although growth in the United States remains tepid amid strong fiscal consolidation, improving conditions bode well for a gradual acceleration in growth (Figure 2.2). In Canada, growth will pick up as export recovery and stronger business investment offset the slowdown in the housing market and the deceleration in private consumption growth.

Growth continued at a modest pace in the United States in the first half of 2013. GDP grew at an annual rate of about 1¼ percent, held down by sizable fiscal consolidation (Figure 2.3). With ample slack remaining in the economy, core inflation averaged only 1.8 percent in August. Recent indicators suggest that the underlying recovery is gaining ground, supported by a rebound in the housing market and higher household net worth, although tighter financial conditions since May have somewhat slowed the bounce-back in activity. The unemployment rate continued to fall from its peak of 10 percent in 2009 to 7.3 percent in August 2013, but much of the improvement stemmed from lower labor force participation. Despite a weak external environment, the current account deficit continued to shrink through the second quarter of 2013, thanks in part to increases in domestic energy production.

At the time of writing, a political standoff in the United States has led to a shutdown of its federal government. The projections assume that the shutdown is short, discretionary public spending is approved and executed as assumed in the forecast, and the debt ceiling—which may be reached by mid-October—is raised promptly. Predicated on these assumptions, the recovery is projected to accelerate in late 2013 and in 2014, as the pace of fiscal consolidation slows, growth continues to benefit from monetary accommodation, household balance sheets

Figure 2.1. The Effects of a Plausible Downside Scenario
(Growth deviation from 2014 baseline projections; percentage points)

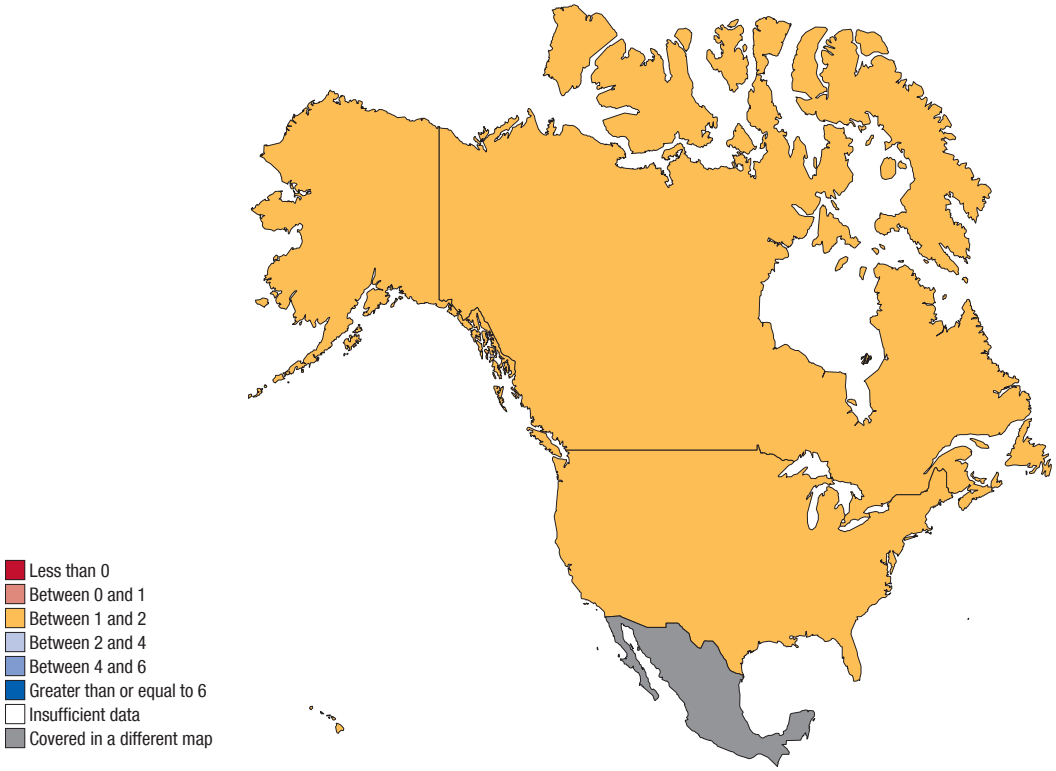


Source: IMF staff estimates.
Note: Simulations were conducted using the IMF's Flexible System Global Models, with 29 individual countries and eight regions (other European Union, other advanced economies, emerging Asia, newly industrialized Asia, Latin America, Middle East and North Africa, sub-Saharan Africa, oil exporters group). Countries not included in the model are allocated to the regions based on the WEO classification of fuel exporters, followed by geographical regional classifications.

strengthen further, and the housing market recovery continues despite higher mortgage rates. Growth will average 1½ percent in 2013 and accelerate to 2½ percent in 2014 (Table 2.1). These projections, weaker than the April 2013 forecast, largely reflect a prolonged budget sequester, until the end of September 2014. The forecast also assumes that the monetary policy stance will remain highly accommodative in that the Federal Reserve's asset purchases will be scaled back only gradually starting later this year and policy rates will remain near zero until early 2016. The unemployment rate is projected to decline gradually and inflation to regain some momentum while remaining subdued given the still wide output gap.

Despite some upside potential, risks to the outlook remain tilted to the downside. On the domestic front, private domestic demand could be weaker if the effect of the sequester, tax increases, and recent tightening in financing conditions on domestic demand and housing is stronger than anticipated. Moreover, even though the Federal Reserve recently communicated its intention to not yet begin tapering of asset purchases, yields have come down only marginally (see Chapter 1), and the risk of a further market-induced tightening of financial conditions even without a stronger recovery, cannot be ruled out. Other scenarios for larger-than-expected interest rate increases involve an unexpected pickup in inflation expectations or, over the medium term, higher sovereign risk premiums caused by a lack of further progress on fiscal consolidation. A longer shutdown could have sizable adverse growth implications. A failure to promptly raise the debt ceiling could also adversely affect financial markets and economic activity, with spillovers to the rest of the world. Overall, an untimely tightening in U.S. monetary conditions combined with shocks from the external front—such as further deceleration in growth in other major economies—as illustrated in the plausible downside scenario (see Figure 2.1) could lower U.S. growth by close to ½ percentage point over the next year and by 1 percent in the medium term.

Figure 2.2. United States and Canada: 2013 GDP Growth Forecasts
(Percent)



Source: IMF staff estimates.
Note: U.S. data are subject to change pending completion of the release of the Bureau of Economic Analysis's Comprehensive Revision of the National Income and Product Accounts (NIPA).

On the upside, a more resilient housing market recovery could contribute to a virtuous cycle of easing lending conditions, rising house prices, increasing household net worth, and stronger consumption and investment, with beneficial growth effects for the United States as well as the rest of the world. Lower uncertainty and prospects for a faster recovery in consumer demand could induce businesses to shift away from cash hoarding toward real investment.

The biggest policy priority is to adopt a comprehensive fiscal consolidation plan to place public debt on a sustainable path over the medium term while supporting near-term growth. The fiscal deficit reduction under the sequester is excessively rapid and ill designed, and it is expected to subtract between 1½ and 1¾ percentage points from growth in 2013.[1] A more balanced and gradual fiscal consolidation process, with the automatic spending cuts replaced by back-loaded savings in entitlement spending and new revenues, would support the recovery.

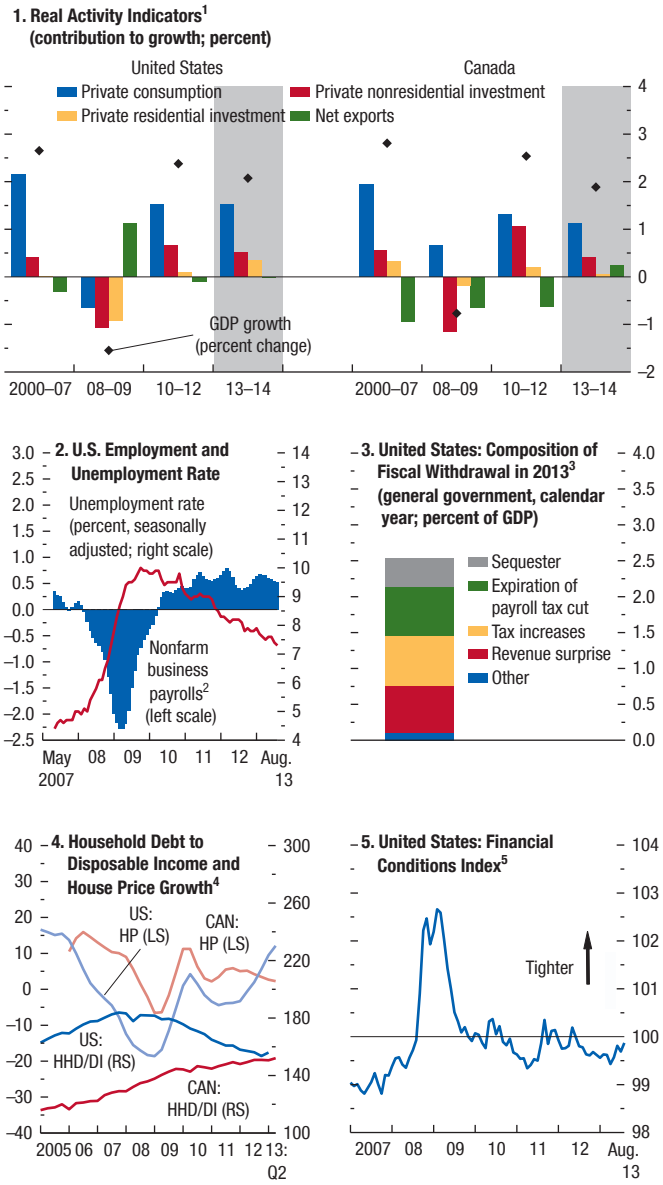
Given the sizable economic slack, slow employment recovery, and stable inflation expectations, the accommodative monetary policy stance continues to be appropriate. Any unwinding in monetary policy accommodation should be guided by the strength of the recovery, while considering other potential issues such as inflation and financial stability challenges. Careful calibration of the timing of exit, and effective communication about the strategy, will be critical to ensure a smooth normalization process and to minimize risks of negative global spillovers. If financial conditions tighten further and threaten to derail the nascent recovery, the Federal Reserve may need to ease monetary policy conditions through forward guidance or changing the timing and extent of the tapering.

The Canadian economy grew at an annual rate of 1¾ percent in the first half of 2013, driven by a rebound in the export and energy sectors, as well as private

[1]The implied fiscal multipliers are based on Appendix 1 of the April 2012 *Fiscal Monitor*.

Figure 2.3. United States and Canada: A Modest Recovery

Despite a large fiscal contraction, growth in the United States is expected to improve gradually given strong private consumption growth and still supportive financing conditions. However, there is considerable economic slack, and employment recovery will remain slow. In Canada, high household debt will dampen consumption growth, but GDP growth will be mainly supported by a positive contribution from net exports.



Sources: Bloomberg, L.P.; Canadian Real Estate Association (CREA); Congressional Budget Office; Haver Analytics; and IMF staff estimates.
[1]U.S. data are subject to change pending completion of the release of the Bureau of Economic Analysis's Comprehensive Revision of the National Income and Product Accounts (NIPA).
[2]Moving quarterly absolute change; millions.
[3]Tax increases refer to the expiration of 2001, 2003, and 2009 tax cuts for upper-income taxpayers (including iteration with the Alternative Minimum Tax). "Other" includes war drawdown and removal of emergency funds for disaster relief.
[4]HHD/DI = household debt to disposable income (percent); HP = house prices (year over year; percent): S&P/Case-Shiller Home Price Index for the United States (US); CREA for Canada (CAN). RS = right scale; LS = left scale. US: HHD/DI data are through 2013:Q1.
[5]Goldman Sachs FCI (Financial Conditions Index).

consumption. The economy is projected to expand at slightly more than 1½ percent in 2013 and 2¼ percent in 2014, as net exports and business investment benefit from the U.S. recovery and more than offset slower consumption growth. The balance of risks to Canada's outlook is still tilted to the downside, emanating from potentially weaker external demand. Moreover, household debt remains historically high, which could amplify the negative growth impact of adverse shocks to the economy.

Policies need to continue to support near-term growth while reducing domestic vulnerabilities. Fiscal consolidation, particularly at the provincial level, must proceed as planned to rebuild fiscal space against future shocks. The current accommodative monetary policy stance remains appropriate, with gradual tightening expected to begin in the second half of 2014.

Europe: Supporting the Fledgling Recovery

Advanced Europe

Policy actions have reduced some important tail risks in the euro area and stabilized financial markets. Growth is beginning to resume but is still very weak (Figure 2.4). Unemployment is very high, and social and political tensions are hurting the reform momentum in the euro area. Actions to restore financial sector health and strengthen its infrastructure are essential to ensure financial stability and support the recovery. Furthermore, continued near-term demand support and deeper structural reforms to raise competitiveness and potential output are essential for growth and job creation.

The euro area returned to growth in the second quarter of 2013 after six quarters of recession. Recent high-frequency indicators suggest that activity is beginning to stabilize in the periphery and recover in the core. However, unemployment remains high, and labor markets remain depressed. Moreover, inflation remains below the European Central Bank's (ECB's) medium-term objective, raising concerns about underlying disinflationary or deflationary trends.

A multitude of factors, all legacies of the global financial crisis, will continue to interact to restrain growth and inflation in the euro area, on top of weakening exports from the deceleration in many emerging market economies (Figure 2.5):

- Demand is persistently weak as the public and private sectors continue to deleverage, especially in

Table 2.1. 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	
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Advanced Economies	**1.5**	**1.2**	**2.0**	**2.0**	**1.4**	**1.8**	**–0.1**	**0.1**	**0.2**	**8.0**	**8.1**	**8.0**
United States[4]	2.8	1.6	2.6	2.1	1.4	1.5	–2.7	–2.7	–2.8	8.1	7.6	7.4
Euro Area[5,6]	–0.6	–0.4	1.0	2.5	1.5	1.5	1.3	1.8	1.9	11.4	12.3	12.2
Japan	2.0	2.0	1.2	0.0	0.0	2.9	1.0	1.2	1.7	4.4	4.2	4.3
United Kingdom[5]	0.2	1.4	1.9	2.8	2.7	2.3	–3.8	–2.8	–2.3	8.0	7.7	7.5
Canada	1.7	1.6	2.2	1.5	1.1	1.6	–3.4	–3.1	–3.1	7.3	7.1	7.1
Other Advanced Economies[7]	1.9	2.3	3.1	2.0	1.5	2.1	4.3	4.4	4.2	4.5	4.6	4.6

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a complete list of the reference periods for each country.

[1]Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Table A6 in the Statistical Appendix.

[2]Percent of GDP.

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

[4]U.S. data are subject to change pending completion of the release of the Bureau of Economic Analysis's Comprehensive Revision of the National Income and Product Accounts (NIPA).

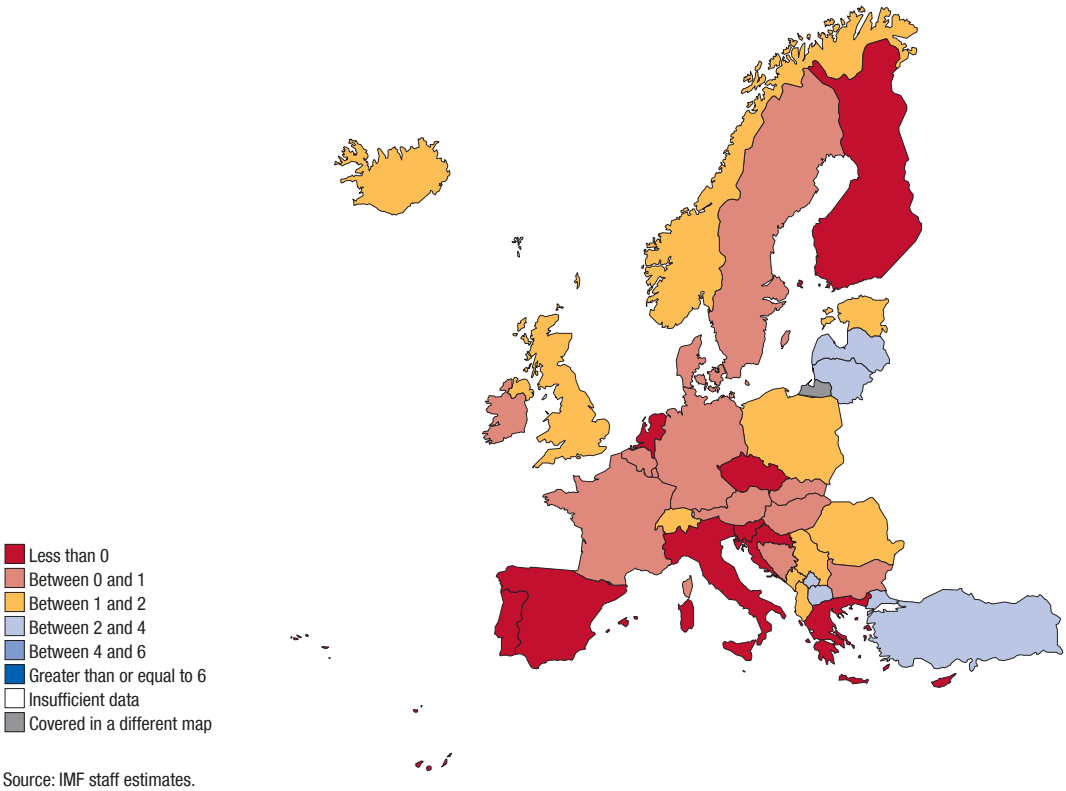
[5]Based on Eurostat's harmonized index of consumer prices.

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

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

Figure 2.4. Europe: 2013 GDP Growth Forecasts

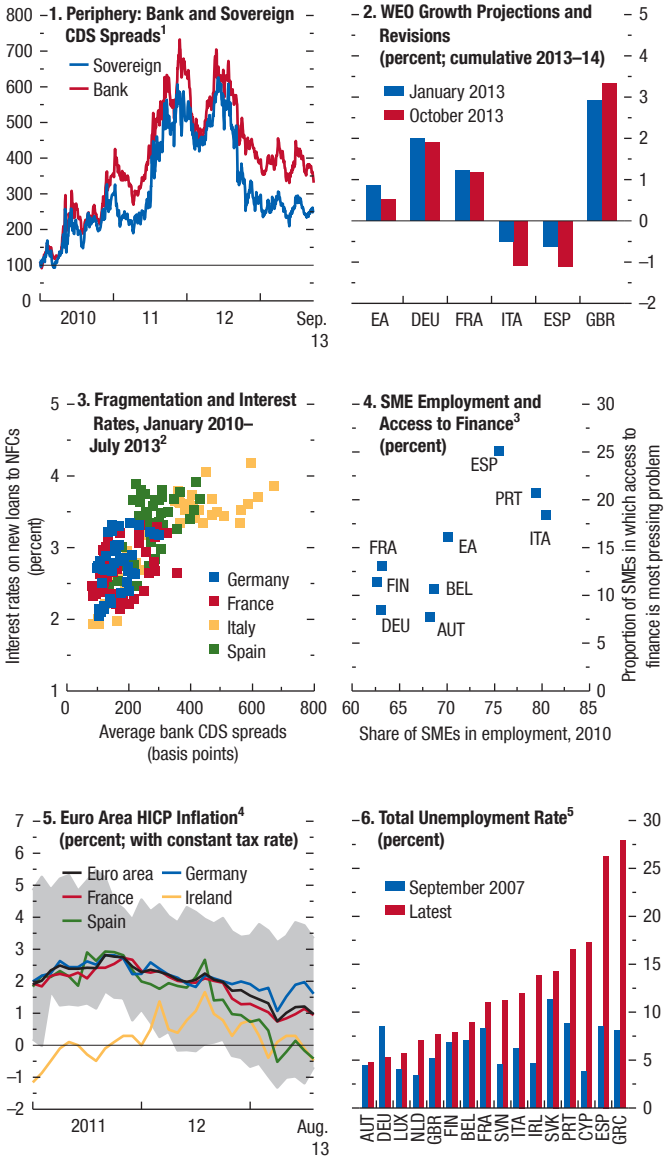
(Percent)



Source: IMF staff estimates.

Figure 2.5. Advanced Europe: Abating Tail Risks, but Prolonged Stagnation

Financial stresses have moderated in response to policy actions, but growth remains weak, spilling over from the periphery to the core. Financial fragmentation and impaired access to credit in the periphery continue. Inflation remains subdued. Unemployment remains high and is still rising.



Sources: Bloomberg, L.P.; European Central Bank; Eurostat; Haver Analytics; and IMF staff estimates.
Note: AUT = Austria; BEL = Belgium; CYP = Cyprus; DEU = Germany; EA = euro area; ESP = Spain; FIN = Finland; FRA = France; GBR = United Kingdom; GRC = Greece; IRL = Ireland; ITA = Italy; LUX = Luxembourg; NLD = Netherlands; PRT = Portugal; SVK = Slovak Republic; SVN = Slovenia. Periphery: ESP, GRC, IRL, ITA, PRT.
[1]Five-year credit default swap (CDS) spreads are in basis points weighted by general government gross debt. All periphery countries are included, except Greece.
[2]NFC = nonfinancial corporation.
[3]SME = small and medium enterprise.
[4]Ireland: Eurostat harmonized index of consumer prices (HICP) total excludes energy, food, alcohol, and tobacco. The band refers to the difference between the maximum and the minimum for the euro area, excluding Ireland.
[5]Latest data refer to July 2013, except for GRC (June 2013) and GBR (May 2013).

some periphery economies. In the core economies, despite recent improvements in confidence, private demand is also affected by concerns about global growth and continued uncertainty about euro area prospects and policies. Moreover, notwithstanding some relaxation in adjustment targets and a slowdown in the pace of adjustment, fiscal consolidation continues to weigh on near-term activity.

- Financial market fragmentation and weak bank balance sheets continue to impair the transmission of the ECB's accommodative monetary policy stance to the periphery, keeping private sector borrowing rates high and limiting banks' ability to lend.
- Despite significant reforms, long-standing labor and product market weaknesses continue to hamper relative price adjustment and competitiveness, especially in the periphery. As a result, the pace at which external imbalances within the euro area are narrowing has been slow.

Under current policies, activity in the euro area is forecast to shrink by about ½ percent in 2013 after a contraction of a similar magnitude in 2012 (Table 2.2). Growth is expected to recover from an annual rate of ¾ percentage point in the second half of 2013 to 1 percent in 2014, driven by a smaller fiscal drag, stronger external demand, and a gradual improvement in private sector lending conditions. Inflation is expected to stay at about 1½ percent over the next two years because of persistent output gaps. Over the medium term, growth is expected to remain subdued and inflation substantially below the ECB's medium-term objective.

Growth is also likely to be subdued in other advanced economies in Europe. In the United Kingdom, recent data have shown welcome signs of an improving economy, consistent with increasing consumer and business confidence, but output remains well below its pre-crisis peak. Growth is expected to be about 1½ percent in 2013 and 2 percent in 2014, slowly returning to trend in the medium term, but output levels will remain below potential for many years. Sweden's economy has been growing slowly along with its main Nordic and European trading partners, with prospects for a slow return to higher but still moderate growth.

Risks have become more balanced than six months ago, but still remain tilted to the downside. Amid a fragile recovery, limited policy space, and substantial slack, the region could be hit by further domestic or external shocks. Any turbulence in global financial markets, for example, as a result of further tightening

Table 2.2. 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	
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Europe	**–0.1**	**0.3**	**1.4**	**3.0**	**2.0**	**1.9**	**1.3**	**1.6**	**1.7**	**. . .**	**. . .**	**. . .**
Advanced Europe	**–0.4**	**0.0**	**1.2**	**2.4**	**1.6**	**1.6**	**1.9**	**2.3**	**2.4**	**10.3**	**11.0**	**10.9**
Euro Area[4,5]	–0.6	–0.4	1.0	2.5	1.5	1.5	1.3	1.8	1.9	11.4	12.3	12.2
Germany	0.9	0.5	1.4	2.1	1.6	1.8	7.0	6.0	5.7	5.5	5.6	5.5
France	0.0	0.2	1.0	2.2	1.0	1.5	–2.2	–1.6	–1.6	10.3	11.0	11.1
Italy	–2.4	–1.8	0.7	3.3	1.6	1.3	–0.7	0.0	0.2	10.7	12.5	12.4
Spain	–1.6	–1.3	0.2	2.4	1.8	1.5	–1.1	1.4	2.6	25.0	26.9	26.7
Netherlands	–1.2	–1.3	0.3	2.8	2.9	1.3	10.1	10.9	11.0	5.3	7.1	7.4
Belgium	–0.3	0.1	1.0	2.6	1.4	1.2	–1.6	–0.7	–0.3	7.6	8.7	8.6
Austria	0.9	0.4	1.6	2.6	2.2	1.8	1.8	2.8	2.4	4.3	4.8	4.8
Greece	–6.4	–4.2	0.6	1.5	–0.8	–0.4	–3.4	–1.0	–0.5	24.2	27.0	26.0
Portugal	–3.2	–1.8	0.8	2.8	0.7	1.0	–1.5	0.9	0.9	15.7	17.4	17.7
Finland	–0.8	–0.6	1.1	3.2	2.4	2.4	–1.8	–1.6	–1.8	7.8	8.0	7.9
Ireland	0.2	0.6	1.8	1.9	1.0	1.2	4.4	2.3	3.0	14.7	13.7	13.3
Slovak Republic	2.0	0.8	2.3	3.7	1.7	2.0	2.3	3.5	4.2	14.0	14.4	14.4
Slovenia	–2.5	–2.6	–1.4	2.6	2.3	1.8	3.3	5.4	7.0	8.9	10.3	10.9
Luxembourg	0.3	0.5	1.3	2.9	1.8	1.9	5.7	6.0	6.6	6.1	6.6	7.0
Estonia	3.9	1.5	2.5	4.2	3.5	2.8	–1.8	–0.7	–0.2	10.2	8.3	7.0
Cyprus	–2.4	–8.7	–3.9	3.1	1.0	1.2	–6.5	–2.0	–0.6	11.9	17.0	19.5
Malta	1.0	1.1	1.8	3.2	2.0	2.0	1.1	1.1	0.8	6.3	6.4	6.3
United Kingdom[5]	0.2	1.4	1.9	2.8	2.7	2.3	–3.8	–2.8	–2.3	8.0	7.7	7.5
Sweden	1.0	0.9	2.3	0.9	0.2	1.6	6.0	5.7	5.5	8.0	8.0	7.7
Switzerland	1.0	1.7	1.8	–0.7	–0.2	0.2	11.2	10.5	10.1	2.9	3.2	3.2
Czech Republic	–1.2	–0.4	1.5	3.3	1.8	1.8	–2.4	–1.8	–1.5	7.0	7.4	7.5
Norway	3.0	1.6	2.3	0.7	1.8	1.8	14.2	11.8	11.3	3.2	3.3	3.3
Denmark	–0.4	0.1	1.2	2.4	0.8	1.9	5.6	4.7	4.8	7.5	7.1	7.1
Iceland	1.6	1.9	2.1	5.2	3.7	3.1	–4.9	–1.2	–1.9	5.8	5.1	4.6
San Marino	–4.0	–3.5	0.0	2.8	1.6	0.9	. . .	. . .	. . .	6.6	6.1	5.5
Emerging Europe[6]	**1.4**	**2.3**	**2.7**	**5.8**	**4.1**	**3.5**	**–4.3**	**–4.4**	**–4.5**	**. . .**	**. . .**	**. . .**
Turkey	2.2	3.8	3.5	8.9	7.7	6.5	–6.1	–7.4	–7.2	9.2	9.4	9.5
Poland	1.9	1.3	2.4	3.7	1.4	1.9	–3.5	–3.0	–3.2	10.1	10.9	11.0
Romania	0.7	2.0	2.2	3.3	4.5	2.8	–3.9	–2.0	–2.5	7.0	7.1	7.1
Hungary	–1.7	0.2	1.3	5.7	2.3	3.0	1.7	2.2	2.0	10.9	11.3	11.1
Bulgaria	0.8	0.5	1.6	2.4	1.4	1.5	–1.3	1.2	0.3	12.4	12.4	11.4
Serbia	–1.7	2.0	2.0	7.3	8.5	5.0	–10.5	–7.5	–6.5	23.1	25.0	24.9
Croatia	–2.0	–0.6	1.5	3.4	3.0	2.5	0.1	0.4	–0.7	16.2	16.6	16.1
Lithuania	3.6	3.4	3.4	3.2	1.3	2.1	–0.5	–0.3	–1.2	13.2	11.8	11.0
Latvia	5.6	4.0	4.2	2.3	0.7	2.1	–1.7	–1.1	–1.3	15.0	11.9	10.7

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a complete list of the reference periods for each country.

[1]Movements in consumer prices are shown as annual averages. Year-end to year-end 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]Includes Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, and Montenegro.

in U.S. monetary conditions, could aggravate fragmentation and complicate policies, although sovereign spreads in the euro area periphery have fallen below the low levels reached in late 2012. Disappointing growth in emerging market economies would also hurt external demand. On the upside, if the core economies experience a stronger pickup in investment after years of underinvestment, it could have positive spillovers to the entire region. However, this would require the delivery of current policy commitments, including at the euro area level. The main risk, therefore, relates to stalled policy commitments. Absent fundamental reforms, there is a high risk of stagnation, renewed stress in the short term, and a loss of potential output through hysteresis effects in the medium term.

The key priorities for all advanced economies in the region are to bolster growth while ensuring financial stability. Attaining this goal requires action in four interrelated areas:

- Bank balance sheets should be repaired expeditiously to improve confidence and revive credit and demand in the euro area and the United Kingdom. A credible, comprehensive, forward-looking, independent assessment of capital shortfalls in the euro area is needed in the context of the forthcoming bank balance sheet assessment. Such an assessment must

be supported with a clear plan to meet bank capital requirements and a credible area-wide backstop to avoid disorderly deleveraging in the short term and help economies, especially those that are fiscally challenged, to address capital shortfalls without threatening debt sustainability. In the United Kingdom, the health of the two government-intervened banks is crucial for credit growth, and a clear strategy is needed for the Royal Bank of Scotland, with a view to returning both to private ownership. Sweden should continue to strengthen financial stability by further improving bank funding, liquidity, and capital; introducing measures to contain the buildup in household debt; and improving mortgage amortization.

- Reforms are also needed to strengthen the financial sector architecture. A more complete banking union is necessary to reverse fragmentation and weaken bank-sovereign links in the euro area. There must be political commitment to build on the progress made to operationalize the recently established Single Supervisory Mechanism and finalize the Bank Recovery and Resolution and the Deposit Guarantee Scheme Directives. A strong resolution mechanism, based on a centralized authority backed by a common fiscal backstop with power to trigger resolution and make decisions on burden sharing, is critical to ensure timely and least-cost resolution. The United Kingdom needs greater coordination across regulatory bodies, continued efforts to ensure that the newly established supervisors are adequately resourced and operationally independent, and that the Financial Policy Committee has a strong macroprudential toolkit. Structural banking reforms must be internationally coordinated to avoid regulatory arbitrage.
- Additional near-term support will be needed to reverse weak growth. In the euro area, more monetary easing is necessary, including further policy rate cuts, further reliance on forward guidance to anchor interest rate expectations, and additional unconventional monetary support to reduce fragmentation and improve credit access, especially for small and medium enterprises (see Figure 2.5, panels 3 and 4). Despite the recent postponement of Excessive Deficit Procedures deadlines for some economies, meeting fiscal targets may still prove challenging in some cases, and more flexibility may be needed if growth disappoints. However, given high debt levels, fiscal adjustment should be anchored by a credible medium-term framework. Monetary policy should also stay accommodative in the United Kingdom, and the Bank of England's recently adopted forward guidance framework is an important step toward greater transparency about the factors that will guide policy rates. In an environment of still low interest rates and underutilization of resources, public investment can also be brought forward to offset the drag from planned near-term fiscal tightening, while staying within the medium-term fiscal framework. In Sweden, fiscal and—assuming household credit growth remains contained—monetary policy should continue to support the recovery in the short term, with room for further easing if downside risks materialize.
- Reforms are also needed to boost potential growth and competitiveness. In the euro area, this will involve implementing the Services Directive to help remove country-specific barriers for protected professions and to the entry and exit of firms, and tackling vested interests in product markets. Improved pension portability and unemployment benefits would foster labor mobility. National labor market reforms could raise participation, level the playing field between protected and unprotected workers, and, where necessary, promote more flexible bargaining arrangements that foster job creation.

Emerging Europe

Emerging Europe is tracking a moderate recovery in 2013 and 2014, but downside risks and domestic policy challenges remain significant.

Emerging Europe experienced a sharp slowdown in 2012, reflecting weak exports due to the euro area recession, decreased funding for subsidiaries of western European banks, and the impact of bad weather in some economies. Activity picked up in the first half of 2013 thanks to easier financial conditions on account of monetary easing, improved external funding, and a bounce-back from the bad weather (Figure 2.6).

The recent global financial market volatility has led to some renewed tightening of local financial conditions, including in Turkey. Economies with relatively larger portfolio inflows were more affected than others, as were countries with higher external imbalances. Still, incoming data suggest that the adverse impact of tighter financial conditions on activity is modest in

most economies, likely reflecting the offsetting effects from currency depreciation.

Growth in the region is expected to pick up from 1½ percent in 2012 to 2¼ percent in 2013 and further to 2¾ percent in 2014, unchanged from the April 2013 WEO forecast. However, there are large differences across countries, with strong growth in Turkey and the Baltics, an incipient recovery in southeastern Europe and Hungary, and further weakening in Poland.

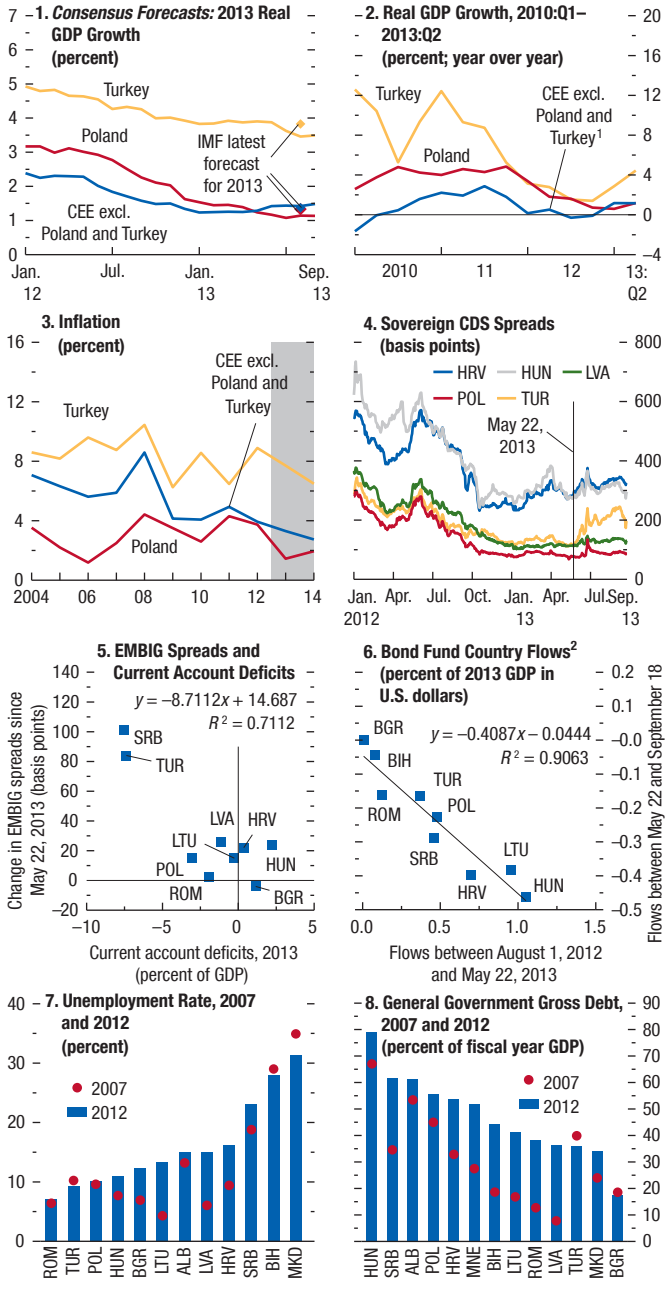
- Growth in Turkey, which slowed sharply last year, is projected to pick up to 3¾ percent this year, decelerating to 3½ percent in 2014. The recent financial tightening is expected to result in some slowing of activity in the second half of 2013. In terms of annual growth in 2013–14, however, the impact of this slowing will be more than offset by the much-stronger-than-anticipated growth in the first half of 2013, reflecting the boost to domestic demand from monetary easing and a sharp increase in government investment.
- Growth in Poland is expected to decelerate from 2 percent in 2012 to 1¼ percent this year, picking up gradually to 2¼ percent in 2014. Not only has the economy been hurt by the weakness in the euro area, but a long period of strong increases in domestic demand seems to have run its course.
- Southeastern Europe, which was affected by both a very cold winter and severe drought in summer 2012, is recovering this year; only Croatia will remain in a mild recession. Better weather will also help Hungary, although activity will be broadly flat this year, recovering by 1¼ percent in 2014.
- Growth in the Baltics is projected to ease but remain strong.

With a few exceptions, moderate economic growth will keep a lid on inflation pressure. However, annual average inflation will remain elevated in 2013 in Turkey (6½ percent) and Serbia (8½ percent), reflecting inflation inertia and the impact of currency depreciation.

The balance of risks to the outlook is tilted to the downside. A more protracted recession in the euro area is a key risk, especially for countries with strong intra-European links (notably, Croatia, Hungary, Poland). Further deterioration in external financing conditions is another major concern, particularly for countries with relatively large fiscal or external imbalances or both, such as Turkey and Serbia. Prolonged financial

Figure 2.6. Emerging Europe: Growth Continues despite Increased Financial Volatility

Growth is forecast to rebound this year after bottoming out in 2012. However, the region is exposed to downside risks from a slowdown in Europe and to potentially greater financial market volatility. Policies should focus on rebuilding fiscal balances to maintain market confidence and implementing structural reforms to raise growth potential and lower still-high unemployment.



Sources: Bloomberg, L.P.; *Consensus Forecasts*; EPFR Global/Haver Analytics; Haver Analytics; and IMF staff estimates.

Note: ALB = Albania; BGR = Bulgaria; BIH = Bosnia and Herzegovina; CEE = central and eastern Europe; HRV = Croatia; HUN = Hungary; LTU = Lithuania; LVA = Latvia; MKD = FYR Macedonia; MNE = Montenegro; POL = Poland; ROM = Romania; SRB = Serbia; TUR =Turkey. CDS = credit default swap (rates on five-year bonds); EMBIG = JPMorgan EMBI Global Index.

[1]Data for 2013:Q2 exclude Albania.

[2]EPFR flows provide a limited proxy for overall balance of payments (BoP) flows, although recent studies have found a close match in the pattern of EPFR flows and BoP gross portfolio flows (see Fratzscher, 2012).

market volatility could also constrain the funding of western banks' regional subsidiaries.

Policies should aim to nurture the recovery and reduce vulnerability from still elevated fiscal and current account deficits in some countries. The recent financial market turbulence calls for a differentiated policy response. In countries with high debt or deficits, rollover risks have increased in recent months, and action will be needed to reduce those vulnerabilities. By contrast, in countries where public debt and deficits are at more moderate levels, giving full play to automatic stabilizers would help cushion the near-term impact on activity. In countries where the inflation outlook is benign, there may be room to further ease monetary policy.

Policies should also focus on lifting potential growth, which is estimated to have dropped sharply since the global financial crisis. For many countries where a large share of the high unemployment appears to be structural (for example, Bulgaria, Croatia, Poland), a bold reform agenda will be needed to alleviate growth bottlenecks. The agenda will vary by country but includes addressing low labor force participation, boosting external competitiveness, and completing the transition agendas.

Asia: A Lower Growth Trajectory

Growth has disappointed across the region, largely because of weaker demand, although supply factors have also played a role in some economies. Capital inflows have declined, and domestic assets have been repriced and exchange rates depreciated, especially in countries where fundamentals were perceived to be weaker. Still, financial conditions remain generally supportive from a historical perspective, and external demand is expected to gradually strengthen. The outlook is for continued strong growth, but risks are tilted to the downside. Policies need to strike a balance between supporting growth and guarding against inflation and financial stability risks. Where supply-side constraints are binding, continued structural reforms are crucial and will also help reduce vulnerabilities.

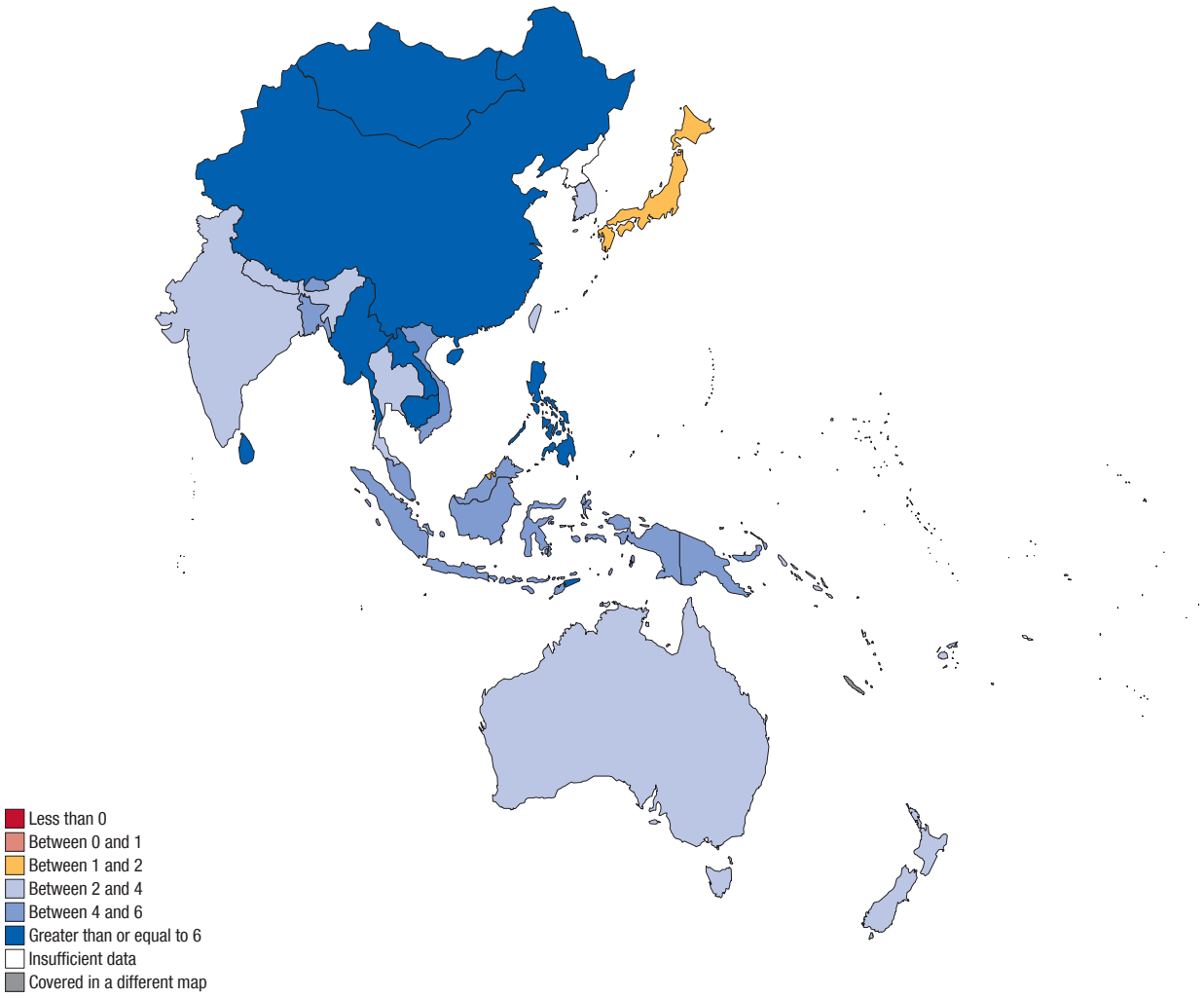
During the first half of 2013, growth in Asia generally moderated and was weaker than anticipated in the April 2013 WEO. This was due to a more rapid slowdown in the pace of growth in China, which affected industrial activity in much of emerging Asia, including through supply-chain links, while India faced persistent supply-side constraints. By contrast, Japan was the main bright spot, reflecting the new policy momentum, which has boosted asset prices and private consumption (see Box 1.4 in Chapter 1).

Awareness of an approaching turning point in U.S. monetary policy, combined with slower growth momentum in many Asian economies, resulted in increased financial volatility in the region in recent months, with capital outflows in most countries. However, tighter financial conditions have affected a few economies so far (notably, India and Indonesia).

Growth in the region is expected to remain solid in the second half of 2013 and 2014, in line with a projected moderate global recovery—and still supportive financial and monetary conditions in many economies—and exchange rate depreciations that have dampened the impact of recent asset price corrections (Figures 2.7 and 2.8). Overall, growth is projected to average about 5¼ percent in 2013–14, which is some ½ percent and ¾ percent weaker for 2013 and 2014, respectively, compared with the April 2013 WEO (Table 2.3). Consistent with the moderate pickup in growth and a stable outlook for global commodity prices, inflation is expected to remain generally within central banks' comfort zones.

- Growth in Japan is projected at 2 percent in 2013, buoyed by the fiscal stimulus and monetary easing to support private consumption and investment. Helped by yen depreciation and a pickup in external demand, exports should also strengthen. Growth is forecast to decelerate to 1¼ percent in 2014, with fiscal stimulus withdrawal and the increase in the consumption tax. However, if an additional "stimulus package" does go ahead, growth in 2014 would be higher than currently projected. Inflation will temporarily rise toward 3 percent in 2014, reflecting the effects of the consumption tax hike, although underlying inflation is projected to be closer to 1¼ percent.
- In China, growth is projected to decelerate to 7½ percent this year, in line with the authorities' target, and further to 7¼ percent next year. Policymakers have refrained from further stimulating growth, which is consistent with the objectives of safeguarding financial stability and moving the economy to a more balanced and sustainable growth path.
- Supported by the recent fiscal and monetary stimulus, the Korean economy is set for a modest recovery. Growth is projected to rise to 2¾ percent

Figure 2.7. Asia: 2013 GDP Growth Forecasts
(Percent)



Source: IMF staff estimates.

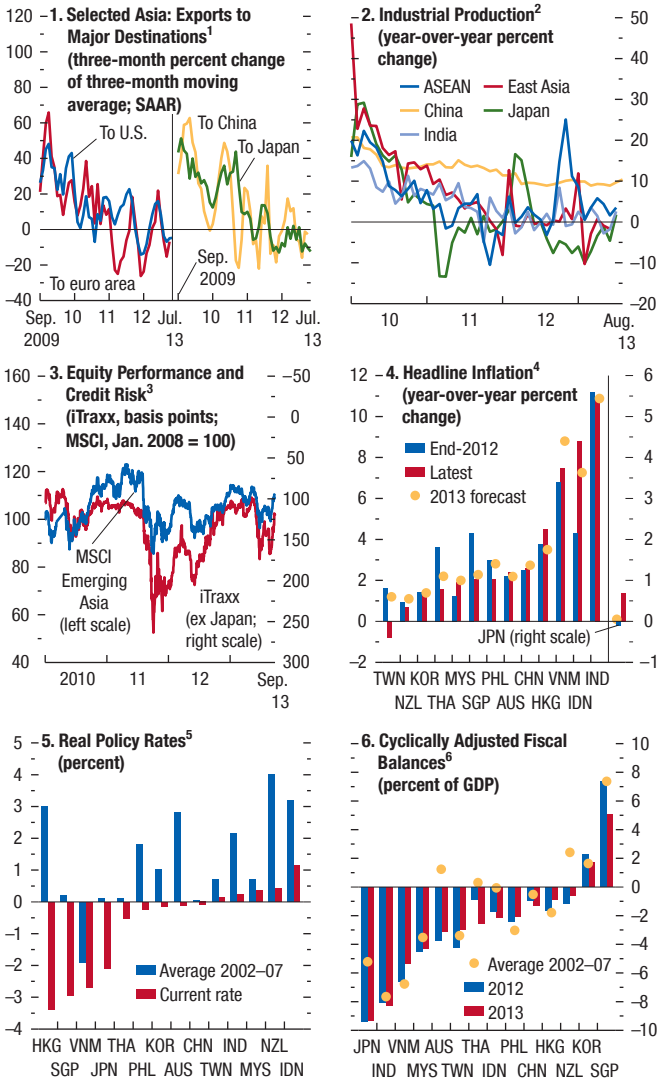
in 2013, after bottoming out at 2 percent in 2012, and rise further to 3¾ percent in 2014.

- In India, growth in fiscal year 2013 is expected to be around 3¾ percent, with strong agriculture production offset by lackluster activity in manufacturing and services, and monetary tightening adversely affecting domestic demand. For fiscal year 2014, growth is projected to accelerate somewhat to 5 percent, helped by an easing of supply bottlenecks and strengthening of exports.[2] Inflation is expected to stay high at almost 11 percent this year and 9 percent in 2014, driven by continued domestic food price pressures.
- In the Association of Southeast Asian Nations economies, solid domestic demand should support growth, particularly in Malaysia and the Philippines. In Thailand, after the slowdown in the first quarter of 2013, growth should return to potential during the second half of the year, driven by private demand and higher public spending. Growth in Indonesia will slow, however, due to sluggish

[2]Note that, in accordance with international standards, growth for India is presented in Table 2.3 for GDP at market prices. In terms of GDP at factor cost, growth is estimated to be 5 percent in fiscal year 2012 and is projected at 4¼ percent in 2013 and about 5 percent in 2014.

Figure 2.8. Asia: A Lower Growth Trajectory

Economic activity was disappointing during the first half of 2013. Growth will pick up slowly from the second half of the year as external and domestic demand recover at a moderate pace.



Sources: Bloomberg, L.P.; CEIC; *Consensus Forecasts*; Haver Analytics; Markit/Haver Analytics; and IMF staff estimates.

Note: AUS = Australia; CHN = China; HKG = Hong Kong SAR; IDN = Indonesia; IND = India; JPN = Japan; KOR = Korea; MYS = Malaysia; NZL = New Zealand; PHL = Philippines; SGP = Singapore; THA = Thailand; TWN = Taiwan Province of China; VNM = Vietnam. East Asia includes CHN, HKG, KOR, and TWN. CDS = credit default swap.

[1]Selected Asia includes east Asia, JPN, MYS, THA, PHL, SGP, and VNM. Indonesia is excluded due to a data lag. SAAR = seasonally adjusted annual rate. Data are through June 2013 (to China; to euro area).

[2]ASEAN = Association of Southeast Asian Nations (IDN, MYS, PHL, SGP, THA). East Asia excludes HKG and CHN in this panel. Data are through July 2013 for ASEAN, IND, JPN; and June 2013 for east Asia.

[3]The Markit iTraxx Asia ex Japan Investment Grade index comprises 40 equally weighted investment grade CDS indices of Asian equities that typically trade on a five-year maturity, and a new series is determined on the basis of liquidity every six months. The MSCI EM Asia Index captures large and mid-cap representation across eight emerging market economies: CHN, IDN, IND, KOR, MYS, PHL, THA, TWN. With 541 constituents, the index covers approximately 85 percent of the free-float-adjusted market capitalization in each country.

[4]Data for India are based on the Industrial Workers Consumer Price Index. Latest data refer to August 2013, except for India and Japan (July 2013); Australia and New Zealand (June 2013).

[5]Data are as of September 23, 2013. Real policy rates are adjusted for the one-year-ahead inflation expectations. For India this is based on the fiscal year.

[6]General government structural balance for Hong Kong SAR and New Zealand.

investment and weaker commodity demand from other emerging market economies, as well as tighter financing conditions.

- Given weakening external demand until recently, growth in other developing Asian economies is projected to slow from 6¼ percent in 2012 to a still robust 6 percent this year before picking up again next year.

Risks to growth in the region are tilted to the downside. A major downside risk is a synchronized global slowdown, which would take a heavy toll on the region's export-dependent economies. Another risk is that capital outflows—due to a further tightening in U.S. monetary conditions or deteriorating domestic fundamentals—could intensify. This could lead to further declines in domestic asset prices, tighter overall financial conditions and, ultimately, slower growth, especially in economies with weaker fundamentals and less policy space. Although in some countries, diminished inflows may alleviate previous concerns about potential credit booms, in others, risks of harder landings or financial instability have increased. That said, many countries operate under flexible exchange rate regimes that would help mitigate these effects, especially where inflation pressure is absent and high reserve levels give them room to smooth excess volatility. A persistent deceleration in investment activity because of structural weaknesses is yet another concern. Given its high regional integration, Asia would be affected by an unexpected slowdown in any of its larger economies, particularly China. In Japan, in the absence of credible fiscal and structural reforms, the new macroeconomic framework may be ineffective in raising growth and inflation expectations, with adverse effects on the rest of Asia as well. Indeed, under the plausible downside scenario, growth in the region would decline substantially. Growth in Japan in the first year would be ¾ percentage point lower, while in the rest of the region it would decrease by 1 percentage point.

Policymakers need to strike a balance between supporting demand and guarding against financial stability risks. For many, against the backdrop of greater downside risks to growth and a generally benign inflation outlook, the accommodative stance is broadly appropriate. However, country circumstances differ given differences in inflationary and financial stability risks—for instance Bank Indonesia recently had to tighten amid downward currency pressure and higher expected inflation. In Japan, efforts should be focused on meet-

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	
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Asia	**5.1**	**5.2**	**5.3**	**3.6**	**3.8**	**4.1**	**1.2**	**1.4**	**1.6**	**. . .**	**. . .**	**. . .**
Advanced Asia	**2.1**	**2.3**	**2.4**	**1.1**	**0.9**	**2.6**	**1.5**	**1.9**	**2.1**	**4.2**	**4.1**	**4.2**
Japan	2.0	2.0	1.2	0.0	0.0	2.9	1.0	1.2	1.7	4.4	4.2	4.3
Korea	2.0	2.8	3.7	2.2	1.4	2.3	3.8	4.6	3.9	3.2	3.2	3.2
Australia	3.7	2.5	2.8	1.8	2.2	2.5	–3.7	–3.4	–3.5	5.2	5.6	6.0
Taiwan Province of China	1.3	2.2	3.8	1.9	1.2	2.0	10.5	10.0	9.6	4.2	4.2	4.2
Hong Kong SAR	1.5	3.0	4.4	4.1	3.5	3.5	2.7	2.3	2.5	3.3	3.2	3.1
Singapore	1.3	3.5	3.4	4.6	2.3	2.7	18.6	18.5	17.6	2.0	2.1	2.3
New Zealand	2.7	2.5	2.9	1.1	1.1	2.1	–5.0	–4.2	–4.2	6.9	6.0	5.3
Developing Asia	**6.4**	**6.3**	**6.5**	**4.7**	**5.0**	**4.7**	**0.9**	**1.1**	**1.3**	**. . .**	**. . .**	**. . .**
China	7.7	7.6	7.3	2.6	2.7	3.0	2.3	2.5	2.7	4.1	4.1	4.1
India	3.2	3.8	5.1	10.4	10.9	8.9	–4.8	–4.4	–3.8	. . .	. . .	. . .
ASEAN-5	**6.2**	**5.0**	**5.4**	**3.9**	**4.9**	**5.1**	**0.6**	**–0.1**	**–0.1**	**. . .**	**. . .**	**. . .**
Indonesia	6.2	5.3	5.5	4.3	7.3	7.5	–2.7	–3.4	–3.1	6.1	5.9	5.8
Thailand	6.5	3.1	5.2	3.0	2.2	2.1	0.0	0.1	–0.2	0.7	0.7	0.7
Malaysia	5.6	4.7	4.9	1.7	2.0	2.6	6.1	3.5	3.6	3.0	3.1	3.0
Philippines	6.8	6.8	6.0	3.2	2.8	3.5	2.9	2.5	2.2	7.0	7.0	7.0
Vietnam	5.2	5.3	5.4	9.1	8.8	7.4	5.8	5.6	3.3	4.5	4.5	4.5
Other Developing Asia[4]	**6.3**	**6.0**	**6.5**	**7.0**	**7.0**	**6.5**	**–2.1**	**–1.6**	**–1.7**	**. . .**	**. . .**	**. . .**
Memorandum												
Emerging Asia[5]	5.8	5.9	6.2	4.4	4.5	4.4	1.8	2.0	2.1	. . .	. . .	. . .

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a complete list of the reference periods for each country.
[1]Movements in consumer prices are shown as annual averages. Year-end to year-end 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 Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Fiji, Kiribati, Lao P.D.R., Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nepal, Palau, Papua New Guinea, Samoa, Solomon Islands, Sri Lanka, Timor-Leste, Tonga, Tuvalu, and Vanuatu.
[5]Emerging Asia comprises all economies in Developing Asia, Hong Kong SAR, Korea, Singapore, and Taiwan Province of China.

ing the authorities' inflation target in the near term. This requires that the accommodative monetary policy stance be implemented fully and supported with other much-needed measures (such as structural reforms) that raise medium-term growth prospects.

Amid heightened global financial market volatility, micro- and macroprudential tools will continue to play a role in achieving financial stability. Measures that strengthen the resilience of financial systems will also help economies weather the consequences of a potential sudden stop in capital inflows. In some economies, including China, further financial reform is needed to safeguard financial stability, improve the allocation of credit, and guide the economy to a more sustainable growth path.

Fiscal targets, where needed, should be defined in cyclically adjusted terms, allowing automatic stabilizers to operate. In many economies, buffers should be rebuilt to open up space for growth-enhancing infrastructure, social spending, and future countercyclical policy. In China, strengthening the management, transparency, and overall governance framework of local government finances would also help contain the risks from rising local government debt. In Japan, the recently announced decision to implement the first stage of the consumption tax increase to 8 percent in April 2014 is a welcome step forward. The planned additional stimulus for 2014 to mitigate the growth impact of this measure puts a premium on developing a concrete and credible medium-term plan as quickly as possible to place public debt on a sustainable path. A successful implementation of Abenomics would have clear growth benefits not only to Japan but also to other economies in the rest of Asia (see also Box 1.4 in Chapter 1). Finally, for a few countries, the recent market pressure has put a further premium on strengthening public finances and implementing structural reforms (for example, India).

If downside risks to growth materialize, exchange rate flexibility and monetary easing should generally be the first lines of defense in economies where inflation is low and expectations are firmly anchored. In some economies, however (for example, India and Indonesia), more tightening may be called for given continued inflation pressure, further amplified by currency depreciation. On the fiscal side, automatic stabilizers should be allowed to play, but high deficits make fiscal consolidation a priority in a number of economies, such as India, Japan, and Vietnam. In others, stimu-

lus should be considered only if a serious slowdown threatens.

Latin America and the Caribbean: Growth Is Subdued

Less supportive external conditions and domestic supply-side constraints have dampened activity in Latin America and the Caribbean. Output growth is projected to moderate to 2¾ percent in 2013 (Figure 2.9). Growth is expected to recover gradually in 2014 as external demand strengthens, but risks remain on the downside. Allowing exchange rates to adjust to changes in fundamentals will help partly offset the effects of tighter financial conditions. Gradual fiscal consolidation should continue in countries with limited fiscal space and those with still tight capacity constraints. With weaker growth prospects and heightened capital flow volatility, safeguarding financial stability is a key policy priority. Growth in the tourism-dependent Caribbean economies remains low, and policy challenges include addressing high debt, weak competitiveness, and fragile financial systems.

Growth in most of the Latin America and Caribbean (LAC) region in the first half of the year was weaker than envisaged in the April 2013 WEO. Activity was held back by infrastructure bottlenecks, lower commodity prices, and policy tightening in some cases (Figure 2.10). The unexpected slowdown in Mexico was related to lower government spending, a decline in construction activity, and sluggish demand from the United States. In Brazil, growth picked up on the back of stronger investment, including inventories. However, high-frequency indicators point to some moderation in activity going into the second half of the year.

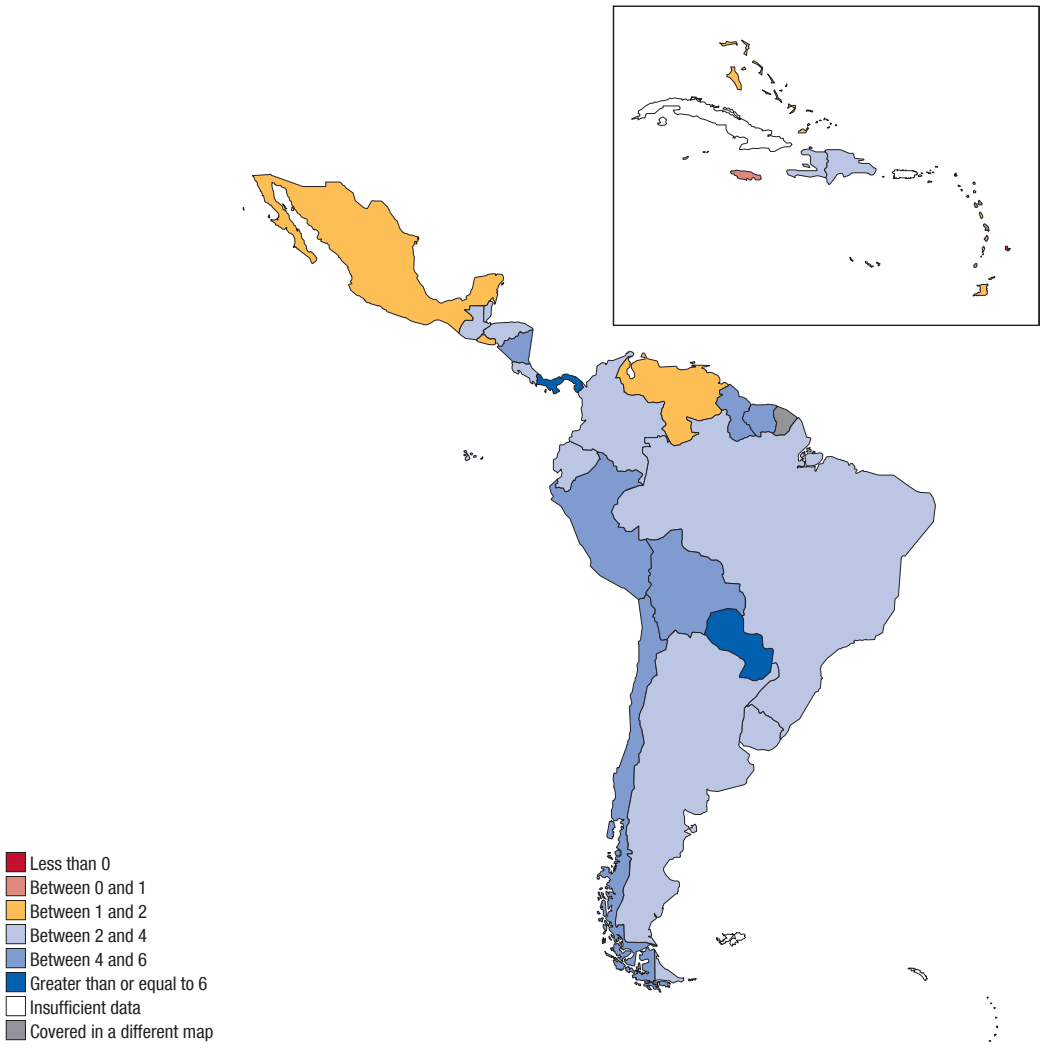
The recent increase in global financial market volatility hit the region's exchange rates, sovereign spreads, and stock markets. In some countries, governments responded to market turbulence by easing capital controls and intervening to contain exchange rate volatility. In many cases, depreciation brought exchange rates more in line with fundamentals. Moreover, sovereign and corporate yields are still relatively low from a historical perspective.

Output in the LAC region is projected to grow by 2¾ percent in 2013 and 3 percent in 2014, some ¾ percentage point lower than forecast in the April 2013 WEO (Table 2.4). The downward revisions reflect the weaker-than-expected outturn in the first half of 2013 and the effect of tighter financial conditions on growth going forward. Growth rates in the medium term are also expected to remain below the cyclically high rates recorded after the Great Recession:[3]

- In most of the financially integrated economies (Chile, Colombia, Peru, Uruguay), growth is expected to moderate to more sustainable levels. Strong wage growth and low unemployment should support consumption. Despite some deceleration, credit growth is expected to remain relatively strong. External current account deficits are projected to widen further in 2013 as commodity prices have softened and domestic demand continues to outpace output. Inflation pressure is broadly contained, except in Uruguay, where inflation remains above target.
- Brazil's economy is expected to grow by 2½ percent in 2013. The recent depreciation of the currency will improve external competitiveness and partially offset the adverse impact of increases in sovereign yields. But higher inflation has lowered real incomes and may weigh on consumption, while supply constraints and policy uncertainty may continue to constrain activity.
- In Mexico, growth is expected to slow to 1¼ percent in 2013, largely reflecting the weakness in activity in the first half of the year. Growth is projected to recover gradually and return to 3 percent in 2014, as manufacturing picks up on the back of a recovery in U.S. demand, public spending regains momentum, and ongoing structural reforms begin to bear fruit. In the medium term, growth is expected to rise to an annual average of 3½ to 4 percent, based on the IMF staff's preliminary estimates of the effects of structural reforms.
- Growth in other commodity-exporting countries is generally expected to remain strong, except in Venezuela, where energy shortages and exchange controls are curtailing economic activity. Growth in Argentina has recovered due to a strong harvest, but activity continues to be constrained by foreign exchange and other administrative controls.
- Output growth will slow in Central America, given weaker-than-expected external demand and sluggish remittances.

[3]See Chapter 3 in the May 2013 *Western Hemisphere Regional Economic Outlook*.

Figure 2.9. Latin America and the Caribbean: 2013 GDP Growth Forecasts
(Percent)



Source: IMF staff estimates.
Note: The data for Argentina are officially reported data. The IMF has, however, issued a declaration of censure and called on Argentina to adopt remedial measures to address the quality of the official GDP data. Alternative data sources have shown significantly lower real growth than the official data since 2008. In this context, the IMF is also using alternative estimates of GDP growth for the surveillance of macroeconomic developments in Argentina.

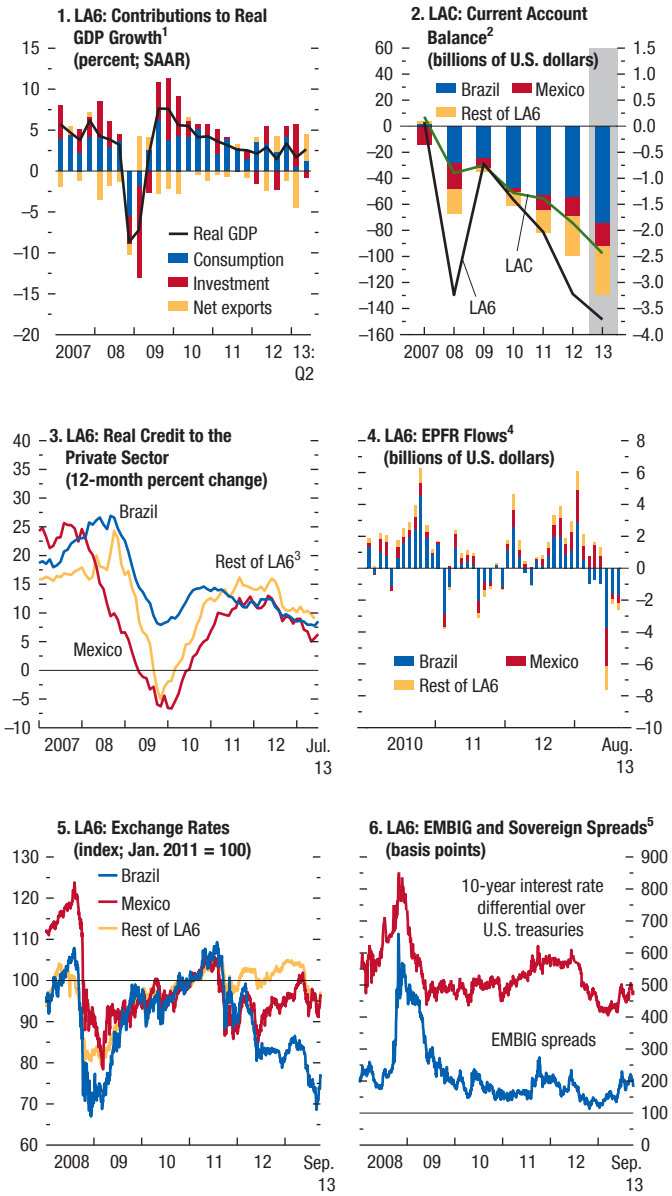
- Activity will be weak in much of the Caribbean as tourism flows remain subdued and construction activity contracts. High debt levels, weak competitiveness, and rising financial vulnerabilities continue to constrain fiscal policy and growth prospects.

Overall, downside risks dominate the outlook. Given the LAC region's strong dependence on commodities, a key external risk is a sharp drop in commodity prices. As illustrated in the plausible downside scenario, slower growth in major economies outside of the region, including in China, would reduce growth in Latin America by ½ percentage point through its effect on commodity prices and exports. Renewed financial market volatility and continued capital outflows represent another risk.

Policymakers should calibrate macroeconomic policies based on a realistic assessment of their economies' supply potential. Maintaining unsustainably high growth rates through fiscal policy stimulus would weaken public finances and widen current account deficits. In the context of limited economic slack and still relatively favorable external conditions in most of

Figure 2.10. Latin America: Growth Is Subdued

Growth has slowed with weaker external and domestic demand. Despite increases in financial volatility and lower commodity prices, external conditions are still broadly supportive. Policies should aim at improving the quality and sustainability of growth and reducing domestic financial volatility.



Sources: Bloomberg, L.P.; EPFR Global/Haver Analytics; Haver Analytics; national authorities; and IMF staff estimates.
Note: LAC = Latin America and the Caribbean. LA6 = Brazil, Chile, Colombia, Mexico, Peru, Uruguay. Rest of LA6 refers to total for Chile, Colombia, Peru, and Uruguay (unless noted otherwise).
[1]Purchasing-power-parity GDP-weighted averages of LA6. SAAR = seasonally adjusted annual rate.
[2]LA6: simple average; percent of GDP, right scale. LAC: percent of GDP, right scale.
[3]Simple average for Chile, Colombia, Peru, and Uruguay. Data are through June 2013.
[4]EPFR flows provide a limited proxy for overall balance of payments (BoP) flows, although recent studies have found a close match in the pattern of EPFR flows and BoP gross portfolio flows (see Fratzscher, 2012).
[5]Sovereign bond yields are average of Brazil, Chile, Colombia, Mexico, and Peru, depending on availability. EMBIG = JPMorgan EMBI Global Index.

Latin America, countries should proceed with gradual fiscal consolidation while protecting critical public investment and social spending. Fiscal consolidation remains critical for countries with high debt and deficits, including in the Caribbean. In countries with low inflation and anchored inflation expectations, exchange rate flexibility and monetary policy should continue to be the first line of defense if downside risks materialize, while guarding against excessive exchange rate volatility. Where inflation pressure persists (including in Brazil), monetary tightening remains appropriate.

Prudential oversight of the financial system needs to be stepped up, with the goal of identifying and addressing potential vulnerabilities, particularly against a backdrop of recent rapid credit growth that was fueled in part by capital inflows.

Strengthening competitiveness, raising productivity, and increasing saving and investment rates remain critical medium-term challenges for the LAC region. With labor participation already high and unemployment rates low, countries will need to rely increasingly on capital accumulation and productivity gains to maintain high growth rates. Raising domestic savings will allow increased investment without additional reliance on foreign borrowing.

Commonwealth of Independent States: Slower Growth amid Weak External and Internal Demand

Growth in the Commonwealth of Independent States (CIS) has slowed, reflecting both a weak external environment and supply-side constraints in some economies (Figure 2.11). Reforms are needed to boost the region's growth potential, while in several countries policies also need to reduce macro imbalances, given heightened risks and limited buffers.

Growth in the European CIS economies, including Russia, slowed in the first half of 2013 (Figure 2.12). Soft external demand was a factor but weak domestic investment also contributed, particularly where output gaps were small and supply constraints were binding. In the Caucasus and central Asia (CCA), however, economic activity continued to grow at a strong pace as in 2012, supported by an expansion of productive capacity in extractive sectors for the commodity exporters, as well as a stable inflow of remittances thus far. The recent increase in global financial volatility hit the

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	
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
North America	**2.8**	**1.5**	**2.6**	**2.2**	**1.6**	**1.7**	**–2.7**	**–2.6**	**–2.7**	**. . .**	**. . .**	**. . .**
United States[4]	2.8	1.6	2.6	2.1	1.4	1.5	–2.7	–2.7	–2.8	8.1	7.6	7.4
Canada	1.7	1.6	2.2	1.5	1.1	1.6	–3.4	–3.1	–3.1	7.3	7.1	7.1
Mexico	3.6	1.2	3.0	4.1	3.6	3.0	–1.2	–1.3	–1.5	5.0	4.8	4.5
South America[5]	**2.6**	**3.2**	**3.1**	**6.8**	**8.0**	**8.0**	**–1.8**	**–2.6**	**–2.5**	**. . .**	**. . .**	**. . .**
Brazil	0.9	2.5	2.5	5.4	6.3	5.8	–2.4	–3.4	–3.2	5.5	5.8	6.0
Argentina[6]	1.9	3.5	2.8	10.0	10.5	11.4	0.0	–0.8	–0.8	7.2	7.3	7.4
Colombia	4.0	3.7	4.2	3.2	2.2	3.0	–3.2	–3.2	–3.2	10.4	10.3	10.0
Venezuela	5.6	1.0	1.7	21.1	37.9	38.0	2.9	2.8	2.2	7.8	9.2	10.3
Peru	6.3	5.4	5.7	3.7	2.8	2.5	–3.6	–4.9	–5.1	6.8	6.0	6.0
Chile	5.6	4.4	4.5	3.0	1.7	3.0	–3.5	–4.6	–4.0	6.4	6.2	6.4
Ecuador	5.1	4.0	4.0	5.1	2.8	2.4	–0.2	–1.1	–1.4	5.3	5.5	5.5
Bolivia	5.2	5.4	5.0	4.5	4.8	4.1	7.8	4.2	3.1	6.4	6.4	6.3
Uruguay	3.9	3.5	3.3	8.1	8.5	8.6	–5.4	–4.9	–4.1	6.0	6.7	6.8
Paraguay	–1.2	12.0	4.6	3.7	3.2	4.6	0.4	0.5	–0.2	5.8	5.4	5.5
Central America[7]	**5.0**	**3.9**	**3.9**	**4.4**	**4.4**	**4.4**	**–6.1**	**–6.2**	**–6.1**	**. . .**	**. . .**	**. . .**
Caribbean[8]	**2.3**	**1.7**	**2.9**	**5.0**	**5.0**	**4.9**	**–4.9**	**–4.0**	**–3.6**	**. . .**	**. . .**	**. . .**
Memorandum												
Latin America and the Caribbean[9]	2.9	2.7	3.1	5.9	6.7	6.5	–1.9	–2.4	–2.4	. . .	. . .	. . .
Eastern Caribbean Currency Union[10]	–0.2	1.0	2.0	2.9	2.5	2.5	–16.0	–16.2	–16.7	. . .	. . .	. . .

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a complete list of the reference periods for each country.

[1]Movements in consumer prices are shown as annual averages. Year-end to year-end 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]U.S. data are subject to change pending completion of the release of the Bureau of Economic Analysis's Comprehensive Revision of the National Income and Product Accounts (NIPA).

[5]Includes Guyana and Suriname.

[6]The data for Argentina are officially reported data. The IMF has, however, issued a declaration of censure and called on Argentina to adopt remedial measures to address the quality of the official GDP and CPI-GBA data. Alternative data sources have shown significantly lower real growth than the official data since 2008 and considerably higher inflation rates than the official data since 2007. In this context, the IMF is also using alternative estimates of GDP growth and CPI inflation for the surveillance of macroeconomic developments in Argentina.

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

[8]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.

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

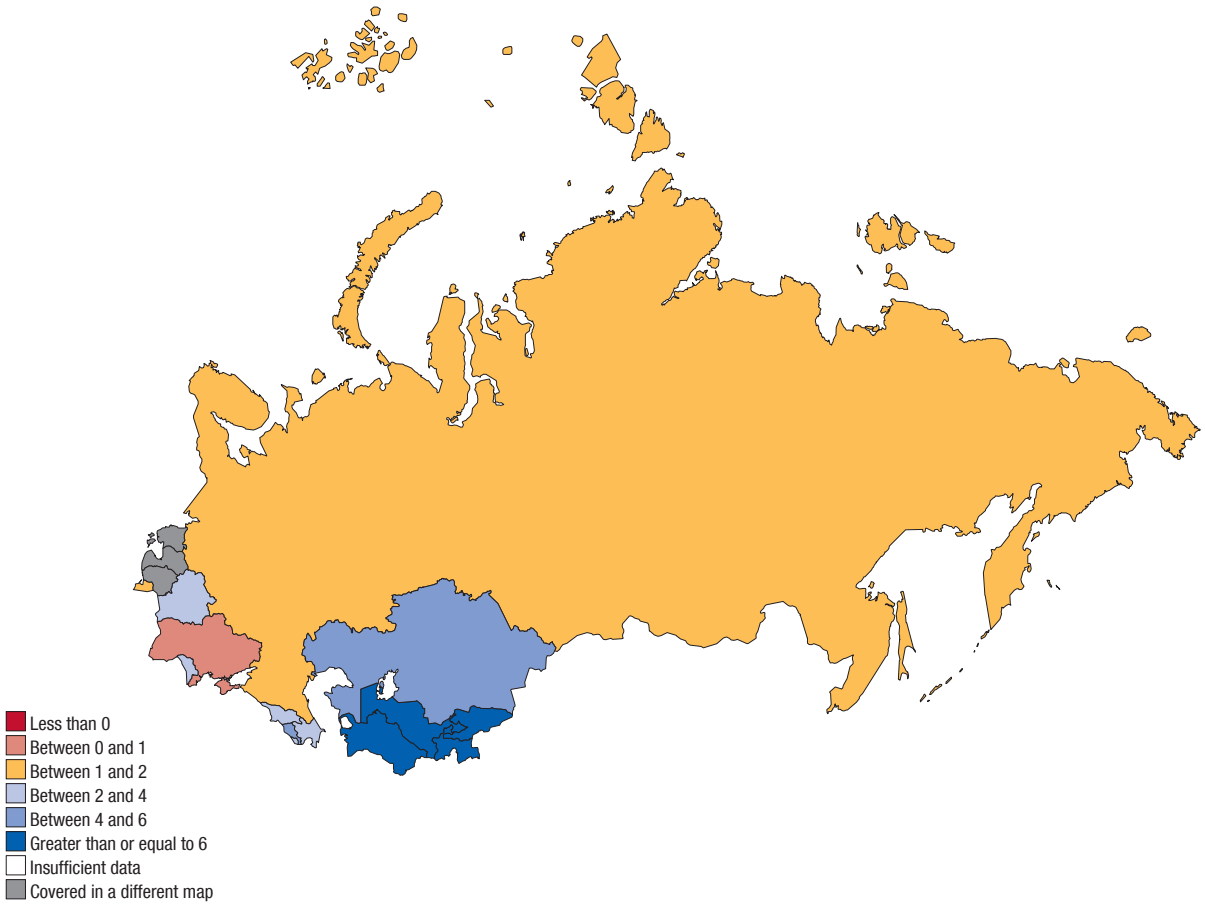
[10]Eastern Caribbean Currency Union comprises Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines as well as Anguilla and Montserrat, which are not IMF members.

major European CIS economies more than the CCA, given the latter's limited external financial exposure.

Growth in the CIS economies is projected to decelerate slightly from 3½ percent in 2012 to about 2 percent this year, before rising to 3½ percent in 2014 (Table 2.5). Prospects vary within the region, with weaker growth in the European CIS economies and net energy importers, and stronger growth in the CCA economies and the net energy exporters:

- In Russia, growth is projected to average 1½ percent in 2013, increasing to 3 percent in 2014. This estimate reflects a downward revision of close to 2 percentage points for 2013 and ¾ percentage point for 2014 relative to the April 2013 WEO. Although consumption is still supported by strong real wage and retail credit growth, growth prospects have been dampened by a weak external environment, some acceleration of capital outflows and declining equity prices, and subdued investment.
- Outside Russia, growth in the region's energy exporters is forecast to remain strong. In Kazakhstan, growth will average 5 percent in 2013 and 5¼ percent in 2014, driven by a recovery in oil production and strong activity in the industrial and services sectors.
- In Ukraine, which has been in recession since mid-2012, growth will be near zero this year. Activity will be held back by weak exports, political uncertainty, and tight monetary conditions in defense of an exchange rate under pressure because of the economy's twin deficits. Growth is projected to rise to 1½ percent in 2014.
- Most of the other energy importers have not seen large capital inflows, in part due to weak recent

Figure 2.11. Commonwealth of Independent States: 2013 GDP Growth Forecasts
(Percent)



Source: IMF staff estimates.
Note: Includes Georgia for reasons of geography and similarity in economic structure.

economic performance or limited linkages to external financial markets. Growth is projected to remain low in Belarus, reflecting structural rigidities and declining competitiveness. Activity will rebound in Moldova, driven by agriculture, exports, and consumption. The Kyrgyz Republic is projected to grow at 7 percent for 2013–14 as the economy recovers from earlier disruptions in gold mining and sustains strong performance in construction, trade, and services.

- Growth in Armenia and Georgia is expected to decelerate this year. In Armenia, this reflects slower growth in the agricultural sector in 2013 after a strong performance in 2012 related to favorable weather, upward price adjustments in gas and electricity tariffs, and budget underspending. Growth in Georgia is expected to moderate given slower private investment, weak credit growth, and budget underspending.

Inflation in the region will average 6–6½ percent in 2013–14 and is a pressing issue in a few economies (Belarus, Uzbekistan). In Belarus, inflation has been declining, but is projected to remain in double digits. Inflation in Uzbekistan is also expected to stay in double digits, reflecting continuing depreciation of the currency, higher local food and administered prices, and wage increases. In Russia, inflation is projected to fall to about 6¼ percent by the end of 2013, just above the upper end of the central bank's target range of 5 to 6 percent, as the effects of temporary supply-side shocks fade. Inflation is expected to remain above the central bank's point inflation target of 4½ percent in 2014.

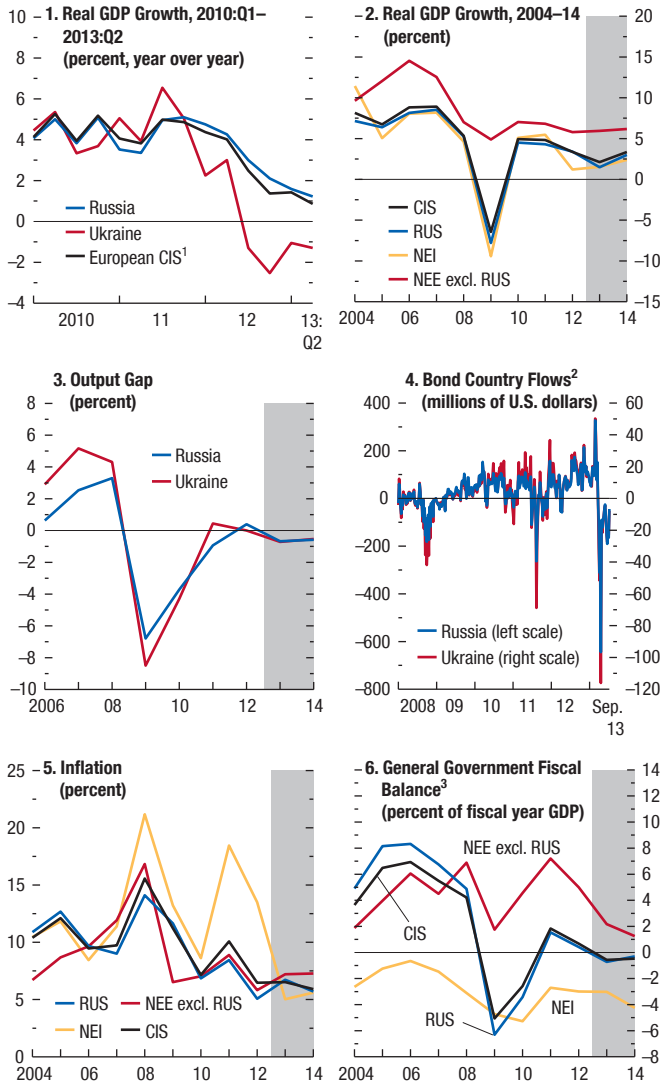
Risks are tilted to the downside. Higher government bond yields and borrowing costs or more difficult access to global capital markets would worsen the outlook for the region, especially for countries with relatively large fiscal and/or external imbalances and limited buffers, such as Belarus and Ukraine (which has seen sovereign credit default swap yields rise to prohibitive ranges in recent months). For the CCA commodity importers, however, the large share of longer-term instruments in the financing of their current account deficits would be a mitigating factor. Lower-than-anticipated growth in emerging market economies elsewhere would lower commodity prices, which would have a large negative impact on activity in Russia, Ukraine, and the CCA commodity exporters. Given the prominence of Russia in trade, and remittance flows in the region, the CCA commodity importers would be affected indirectly through the sharper-than-expected slowdown in Russia.

Policies should continue to maintain macroeconomic stability and implement reforms to boost potential growth. Russia is now in a better position to absorb external shocks than it used to be because of its more flexible exchange rate, improved crisis-management capacity, higher reserves, and narrower balance sheet mismatches. The priority is to raise the growth potential, improve the investment regime, facilitate new energy production, scale back government involvement in the economy, and gradually strengthen fiscal buffers. Ukraine would benefit from a more flexible exchange rate regime, tighter fiscal policy, an increase in domestic gas and heating tariffs, and a restart of structural reforms. Belarus will need to coordinate fiscal and monetary policies to tightly manage domestic demand and adopt structural reforms to achieve sustainable growth. Kazakhstan should continue to move toward a long-lasting solution to its high stock of nonperforming loans and revamp its monetary and fiscal policy frameworks. Azerbaijan and Turkmenistan should remove fiscal stimulus to keep inflation at bay and improve fiscal sustainability while further enhancing the efficiency of government spending. Monetary tightening should continue in Uzbekistan to contain second-round effects on inflation from local food and administered price increases.

For some economies, budget underspending has resulted in an unexpected fiscal tightening, which has also contributed to the recent slowdown (Armenia, Georgia). For these economies, the priority should be

Figure 2.12. Commonwealth of Independent States: Slower Growth amid Weak External and Internal Demand

Growth in the CIS economies is increasingly dampened by supply constraints. Supply-side reforms are needed to boost the region's growth potential. In several countries macroeconomic policies should avoid widening macro imbalances given heightened financial risks and limited buffers.



Sources: EPFR Global/Haver Analytics; Haver Analytics; and IMF staff estimates.
Note: CIS = Commonwealth of Independent States. Georgia, which is not a member of the CIS, is included in this group for reasons of geography and similarity in economic structure. Net energy exporters (NEE): Azerbaijan, Kazakhstan, Russia (RUS), Turkmenistan, Uzbekistan. Net energy importers (NEI): Armenia, Belarus, Georgia, Kyrgyz Republic, Moldova, Tajikistan, Ukraine. NEE excl. RUS = net energy exporters excluding Russia.
[1]European CIS comprises Belarus, Moldova, Russia, and Ukraine.
[2]EPFR flows provide a limited proxy for overall balance of payments (BoP) flows, although recent studies have found a close match in the pattern of EPFR flows and BoP gross portfolio flows (see Fratzscher, 2012). In addition, these high-frequency data are more up to date than the BoP series. Moreover, the EPFR bond flows can be considered a proxy for sovereign bond flows, which were the most prominent part of portfolio flows toward countries in the region in recent years.
[3]General government fiscal balance refers to net lending/borrowing except for NEI, where it is the overall balance.

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	
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Commonwealth of Independent States (CIS)	**3.4**	**2.1**	**3.4**	**6.5**	**6.5**	**5.9**	**2.9**	**2.1**	**1.6**	**. . .**	**. . .**	**. . .**
Net Energy Exporters	**3.8**	**2.2**	**3.5**	**5.2**	**6.8**	**6.0**	**4.1**	**3.2**	**2.6**	**. . .**	**. . .**	**. . .**
Russia	3.4	1.5	3.0	5.1	6.7	5.7	3.7	2.9	2.3	6.0	5.7	5.7
Kazakhstan	5.1	5.0	5.2	5.1	6.3	6.3	3.8	4.3	3.1	5.3	5.3	5.3
Uzbekistan	8.2	7.0	6.5	12.1	12.1	10.4	0.7	0.2	1.1	. . .	. . .	. . .
Azerbaijan	2.2	3.5	5.6	1.0	3.7	6.3	21.7	13.3	9.2	6.0	6.0	6.0
Turkmenistan	11.1	12.2	10.4	5.3	7.6	7.0	0.0	0.2	3.8	. . .	. . .	. . .
Net Energy Importers	**1.2**	**1.5**	**2.4**	**13.5**	**5.0**	**5.6**	**–7.4**	**–7.5**	**–7.2**	**. . .**	**. . .**	**. . .**
Ukraine	0.2	0.4	1.5	0.6	0.0	1.9	–8.4	–7.3	–7.4	7.5	8.0	8.0
Belarus	1.5	2.1	2.5	59.2	17.5	14.8	–2.9	–8.3	–6.7	0.6	0.6	0.6
Georgia[4]	6.1	2.5	5.0	–0.9	–0.3	4.0	–11.5	–6.5	–7.8	15.0	16.7	17.3
Armenia	7.2	4.6	4.8	2.5	7.0	3.5	–11.3	–10.0	–8.6	19.0	18.5	18.0
Tajikistan	7.5	6.7	5.8	5.8	7.5	7.2	–1.3	–1.7	–2.2	. . .	. . .	. . .
Kyrgyz Republic	–0.9	7.4	6.5	2.8	8.6	7.2	–15.3	–9.6	–8.3	7.7	7.6	7.6
Moldova[5]	–0.8	4.0	4.0	4.6	4.4	4.3	–7.0	–7.6	–8.8	5.6	6.2	5.7
Memorandum												
Caucasus and Central Asia[6]	5.8	5.8	6.1	5.2	6.9	7.0	4.8	3.9	3.1	. . .	. . .	. . .
Low-Income CIS Countries[7]	6.6	6.0	5.9	7.5	8.7	8.0	–4.2	–3.3	–2.8	. . .	. . .	. . .
Net Energy Exporters Excluding Russia	5.8	5.9	6.2	5.8	7.2	7.3	6.4	5.0	4.1	. . .	. . .	. . .

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a complete list of the reference periods for each country.
[1]Movements in consumer prices are shown as annual averages. Year-end to year-end 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, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[5]Moldova predictions are based on data available for the first quarter of 2013.
[6]Includes Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.
[7]Low-Income CIS countries comprise Armenia, Georgia, Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan.

to allow policies to be more accommodative for productive spending to support demand. In Georgia, this year's policy rate cuts should help reduce deflationary pressures, although resolution of recent political uncertainty is needed to restore investor confidence.

Middle East, North Africa, Afghanistan, and Pakistan: Growth Hinges on Improvements in Oil Production and Confidence

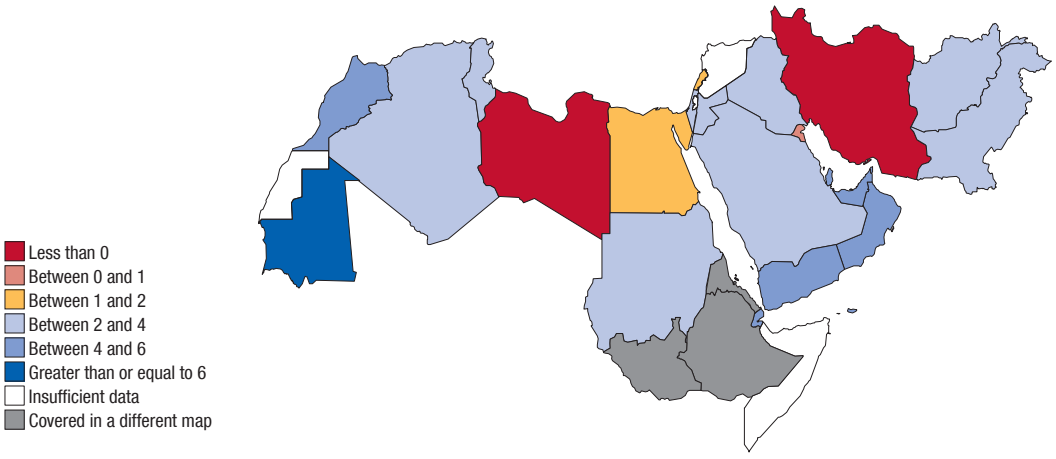
Growth in the MENAP region is expected to decline in 2013 (Figure 2.13). Weak global demand and domestic supply disruptions have reduced oil production. Meanwhile, uncertainties arising from prolonged political transitions, and a weak external environment, weigh on confidence in the oil importers. Growth is expected to pick up in 2014 with improved global conditions and a recovery in oil production (Figure 2.14). However, sustainable and equitable growth over the medium term depends on an improved sociopolitical environment and macroeconomic stability, increased economic diversification, and accelerated job creation.

Oil-Exporting Economies

Growth in the oil exporters decelerated substantially in the first half of 2013, driven by falling oil production. In a number of economies, such as the Islamic Republic of Iran, Iraq, and Libya, high geopolitical tension, economic sanctions, unscheduled maintenance, and deteriorating security have disrupted the oil supply. All in all, the region's hydrocarbon output is expected to fall by 1 percent in 2013, with the decline driven broadly by Libya and Iran. Saudi Arabia's oil production for the year as a whole is also projected to decline slightly, as it continued to play a stabilizing role in the global oil market: it reduced production in late 2012 through early 2013 in the face of slowing global demand and rising supply from suppliers outside the Organization of the Petroleum Exporting Countries (OPEC), and raised it later in the year to compensate for oil production disruptions elsewhere in the region. In contrast to oil GDP, non-oil GDP is holding up well in most countries, supported by high government spending and recovering credit growth.

During the recent increase in financial market volatility, sovereign and corporate bond yields for the

Figure 2.13. Middle East, North Africa, Afghanistan, and Pakistan: 2013 GDP Growth Forecasts
(Percent)



Source: IMF staff estimates.
Note: Includes Israel only for reasons of geography. Iran's real GDP growth for 2012 and beyond has not been significantly updated from the April 2013 WEO in light of the pending publication of national accounts by the central bank and the new authorities' plans.

MENAP oil exporters rose, but not significantly and from low levels, reflecting generally limited financial linkages with global markets and large external buffers.

For the year as a whole, growth is projected to average 2 percent—a downward revision of 1¼ percentage point from the April 2013 WEO—largely on account of lower oil production. Growth will likely increase to 4 percent in 2014 with a recovery in global demand and higher oil production in Saudi Arabia, Iraq, and Libya (Table 2.6). Growth in non-oil GDP is forecast to increase from about 3¾ percent in 2013 to 4½ percent in 2014.

Average inflation is not an immediate concern for most oil exporters. In the Gulf Cooperation Council (GCC) economies, inflation rates have been gradually rising, largely because of food prices and/or higher housing costs, but are expected to remain moderate at about 3¼ percent in 2013–14. By contrast, in Iran, inflation has accelerated markedly since late 2012, reflecting pass-through from the large currency depreciation. Elsewhere, inflation has declined further with the alleviation of supply bottlenecks, moderating food prices, and, in Algeria, a withdrawal of policy accommodation, but is expected to remain higher than in the GCC economies.

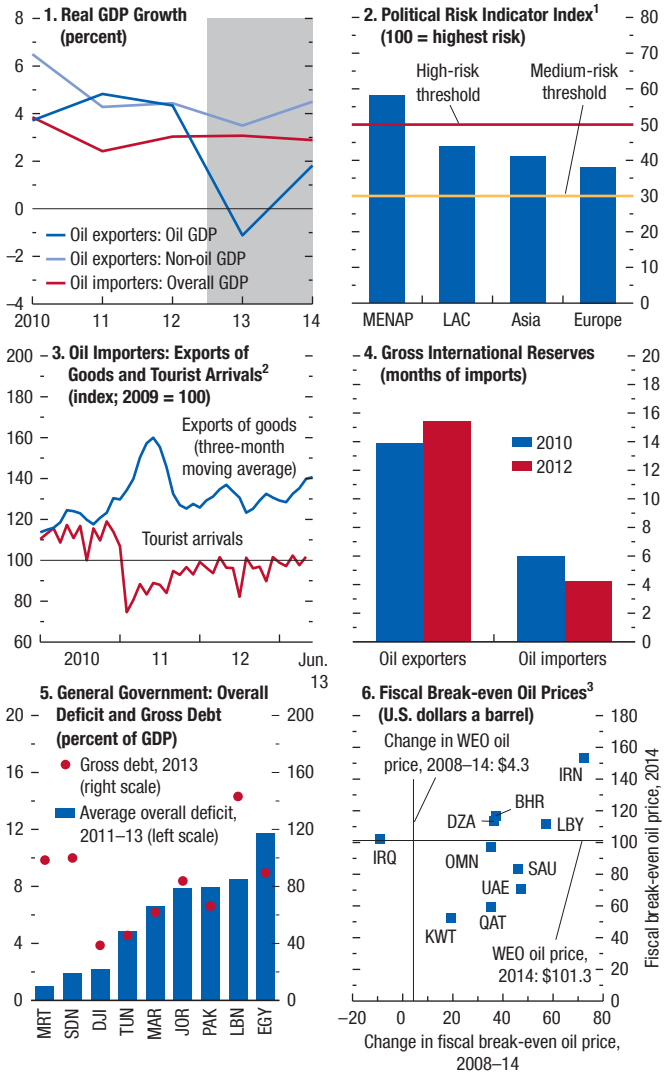
Risks to the near-term regional outlook are broadly balanced. On the upside, geopolitical shocks and supply disruptions in the region may push oil prices higher, benefiting growth in oil suppliers with spare capacity as they compensate for shortfalls in other oil exporters. On the downside, weaker global demand, particularly a further slowdown in emerging market economies, or a faster-than-expected increase in non-OPEC supply, could put downward pressure on oil prices and growth in oil exporters in the region. Although a sharper-than-expected tightening in global monetary conditions would lead to higher domestic interest rates in GCC economies whose currencies are pegged to the U.S. dollar, the overall growth effects are likely to be small as long as oil prices remain strong.

A sustained decline in oil prices would leave many oil exporters in the region with fiscal deficits. Over the past several years, increased spending has raised fiscal break-even oil prices (oil prices at which government budgets are balanced) faster than actual oil prices have risen. As a result, a number of economies (Algeria, Bahrain, Iran, Iraq, Libya, Yemen) have fiscal break-even prices above the projected oil price for 2014. Although the remaining economies are running surpluses and public debt levels are still relatively low, most have not been accumulating wealth fast enough to build sufficient reserves for future generations and as a buffer against declines in oil revenue.

The policy priority for the region's oil exporters is to increase resilience to oil revenue shocks while diversifying their economies for a rapidly growing labor force. Only a few GCC economies with long production horizons and substantial fiscal buffers have the scope to

Figure 2.14. Middle East, North Africa, Afghanistan, and Pakistan: Growth Hinges on Improvements in Oil Production and Confidence

Growth in the region is decelerating on account of declining oil production among the oil-exporting countries and continued challenges from difficult political transitions in oil importers. Priorities are to improve the sociopolitical environment, strengthen macroeconomic stability, reduce fiscal and external imbalances, and implement reforms for sustainable and inclusive growth, further diversification, and job creation.



Sources: Haver Analytics; national authorities; PRS Group, Inc., *International Country Risk Guide* (ICRG); United Nations World Tourism Organization, World Tourism Barometer; and IMF staff estimates.

Note: Middle East, North Africa, Afghanistan, and Pakistan (MENAP) oil exporters: Algeria (DZA), Bahrain (BHR), Iran (IRN), Iraq (IRQ), Kuwait (KWT), Libya (LBY), Oman (OMN), Qatar (QAT), Saudi Arabia (SAU), United Arab Emirates (UAE), Yemen (YMN); oil importers: Afghanistan (AFG), Djibouti (DJI), Egypt (EGY), Jordan (JOR), Lebanon (LBN), Mauritania (MRT), Morocco (MAR), Pakistan (PAK), Sudan (SDN), Syria (SYR), Tunisia (TUN). Data projections from 2011 and onward exclude Syria.

[1]The index is calculated using ICRG political risk scores and socioeconomic indicators including unemployment, poverty, growth, and inequality. MENAP: DZA, EGY, JOR, LBN, MAR, PAK, TUN; LAC: Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Jamaica, Mexico, Panama, Peru, Uruguay, Venezuela; Asia: China, India, Indonesia, Malaysia, Philippines, Sri Lanka, Thailand, Vietnam; Europe: Albania, Belarus, Bulgaria, Croatia, Hungary, Latvia, Lithuania, Poland, Romania, Serbia, Turkey, Ukraine.

[2]Exports of goods data for June exclude AFG, DJI, MRT, SDN, SYR. Tourist arrival data are through May 2013: seasonally adjusted; the aggregate: EGY, JOR, LBN, MAR, TUN.

[3]The fiscal break-even oil price is the oil price at which the government budget is balanced. For Yemen, the fiscal break-even price in 2013 is $214.8 a barrel.

use countercyclical fiscal policy against downside risks; in others, there is either little or no fiscal space. Fiscal policy should focus on building buffers against oil price shocks by finding non-oil sources of revenue and containing hard-to-reverse current expenditures, while maintaining social and high-quality capital spending in support of economic diversification, growth, and accumulating wealth for future generations.

Measures to raise the quality of education and better align it with the needs of the private sector could, in conjunction with measures to promote entrepreneurship and female labor force participation, help boost non-oil GDP growth and reduce the reliance on fiscal spending from oil revenues as a source of economic growth. In the GCC economies, labor market initiatives, including appropriate training, to attract GCC citizens to private sector work should be complemented with public sector wage restraint and contained expectations of future government employment. Non-GCC economies should aim to promote private sector activity through enhanced basic infrastructure and a better business climate.

Oil-Importing Economies

Economic conditions are difficult in MENAP oil importers. While there are nascent signs of improvement in tourism, exports, and foreign direct investment (FDI) in a number of countries, owing in part to increased demand from the GCC economies, continued political and economic policy uncertainty weigh on confidence and economic activity. The intensifying conflict in Syria and developments in Egypt have sparked concerns about wider destabilization, which further complicates economic management. Moreover, in many countries, external and fiscal buffers are running low.

Overall, growth is expected to remain at about 3 percent in 2013–14. In most economies, this will result in continued high unemployment and stagnating living standards, likely contributing to continued social discontent.

- In Egypt, political developments will largely determine the pace of policy reforms, confidence, and domestic activity against a backdrop of large fiscal and external imbalances. Financing from several GCC countries is alleviating short-term constraints, and as a result the authorities have announced a fiscal stimulus package aimed at supporting growth and creating jobs.

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	
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Middle East and North Africa	**4.6**	**2.1**	**3.8**	**10.8**	**12.3**	**10.3**	**13.2**	**10.3**	**9.3**	**. . .**	**. . .**	**. . .**
Oil Exporters[4]	**5.4**	**1.9**	**4.0**	**11.4**	**13.8**	**10.8**	**17.4**	**13.9**	**12.4**	**. . .**	**. . .**	**. . .**
Iran[5]	–1.9	–1.5	1.3	30.5	42.3	29.0	5.0	3.1	0.3	12.2	13.2	14.5
Saudi Arabia	5.1	3.6	4.4	2.9	3.8	3.6	23.2	19.3	17.7	5.5	. . .	. . .
Algeria	3.3	3.1	3.7	8.9	5.0	4.5	5.9	1.8	1.2	10.0	10.0	9.8
United Arab Emirates	4.4	4.0	3.9	0.7	1.5	2.5	17.3	15.2	15.6	. . .	. . .	. . .
Qatar	6.2	5.1	5.0	1.9	3.7	4.0	32.4	29.6	25.6	. . .	. . .	. . .
Kuwait	6.2	0.8	2.6	3.2	3.0	3.5	43.2	38.7	37.7	2.1	2.1	2.1
Iraq	8.4	3.7	6.3	6.1	2.3	5.0	7.0	0.7	0.8	. . .	. . .	. . .
Oil Importers[6]	**2.0**	**2.8**	**3.1**	**8.7**	**7.8**	**8.9**	**–7.7**	**–6.7**	**–4.9**	**. . .**	**. . .**	**. . .**
Egypt	2.2	1.8	2.8	8.6	6.9	10.3	–3.1	–2.6	–0.9	12.3	13.0	12.8
Morocco	2.7	5.1	3.8	1.3	2.3	2.5	–10.0	–7.2	–6.1	9.0	8.9	8.8
Tunisia	3.6	3.0	3.7	5.6	6.0	4.7	–8.1	–8.0	–6.6	17.6	16.7	16.0
Sudan	–3.3	3.9	2.5	35.5	32.1	27.4	–10.8	–11.9	–7.0	18.0	19.0	20.0
Lebanon	1.5	1.5	1.5	6.6	6.3	3.1	–16.2	–16.7	–16.7	. . .	. . .	. . .
Jordan	2.8	3.3	3.5	4.8	5.9	3.2	–18.1	–9.9	–9.1	12.2	12.2	12.2
Memorandum												
Middle East, North Africa, Afghanistan, and Pakistan	4.6	2.3	3.6	10.7	11.7	10.0	12.1	9.4	8.6	. . .	. . .	. . .
Pakistan	4.4	3.6	2.5	11.0	7.4	7.9	–2.1	–1.0	–0.6	6.5	6.7	6.9
Afghanistan	12.5	3.1	3.5	4.5	7.1	5.5	3.9	2.5	1.8	. . .	. . .	. . .
Israel[7]	3.4	3.8	3.3	1.7	1.6	2.1	0.3	2.3	3.0	6.9	6.8	6.8
Maghreb[8]	15.5	2.7	6.7	5.9	4.3	4.6	5.0	–2.8	–2.7	. . .	. . .	. . .
Mashreq[9]	2.2	1.9	2.7	8.2	6.8	9.1	–6.2	–5.2	–3.7	. . .	. . .	. . .

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a complete list of reference periods for each country.

[1]Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Table A7 in the Statistical Appendix.

[2]Percent of GDP.

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

[4]Includes Bahrain, Libya, Oman, and Yemen.

[5]Iran's real GDP growth for 2012 and beyond has not been significantly updated from the April 2013 WEO in light of the pending publication of national accounts by the central bank and the new authorities' plans.

[6]Includes Djibouti and Mauritania. Excludes Syria.

[7]Israel, which is not a member of the region, is included for reasons of geography. Note that Israel is not included in the regional aggregates.

[8]The Maghreb comprises Algeria, Libya, Mauritania, Morocco, and Tunisia.

[9]The Mashreq comprises Egypt, Jordan, and Lebanon. Excludes Syria.

- In Lebanon, political spillovers and refugees from the conflict in Syria will continue to shake confidence and deter tourism and growth, which will strain the fiscal position and put pressure on external balances.
- Pakistan's newly elected government has a mandate to tackle large fiscal and external deficits, which will initially weigh on growth. However, reforms in the energy sector, combined with relatively stable worker remittances and agricultural production and support from international and bilateral donors, are expected to support growth over the medium term.
- Political and security developments in Tunisia will continue to weigh on the economic outlook and the pace of fiscal, financial, and structural reforms.
- Morocco's growth is expected to slow in 2014 as rain-dependent agricultural production normalizes after an exceptional harvest in 2013.
- Escaping regional trends, some economies are projected to enjoy continued solid growth. In Djibouti, strong shipping activity will stimulate construction and attract FDI. In Mauritania, a thriving mining sector and public infrastructure work will buoy economic activity.

In most countries, inflation remains elevated, although it has moderated recently, given decreasing global food and energy prices. In Pakistan, past currency depreciation and reduced energy subsidies will likely result in higher inflation.

Domestic and regional factors are the main sources of risks, which remain tilted to the downside. Setbacks in political transitions and continued social and security tensions could delay a return of confidence and reforms. Downside risks to growth in the euro area and the GCC economies also present risks for the region's oil importers, through spillovers on tourism, trade, and

remittances. Limited exposure to international capital markets should limit risks of a sudden stop in capital inflows for most countries. Still, with limited exchange rate flexibility, tighter global monetary conditions could result in higher domestic interest rates, which would dampen growth.

In an environment of increased risks due to regional tensions and heightened political uncertainty, policy goals are threefold: (1) creating jobs, (2) making inroads into fiscal consolidation, and (3) embarking on structural reforms.

- High and rising unemployment calls for an urgent focus on job creation. Delays in the revival of private investment suggest the need for the government to play a key role in shoring up economic activity over the near term. With limited room for widening fiscal deficits, spending on broad-based subsidies needs to be reoriented toward growth-enhancing public investment, while improving protection of vulnerable groups through well-targeted social assistance. External partners could provide additional financing based on the existence of adequate policy frameworks.
- With concerns about debt sustainability rising and fiscal and external buffers eroded, most countries need to start putting their fiscal house in order. That said, in some cases, there may be scope for phasing the fiscal adjustment to limit its impact on economic activity in the short run. A credible medium-term fiscal consolidation strategy would be needed to ensure continued willingness of domestic and foreign investors to provide adequate financing. In some cases, greater exchange rate flexibility can also help to soften the short-term impact of fiscal consolidation on growth and help to rebuild international reserves.
- A bold structural reform agenda is essential for propelling private sector activity and fostering a more dynamic, competitive, and inclusive economy. Reforms need to focus on a multitude of areas, including improving business regulation and governance, expanding access of businesses and consumers to finance, and increasing the flexibility of labor and product markets while protecting the vulnerable through well-targeted social assistance. Early steps in these areas can help to signal governments' commitment to reforms and improve confidence.

Delays in economic recovery and rising unemployment underscore the urgency of policy reforms. Early progress across all three priority areas—supported by the international community through scaled-up financing, enhanced access, and technical assistance—is essential to start achieving the much-awaited dividends from the recent economic and political transitions.

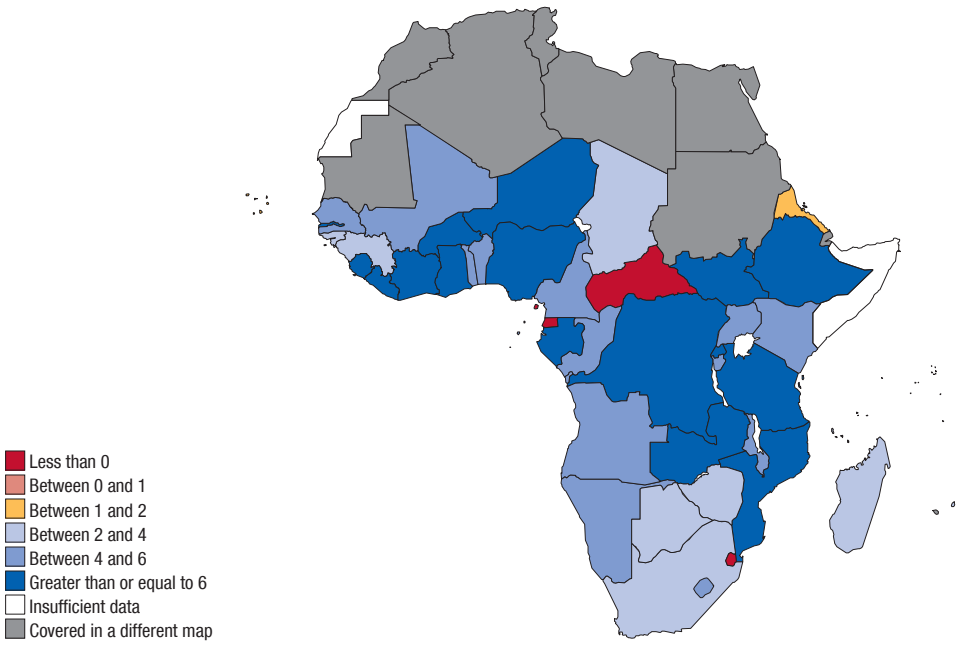
Sub-Saharan Africa: Continued Dynamism

Growth in sub-Saharan Africa remained robust in 2012–13 and is expected to accelerate somewhat in 2014 (Figure 2.15), reflecting strong domestic demand in most of the region. Nevertheless, spillovers from sluggish external demand, reversal of capital flows, and declines in commodity prices are contributing to somewhat weaker growth prospects in many countries relative to the April 2013 WEO. Policies should aim to rebuild room for policy maneuvering where it has been eroded, and more broadly to mobilize revenue to address social and investment needs. To achieve sustainable and inclusive growth in the medium term, governments should deepen structural reforms and give priority to infrastructure investment and social spending.

Activity in sub-Saharan Africa remained strong in the beginning of 2013, although marginally down from 2012, supported in most countries by domestic demand (Figure 2.16). Growth was particularly strong in low-income and fragile states, with the notable exceptions of Mali and Guinea-Bissau, which were affected by internal civil conflicts. Angola benefited from a recovery in oil production. In Nigeria, still high oil prices underpinned strong growth, notwithstanding temporary downdrafts from security problems in the north and oil theft. In Ethiopia, declining coffee prices and supply bottlenecks slowed growth slightly from a very high level. However, South Africa's growth slowed further, in large part due to tense industrial relations, anemic private investment, and weaker consumption growth, the latter affected by slowing disposable income growth and weakening consumer confidence. With a few exceptions, inflation remained broadly stable in the region.

Recent global financial market volatility has affected several economies in the region, although most low-income countries experienced little impact given their limited links with global financial markets. Among frontier markets, Nigeria's currency weakened against the U.S. dollar at the peak of the volatility, although financial conditions have since stabilized. In South

Figure 2.15. Sub-Saharan Africa: 2013 GDP Growth Forecasts
(Percent)



Source: IMF staff estimates.

Africa, the currency suffered a steep decline, bond spreads widened, and equity prices fell due to external factors combined with domestic economic vulnerabilities. However, with inflows returning during July and August, by early September South African asset prices appeared to be stabilizing.

Growth is projected to increase from about 5 percent in both 2012 and 2013 to 6 percent in 2014. This represents a more than ½ percentage point downward revision for 2013 relative to the April 2013 WEO for the whole region, and close to a ½ percentage point downward revision for 2014 for the middle-income countries (Table 2.7):

- In Angola, the revisions reflect delays in budget execution. In Nigeria, among other factors, they mainly reflect reduced oil production.
- In South Africa, growth is forecast to improve gradually in 2014 and beyond as global growth improves and infrastructure bottlenecks are alleviated. However, the tighter financing environment, still weak investor and consumer confidence, continued tense industrial relations, policy uncertainty, and elevated household debt will weigh on economic performance.
- Elsewhere, growth is forecast to remain fairly robust, driven by investment in infrastructure, energy, and natural resources projects, as well as increased output from projects coming onstream (Ghana, Mozambique, Niger, Sierra Leone). However, the recent weakness in international commodity prices may delay mining investment in a few countries (Guinea). Medium-term growth in some resource exporters will also be affected by the Chinese economy's slower growth trajectory.[4]

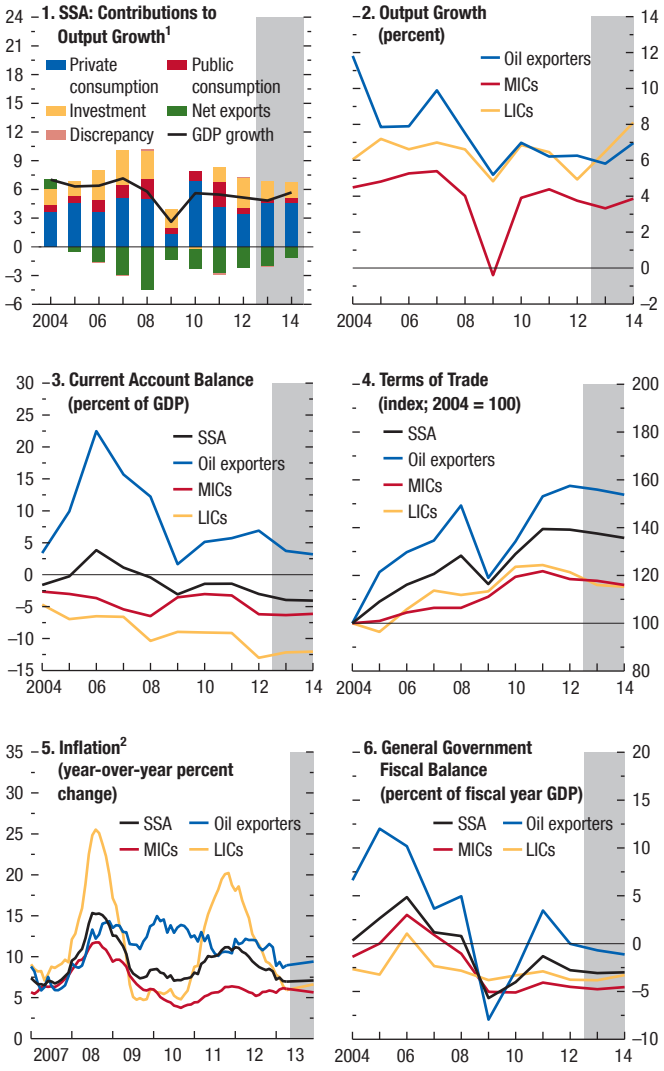
Inflation is expected to decline further in 2013 through much of the region, helped by some moderate global food prices and prudent monetary policies. However, current account balances are projected to continue to weaken, including because of lower global commodity prices (for example, Burkina Faso and Nigeria) and continued FDI-financed investment in infrastructure and natural resources (Mozambique, Sierra Leone).

The main threats to the outlook are a global economic downturn or a further deceleration of growth in China or other major emerging markets that could

[4]See also the Commodities Special Feature in Chapter 1.

Figure 2.16. Sub-Saharan Africa: Continued Dynamism

Growth remains robust and will accelerate further, although at a slower pace than previously expected. Activity is being helped by strong domestic demand and increases in commodity-related investment, and spillovers have so far been small given limited financial linkages. Continued economic strength calls for better efforts to rebuild policy buffers, contain inflation, and boost potential growth.



Sources: Haver Analytics; IMF, International Financial Statistics database; 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]Due to data limitations, the following are excluded: Chad, Republic of Congo, and Gabon from oil exporters; Cameroon, Swaziland, and Zambia from MICs; Comoros, Democratic Republic of the Congo, Eritrea, The Gambia, Guinea, Guinea-Bissau, Liberia, São Tomé and Príncipe, South Sudan, and Zimbabwe from LICs.

weaken exports through lower commodity prices or reduced inflows of aid and FDI. A sharp or protracted decline in oil and commodity prices would affect commodity exporters that do not yet have sufficient fiscal buffers (Angola, Nigeria) and could affect planned or ongoing resource development projects (Ghana, Guinea, Liberia). South Africa is also vulnerable to further slowdowns or sudden stops in capital inflows, which could be triggered by global repricing of risk or domestic shocks, especially escalating industrial tensions. Some frontier markets, such as Ghana and Nigeria, could also be vulnerable to such slowdowns of private financial flows. Domestic risk from further social and political unrest (for example, in the Sahel and Central African Republic) and further security problems in northern Nigeria might also adversely affect neighboring countries. Given the significance of subsistence agriculture, lack of rain can also present the risk of food insecurity and generate price increases in various pockets of the region. Insufficient capacity in electricity generation could be an additional drag on growth in a large number of countries.

Macroeconomic policies should generally remain focused on rebuilding buffers where these have been depleted and on keeping inflation under control. Revenue mobilization is an important objective in low-income countries more generally, where it can help address social and investment needs. Related to this, it will also be crucial to prioritize capital and social spending while continuing to improve project selection and execution capacity. Although debt cancellation under the Heavily Indebted Poor Country and Multilateral Debt Relief Initiatives has improved overall debt sustainability, continued prudence is needed to keep debt levels under control, especially where it has increased recently (for example, Cape Verde and Senegal). Where inflation remains relatively high, tight monetary policies are also warranted (Angola, Tanzania). In some oil-exporting countries (Angola), steps need to be taken to improve transparency and public control over the management of oil revenue. South Africa needs decisive progress in implementing structural reforms to strengthen education and the effectiveness of government services, ease infrastructure bottlenecks, and increase product market competition and labor market flexibility.

In the medium term, all countries in the region will need to step up their efforts to promote sustainable and inclusive growth by investing in physical and

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	
	2012	2013	2014	2012	2013	2014	2012	2013	2014	2012	2013	2014
Sub-Saharan Africa	**4.9**	**5.0**	**6.0**	**9.0**	**6.9**	**6.3**	**–3.0**	**–4.0**	**–4.0**	**. . .**	**. . .**	**. . .**
Oil Exporters[4]	**6.3**	**5.8**	**7.0**	**10.8**	**8.7**	**7.6**	**6.9**	**3.7**	**3.2**	**. . .**	**. . .**	**. . .**
Nigeria	6.6	6.2	7.4	12.2	9.9	8.2	7.6	3.2	3.6	. . .	. . .	. . .
Angola	5.2	5.6	6.3	10.3	9.2	8.5	9.2	7.1	4.6	. . .	. . .	. . .
Equatorial Guinea	5.3	–1.5	–1.9	3.4	5.0	5.4	–12.6	–15.1	–16.9	. . .	. . .	. . .
Gabon	5.6	6.6	6.8	2.7	–1.5	2.5	13.2	9.7	6.3	. . .	. . .	. . .
Republic of Congo	3.8	5.8	4.8	5.0	5.3	2.8	–1.3	7.5	5.1	. . .	. . .	. . .
Middle-Income Countries[5]	**3.8**	**3.3**	**3.9**	**5.5**	**5.9**	**5.5**	**–6.2**	**–6.3**	**–6.1**	**. . .**	**. . .**	**. . .**
South Africa	2.5	2.0	2.9	5.7	5.9	5.5	–6.3	–6.1	–6.1	25.1	26.0	26.2
Ghana	7.9	7.9	6.1	9.2	11.0	9.8	–12.2	–12.9	–10.7	. . .	. . .	. . .
Cameroon	4.6	4.6	4.9	2.4	2.5	2.5	–3.7	–4.1	–3.7	. . .	. . .	. . .
Côte d'Ivoire	9.8	8.0	8.0	1.3	2.9	2.5	–1.3	–2.9	–2.5	. . .	. . .	. . .
Botswana	4.2	3.9	4.1	7.5	6.8	5.8	–4.9	–1.8	–1.2	. . .	. . .	. . .
Senegal	3.5	4.0	4.6	1.4	1.2	1.6	–10.3	–9.5	–8.5	. . .	. . .	. . .
Low-Income Countries[6]	**4.9**	**6.5**	**8.1**	**12.7**	**6.3**	**5.8**	**–13.0**	**–12.2**	**–12.1**	**. . .**	**. . .**	**. . .**
Ethiopia	8.5	7.0	7.5	24.1	7.2	8.2	–6.6	–6.4	–6.1	. . .	. . .	. . .
Kenya	4.6	5.9	6.2	9.4	5.4	5.0	–9.3	–7.8	–7.3	. . .	. . .	. . .
Tanzania	6.9	7.0	7.2	16.0	8.5	5.8	–15.3	–14.9	–14.1	. . .	. . .	. . .
Uganda	2.8	5.6	6.5	14.0	5.0	4.9	–10.5	–12.0	–13.9	. . .	. . .	. . .
Democratic Republic of the Congo	7.2	6.2	10.5	2.1	4.4	6.0	–9.6	–12.9	–17.0	. . .	. . .	. . .
Mozambique	7.4	7.0	8.5	2.1	5.5	5.6	–36.5	–40.1	–41.7	. . .	. . .	. . .
Memorandum												
Sub-Saharan Africa Excluding South Sudan	5.1	4.8	5.7	8.9	6.9	6.3	–2.8	–3.9	–4.2	. . .	. . .	. . .

Note: Data for some countries are based on fiscal years. Please refer to Table F in the Statistical Appendix for a complete list of the reference periods for each country.

[1]Movements in consumer prices are shown as annual averages. Year-end to year-end changes can be found in Table A7 in the Statistical Appendix.

[2]Percent of GDP.

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

[4]Includes Chad.

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

[6]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, South Sudan, Togo, and Zimbabwe.

human capital, deepening financial sectors, promoting agriculture, improving the business climate, and encouraging economic diversification. In many countries there is scope for expanding the funding of priority expenditures by broadening the tax base or reducing energy subsidies (for example, Cameroon and Nigeria).

Reference

Fratzscher, Marcel, 2012, "Capital Flows, Push versus Pull Factors and the Global Financial Crisis," *Journal of International Economics,* Vol. 88, No. 2, pp. 341–56.

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CHAPTER 3

DANCING TOGETHER? SPILLOVERS, COMMON SHOCKS, AND THE ROLE OF FINANCIAL AND TRADE LINKAGES

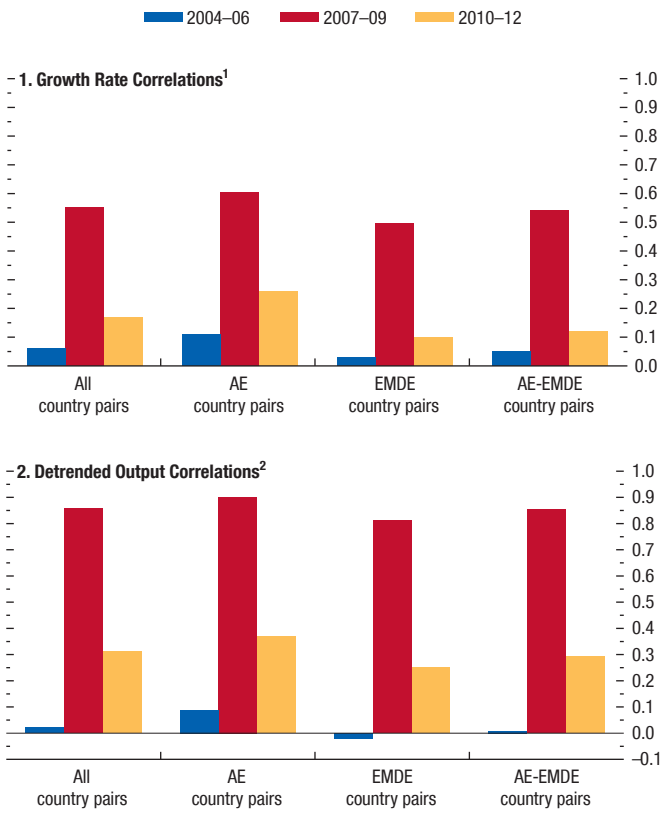
The world's economies moved much more in lockstep during the peak of the global financial crisis than at any other time in recent decades. Correlations of GDP growth rates, which had been modest in the years before the crisis, rose dramatically during 2007–09 (Figure 3.1, panel 1).[1] The increased comovement was not confined to the advanced economies, where the global financial crisis was centered, but was observed across all geographic regions and among advanced, emerging market, and developing economies.

Since 2010, however, correlations have fallen back sharply (Figure 3.1, yellow bars). The move from a period of globally synchronized collapse and recovery to one in which the world's economies move more independently of each other—which recent issues of the *World Economic Outlook* (WEO) call a "multispeed global economy"—can thus be considered a return to relative normalcy.

Could output comovements rise sharply again? Answering this question requires shedding light on the factors that drove these sharp changes in correlations. One possibility is that greater comovements in output were induced by large common shocks simultaneously affecting many countries—such as a sudden increase in financial uncertainty or a wake-up call that triggered a change in investors' perceptions of the world.[2] A second possibility is that output spillovers—defined as the transmission of country-specific shocks to output in other countries—became more important due to the strengthening of financial and trade linkages. A third possibility is that the nature of shocks changed. In particular, shocks to countries' financial sectors, such as banking crises and liquidity freezes, were more prevalent during

Figure 3.1. The Evolution of Output Comovements, 2004–12

Output comovements, whether measured by growth correlations or detrended output correlations, rose sharply at the peak of the global financial crisis in 2007–09. But they declined sharply in recent years.



Sources: Haver Analytics; IMF, *World Economic Outlook*; Organization For Economic Cooperation and Development; and IMF staff calculations.
Note: Sample includes 34 advanced economies and 29 emerging market and developing economies. AE = advanced economy country pairs; EMDE = emerging market and developing economy country pairs; AE-EMDE = advanced economy and emerging market and developing economy country pairs. See Appendix 3.1 for country groupings.
[1]Simple average of pairwise correlations of quarterly GDP growth rates.
[2]Simple average of pairwise correlations of moving average detrended output.

The authors of this chapter are Abdul Abiad (team leader), Davide Furceri, Sebnem Kalemli-Ozcan, and Andrea Pescatori. Angela Espiritu, Mitko Grigorov, and Katherine Pan provided research support.

[1]Correlations of detrended GDP show a similarly sharp increase (Figure 3.1, panel 2, blue and red bars).

[2]See, for example, Goldstein (1998); Forbes (2004); Fratzscher (2009, 2012); Didier, Mauro, and Schmukler (2008); Acharya and Schnabl (2010); and Bekaert and others (2011).

the global financial crisis. These financial shocks might be transmitted to other countries in a more virulent manner during crises than real shocks, which are more prevalent during normal times. Examining the roles played by these factors is of more than academic interest, because policymakers need to know the extent to which they will have to deal with such sudden increases in output comovements in years to come.

This chapter explores how output comovements have evolved in recent years and how they are influenced by various shocks and linkages. Using quarterly data from 1978 to 2012 for 63 economies, it examines what types of events drive large spikes in comovements and the role played by financial and trade linkages in transmitting shocks. It assesses the possible output spillovers from the potential shocks that most concern policymakers, including *policy shocks*, such as unexpected monetary or fiscal tightening; *financial shocks*, such as a systemic banking crisis or renewed financial turmoil; and *growth surprises* (which could be driven by either real or financial shocks) in advanced economies or in large emerging markets. In this regard, this chapter complements the existing work the IMF has done on spillovers, including the IMF spillover reports (IMF, various years). Finally, it discusses the implications for the outlook and for policy and financial regulation.

The chapter's main findings are as follows:

- Following an unprecedented increase in output synchronization between late 2008 and early 2009, the world's economies have once again decoupled. Global output comovements have fallen back to normal levels in the past two years, despite the turmoil in Europe.
- Spikes in regional and global output correlations occurred primarily during financial crises, such as those in Latin America in the 1980s and in Asia in the 1990s, but when a crisis occurred in an economy such as the United States—which is both large and a global financial hub—the effects on global output synchronization were disproportionately large. In this context, preserving financial stability is key to preventing synchronized output collapses in the future, but progress on global financial reform has been incomplete, and the world economy remains susceptible to risks from financial institutions that are too big to fail.
- During the global financial crisis, financial linkages contributed to the spread of these financial stresses across borders, but other factors—such as global panic, increased uncertainty, and wake-up calls that changed investors' perceptions—acted as a common shock and played a much larger role in increasing output synchronization.
- The effect of financial linkages on output comovements during normal times is the opposite of the effect during crises. During tranquil periods, increased financial linkages induce greater output divergence since capital is better able to move to where it is most productive.[3] The key, then, is to preserve the benefits of increased financial integration while minimizing the attendant risks through better prudential oversight, including better policy coordination and collaboration.
- The fact that comovements are now lower does not mean that policymakers should not worry about the effects of external shocks, such as growth slowdowns or monetary and fiscal tightening in major economies. But policymakers need not worry equally about all potential shocks. First, size matters: the United States still matters most from a global perspective, although the euro area, China, and Japan are important as sources of spillovers within their respective regions.[4] Second, the size of spillovers depends on the nature of the shock and the strength of linkages with the economy where the shock originates. For example, while a fiscal tightening in the United States or the euro area will most affect countries that have stronger trade linkages with these economies, the effect of interest rate normalization in the United States primarily affects countries that peg to the U.S. dollar.

The following section provides a conceptual framework for thinking about output comovements and describes their evolution in recent years. The next section examines the factors driving large spikes in output comovements. The chapter then looks more closely at how various shocks in major economies affect output elsewhere and ends with some implications for the outlook.

[3]These results were first established by Kalemli-Ozcan, Papaioannou, and Peydro (2013) and Kalemli-Ozcan, Papaioannou, and Perri (2013).

[4]These findings are consistent with the 2011 IMF spillover report, which uses a different approach and also finds significant spillovers from shocks originating from the United States but only modest spillovers from shocks elsewhere. The 2013 spillover report finds much larger effects from policies enacted in major economies over the previous year, because it posits that these policies helped avert major crises in the United States and Europe.

Output Comovements: Conceptual Framework and Stylized Facts

Conceptual Framework

How should we think about comovement and spillovers? In general, growth in each country can be thought of as being driven by common shocks that affect many countries simultaneously, shocks specific to the home country, and shocks specific to foreign countries that spill over and affect growth in the home country. Shocks in a foreign country can spill over to the home country in many ways, including through conventional linkages such as finance and trade. The nature of the shock, however, can change the manner in which shocks are transmitted or the importance of linkages in transmitting the shock—for example, financial linkages might transmit shocks to a country's financial sector in a different manner than shocks to the real sector.[5]

Under this framework, the existence of common shocks and of cross-border spillover effects from country-specific shocks implies correlated growth rates across countries. There are three ways in which these correlations can change. First, common shocks can become larger or more frequent relative to idiosyncratic shocks, increasing correlations by driving economies up and down together. Second, the linkages that bind countries together can change.[6] Finally, the kinds of shocks that buffet economies can change, from those that have mostly a domestic impact to those that have bigger cross-border effects.

Following this framework, the chapter assesses the factors behind larges spikes in comovements and the cross-border effects of observable shocks emanating from the world's major economies. The first part of the analysis assesses whether spikes in global comovements correspond to well-known historical events that hit many countries at the same time and whether shocks characterizing these events are transmitted through identifiable channels, such as financial and trade linkages. An important caveat in this analysis is that it is not possible to definitively distinguish between comovements attributable to common shocks and spillovers resulting from country-specific shocks transmitted quickly through other channels that are more difficult to quantify (such as global panic or self-fulfilling expectations): in the data these two types of comovement are observationally equivalent. Indeed, even for an event as thoroughly analyzed as the global financial crisis there is no consensus on whether it should be characterized as a global shock or a U.S. shock that spilled over to other countries.[7]

The second part of the analysis examines the cross-border effect of observable shocks emanating from the world's major economies and the channels through which these shocks are transmitted. The focus here is on shocks that reflect events and policies in major economies that are unlikely to be related to other factors influencing foreign economic activity in the short term.[8]

Stylized Facts

We begin by establishing the stylized facts on output comovements in recent years. The sample comprises 34 advanced economies and 29 emerging market and developing economies for which quarterly real GDP data are available. The regional and income groupings follow those in the WEO Statistical Appendix. (The countries included in this sample are listed in Appendix 3.1.)

There are various ways to measure comovements. Perhaps the simplest and most common measure of output comovements is the correlation of real GDP growth. Alternatively, one can look at correlations in detrended output, which requires the choice of a detrending method. In what follows, we use a five-year backward-looking moving average to filter out the trend.[9] It can be shown that for a wide variety of data-generating processes, correlations based on detrended output tend to be larger than those based on output growth.

[5]More formally, the growth rate of each country can be assumed to be determined as $y_{it} = \varepsilon_t + \varepsilon_{it} + \Sigma_j \rho_{ijt}\varepsilon_{jt}$, in which y_{it} denotes real GDP growth in country i, ε_t denotes common shocks, ε_{it} denotes domestic idiosyncratic shocks, ε_{jt} (for $j \neq i$) denotes other countries' idiosyncratic shocks, and ρ_{ijt} measures the linkages between country i and country j. See Doyle and Faust (2005) for a more in-depth discussion. In the analysis below, we focus on conventional linkages such as finance and trade: $\rho_{ijt}(h) = \rho^0(h) + \rho^1(h)Finance_{ijt} + \rho^2(h)Trade_{ijt}$. The dependence of ρ_{ijt} on h, with h indicating the nature of shocks (for example, real or financial), is meant to capture the possibility that the nature of the underlying shock can affect the sign and magnitude of the spillovers.

[6]Regarding the role of linkages, economic theory has ambiguous predictions about the impact of changing financial and trade integration on output comovements. See Kalemli-Ozcan, Papaioannou, and Peydro (2013) and Doyle and Faust (2005) and the references therein.

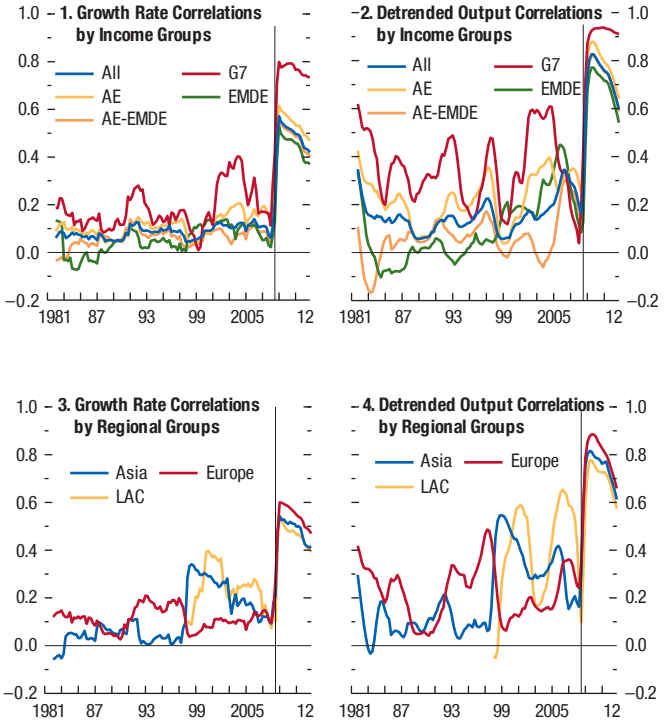
[7]See, for example, Fratzscher (2009, 2012); Acharya and Schnabl (2010); and Bekaert and others (2011).

[8]Indeed, our results are essentially unchanged when we control for other observable factors influencing foreign output growth and when we include time-fixed effects to account for unobservable common and country-specific shocks.

[9]Sensitivity to using alternative detrending methods is explored in Appendix 3.1.

Figure 3.2. Output Comovements: 1978–2012
(Five-year rolling period correlations for various country groups)

Output growth correlations remained relatively low through much of the past three decades. But there was a sharp rise in these correlations in late 2008, evident across all country groups and regions. Correlations based on detrended output showed a similar sharp rise.



Sources: Haver Analytics; IMF, *World Economic Outlook*; Organization for Economic Cooperation and Development; and IMF staff calculations.
Note: All = all country pairs; AE = advanced economy country pairs; EMDE = emerging market and developing economy country pairs; AE-EMDE = advanced economy and emerging market and developing economy country pairs; G7 = G7 country pairs; LAC = Latin America and the Caribbean country pairs. See Appendix 3.1 for country groupings. Vertical line indicates the third quarter of 2008, when Lehman Brothers filed for bankruptcy.The Commonwealth of Independent States, Middle East and North Africa, and sub-Saharan Africa regions are excluded from panels 3 and 4 due to a lack of quarterly real GDP data for a sufficient number of countries.

Output growth correlations remained relatively low through much of the past three decades (Figure 3.2, panel 1). Simple averages of five-year rolling window growth correlations across all country pairs remained below 0.2 from the 1980s until 2007. Growth correlations tended to be higher among advanced economy pairs than among emerging market and developing economy pairs, even more so for country pairs within the Group of Seven (G7) countries (Canada, France, Germany, Italy, Japan, United Kingdom, United States), for which average correlations were between 0.3 and 0.4 in the early 2000s. Growth correlations within geographic regions were also relatively low (Figure 3.2, panel 3), although correlations in Asia rose to 0.3 following the Asian crisis.[10] Correlations based on detrended output were generally higher than, but similar in pattern to, those based on output growth (Figure 3.2, panels 2 and 4).

Growth correlations spiked sharply, however, during the global financial crisis (Figure 3.2, panels 1 and 3). Following the bankruptcy of Lehman Brothers in September 2008, there was a sharp, synchronized, and across-the-board collapse in output in the fourth quarter of 2008 and the first quarter of 2009. The synchronized collapse led to a sharp rise in growth correlations, exceeding 0.5 for all income groups and geographic regions, with the highest correlations observed among the G7 economies. Detrended output correlations exhibit a similarly sharp rise. The rest of this analysis restricts its attention to output growth correlations.

Whereas five-year correlations suggest that output comovements remain high, Figure 3.1 suggests that output comovements have already fallen sharply, and this is confirmed by the use of shorter-window or instantaneous correlations (Figure 3.3). If two-year rolling window growth correlations are used, there is a sharp drop in output synchronization in the first quarter of 2011—when the first quarter of 2009 drops out of the rolling window. Two measures of "instantaneous" correlation also indicate that average output comovements are now much lower than at the peak of the global financial crisis (Figure 3.3, panel 2).[11] Output growth correlations during 2011–12 have actually been quite close to precrisis levels, despite the intensification of the crisis in Europe during this period.[12]

[10]The Commonwealth of Independent States; Middle East, North Africa, Afghanistan, and Pakistan (MENAP); and sub-Saharan Africa regions are included in the chapter analysis but are excluded from these figures because of a lack of quarterly real GDP data for a sufficient number of countries. Box 3.1 presents stylized facts on output comovements in the MENAP and the Caucasus and Central Asia based on yearly output growth correlations.

[11]One such measure is based on the dynamic conditional correlations from a multivariate GARCH model, as described by Engle (2002). A second measure is an instantaneous quasicorrelation, defined as $(g_{it} - \bar{g}_i)(g_{jt} - \bar{g}_j)/\sigma_i\sigma_j$. Note that although this measure is similar to a correlation, it is not bounded by 1 in absolute value. If growth rates in both countries are simultaneously far above or below their respective means—as occurred during the synchronized global collapse in late 2008 and early 2009—this quasicorrelation can exceed 1 by a large margin.

[12]Interestingly, financial market comovements—as measured for example by equity price correlations—rose at various times during 2010–12 (Forbes, 2013). This chapter's focus is on output spillovers; Chapter 4 of the April 2009 WEO analyzed the transmission of financial stress from advanced to emerging market economies.

Could the same shocks that sharply increased output comovements in recent years reemerge? Answering this question requires focusing on the factors that drove these sharp changes in correlations, which is explored in the next section.

The Role of Common Shocks and Financial and Trade Linkages

This section examines whether spikes in global comovements correspond to well-known historical events that hit many countries at the same time and whether shocks characterizing these events are transmitted by identifiable channels such as financial and trade linkages.

What Drives Sharp Spikes in Output Comovement?

Given the sizable impact of the global financial crisis on comovements, it is natural to ask whether other historical events have also been associated with sharp increases in comovements. Spikes in global comovement correspond to well-known global or regional events (Figure 3.4, panel 1).[13] These include the second oil shock in 1979 and the recessions in the United States and Europe that began in 1980; the Latin American debt crisis in the early to mid-1980s; the "Black Friday" stock market crash in 1987; the U.S. recession in 1990–91; the Exchange Rate Mechanism (ERM) crisis and European recession in 1992; the tequila, Asian, and Russian crises in the mid- to late 1990s; the dot-com bust in 2000, which was followed by a U.S. recession; and the recent global financial crisis. With the exception of the 1979 oil price shock, these events were either financial in nature or were associated with downturns in the United States or Europe.

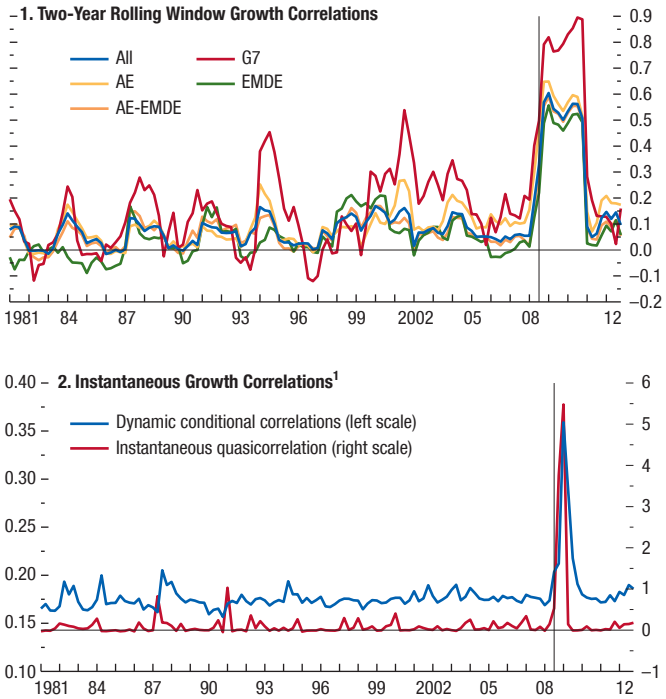
The importance of financial shocks in inducing spikes in output comovements is made clear in panels 2–4 of Figure 3.4. These charts repeat the earlier exercise for different regional subsamples, and they superimpose the number of financial crises in the region from the chronology of Laeven and Valencia (2012).[14] For Asia, the crisis in 1997–98—during which many countries experienced a combination of a currency crisis and a systemic banking crisis—was a common shock whose effect on regional comovements was almost as large as that of the recent global crisis. For Europe, a regional shock occurred during the recession of the early 1980s and during the ERM crisis in the early 1990s, but these are dwarfed by the global financial crisis, when 18 of the region's economies experienced some type of financial crisis. And in Latin

[13]Econometrically, spikes in global comovement are captured by the coefficients on the time dummies when country-pair comovements are regressed on country-pair and time-fixed effects. In Figure 3.4, panel 1, comovements are measured by instantaneous quasicorrelations, and the time dummy coefficients are estimated over the entire sample. These time dummies capture shocks common to all countries (the ε_t in the conceptual framework above) but also pick up spillovers from country-specific shocks because we do not control for such spillovers in this regression.

[14]These include systemic banking crises, currency crises, and debt crises. Multiple instances of these in a year in a given country (for example, twin banking and currency crises) are counted as a single instance.

Figure 3.3. Output Comovements: Back to Precrisis Levels?

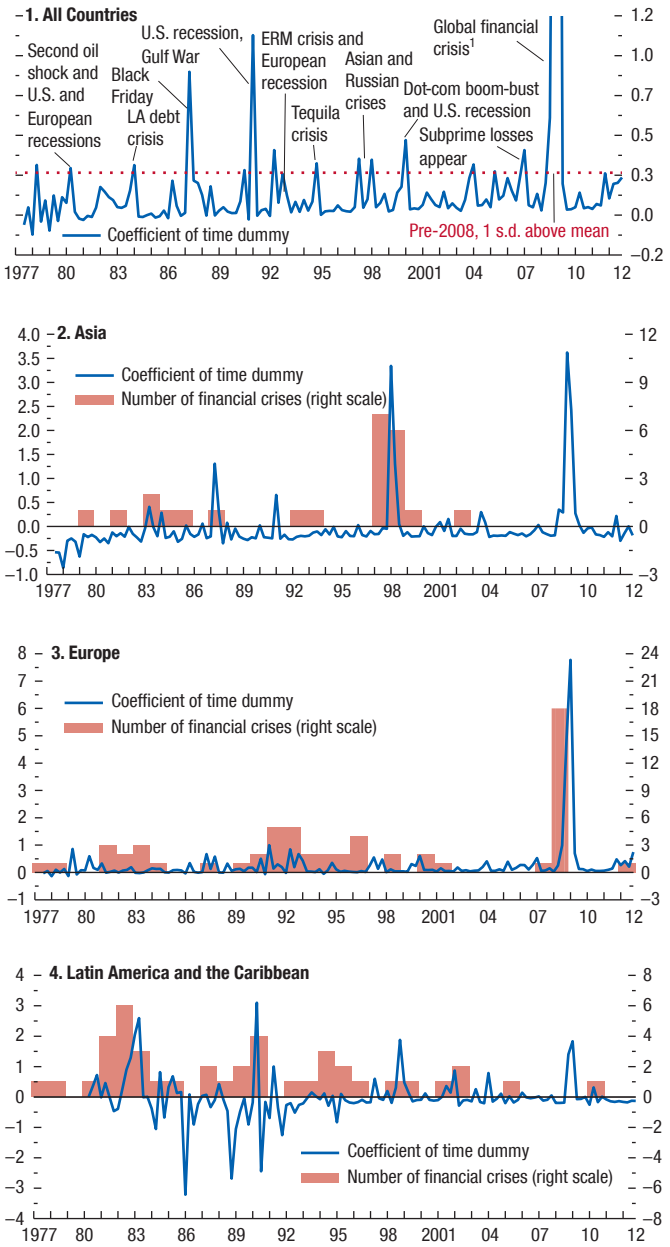
The use of shorter-period or instantaneous correlations indicates that output comovements have already returned to precrisis levels.



Sources: Haver Analytics; IMF, *World Economic Outlook*; Organization for Economic Cooperation and Development; and IMF staff calculations.
Note: The vertical line indicates the third quarter of 2008. All = all country pairs; AE = advanced economy pairs; EMDE = emerging market and developing economy pairs; AE-EMDE = reporter is from advanced economy, partner is from emerging market and developing economy; G7 = G7 country pairs. See Appendix 3.1 for country groupings.
[1]Based on mGARCH dynamic conditional correlations (plotted on the left *y*-axis) and on average quasicorrelations (plotted on the right *y*-axis). The blue line shows dynamic conditional correlations from the mGARCH model of G20 quarterly GDP growth rates. The red line shows the simple average of $(g_{it} - \bar{g})(g_{jt} - \bar{g}_j)/\sigma_i\sigma_j$.

Figure 3.4. What's behind "Common Shocks"?

Spikes in global comovement correspond to well-documented global events such as oil shocks, financial shocks, and recessions in major advanced economies. Regional output comovements confirm the importance of financial crises in increasing output synchronization.



Sources: Laeven and Valencia (2012); and IMF staff calculations.
Note: s.d. = standard deviation; LA = Latin America; ERM = exchange rate mechanism. The blue lines plot the time dummies from a regression of instantaneous quasicorrelations on country-pair and time dummies. U.S. and euro area recessions are from the National Bureau of Economic Research and Center for Economic and Policy Research, respectively. Financial crises include currency, debt, and systemic banking crises and are taken from Laeven and Valencia (2012); if a country has more than one type of crisis in a given year (e.g., twin currency and banking crises) they are counted as one crisis.
[1]Time-fixed effect rises above 5 in 2008:Q4 and 2009:Q1.

America, the largest common shocks were the debt crises that affected many of the region's economies in the early 1980s and again in 1989–90, when Argentina and Brazil both had financial crises.

Panel 1 of Figure 3.4 also shows that the recent global financial crisis—a financial shock that originated in the world's largest economy and a global financial hub—stands head and shoulders above the other events in the sample in terms of inducing strong output comovements. It is literally off the charts, with an impact on output comovements four times larger than that of any other event during the past several decades.

The general takeaway is that financial shocks, even though they hit individual countries, often act as common shocks that tend to raise output comovements regionally or globally. When financial shocks emanate from a large financial center or a major economy, the resulting spikes in comovements are disproportionately large.

Do Financial and Trade Linkages Amplify the Effects of Shocks on Comovements?

To assess the role of financial and trade linkages in amplifying the effect of shocks, we regress the correlation of output growth between country pairs on the trade and financial linkages between them.[15] We focus our attention on the past 10 years and divide this period into two five-year periods: a "normal" period consisting of the precrisis years (2003–07) and a "crisis" period corresponding to the past five years (2008–12). The crisis period is characterized by a major financial shock, and the normal period is most likely dominated by real demand and supply shocks. We allow the effect of trade and financial linkages to differ across these two periods, since the shocks at work in each period are different. This allows us to test whether the effect of finance and trade linkages differs between tranquil times and periods of financial turmoil.

The econometric estimation suggests that an increase in financial linkages tends to lower output correlations during normal times (Table 3.1).[16] The coefficient on

[15]We follow the empirical strategy used in Kalemli-Ozcan, Papaioannou, and Peydro (2013) and Kalemli-Ozcan, Papaioannou, and Perri (2013). Further details on sources for and definitions of the variables, and on the empirical methodology, can be found in Appendix 3.2.

[16]Cross-sectional studies typically find a positive correlation between trade and financial integration and output comovements (Imbs, 2006; and Kalemli-Ozcan, Papaioannou, and Peydro, 2013;

Table 3.1. Financial Linkages and International Comovement—Two Periods

	(1)	(2)	(3)	(4)	(5)
Crisis	0.45***	0.58***	0.45***	0.63***	0.64***
	(24.06)	(9.89)	(23.51)	(8.88)	(8.91)
Financial Linkages	–0.06**	–0.06***			–0.06*
	(–2.03)	(–2.12)			(–1.94)
Financial Linkages × Crisis		0.03***			0.02
		(0.01)			(0.02)
Trade Linkages			0.08	0.05	0.05
			(1.16)	(0.69)	(0.70)
Trade Linkages × Crisis				2.61	0.03
				(2.61)	(1.27)
Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations (*N*)	539	539	539	539	539
R Squared	0.720	0.723	0.713	0.721	0.727
Country Pairs	307	307	307	307	307

Note: The table reports panel (country-pair) fixed-effect coefficients estimated in two nonoverlapping five-year periods during 2003:Q1–2007:Q4 and 2008:Q1–2012:Q4 using all country pairs. The dependent variable is the pair-wise correlation of real GDP per capita between country *i* and country *j* in each of the two periods. The crisis period equals 1 for the second period (and zero in the first period). Financial linkages are measured by the log of the share of the stock of bilateral assets and liabilities between countries *i* and *j* in quarter *t* relative to the sum of the two countries' total exposure in the beginning of each period. *T* statistics for robust errors are reported in parentheses. *, **, *** denote significance at the 10 percent, 5 percent, and 1 percent levels, respectively.

the financial linkage variable is negative and significant, indicating that increased financial linkages are associated with less-synchronized growth of output in normal times. The magnitude of the estimated coefficient suggests that if a country pair moves from the 25th to the 75th percentile in terms of financial integration—which is similar to the increase in integration between Italy and Portugal in the past 10 years—the correlation of their growth rates would decline by 0.1, a significant amount given the mean correlation in the sample of 0.2. This supports the view that financial integration allows countries to diversify during tranquil times, with capital flowing to where it is most productive.[17]

During the crisis period, however, this negative association was attenuated because financial sector shocks were transmitted through financial linkages. Countries that were more strongly integrated with each other through the international banking system experienced a bigger increase in their growth correlations during the crisis. This is consistent with the idea that financial linkages, while facilitating efficient capital allocation during normal times, also transmit large financial shocks across borders during crisis times. Even though the partial effect of financial integration on output synchronization during the recent crisis was reversed and became positive, the total effect is still negative; that is, the crisis only weakened the overall negative relationship between financial integration and output synchronization, roughly halving it.

Most of the spike in correlations, however, is captured by the crisis dummy itself. This suggests that, while financial linkages contributed to spreading the financial stress to other countries, other factors played a much larger role in raising output synchronization. In other words, there was a very important common shock element to the recent crisis, a point made by Bacchetta and van Wincoop (2013), among others, who suggest that global panic and self-fulfilling expectations played an important role in the global financial crisis.

Finally, in contrast to the significant effects of financial linkages on output comovements, the measured influence of trade linkages is statistically insignificant. This could be due to the limited time variation in trade data from quarter to quarter relative to finance data, since the methodology used here evaluates the effect of changes in finance and trade linkages on changes in output correlations. As shown by Frankel and Rose (1998) and many others, the level of trade linkages over the long term is strongly and positively associated with the level of output comovements.[18]

among others). The difference in the results between cross-sectional and panel studies is driven by omitted-variables bias arising from common time-varying shocks and, most important, by unobservable country-pair characteristics, such as common borders and language, that affect both comovements and linkages.

[17]Previous studies also show that financial integration increases risk sharing and reduces consumption volatility. See, for example, Bekaert, Campbell, and Lundbad (2005, 2006, 2011); Bekaert and others (2007); Kose, Prasad, and Terrones (2009); Kalemli-Ozcan, Sørensen, and Yosha (2001, 2003); Kalemli-Ozcan, Sørensen, and Volosovych (2010); and Kalemli-Ozcan, Papaioannou, and Peydro (2009), among others.

[18]The caveat for such average level effects is that they are difficult to separate from the effect of a common border or language, a common currency, or historical ties, because such countries will also tend to trade more with each other.

A multiperiod version of the same regression—which uses the full sample going back to 1980 and allows for the inclusion or exclusion of time dummies—corroborates the findings above. The results confirm the findings that (1) higher financial integration tends to reduce output comovements during normal times and (2) the effect is weakened during crises, which tend to induce greater synchronization in country pairs that are more financially integrated.

Spillovers of Country-Specific Shocks to Other Countries and the Role of Financial and Trade Linkages

The decline in correlations to precrisis levels does not imply that spillovers are no longer relevant or worth analyzing. As demonstrated in this section, various shocks in major economies affect output in other countries.

The analysis in this section assesses the impact of country-specific shocks on output in other countries and the role of trade and financial linkages in transmitting these shocks, applying the statistical approach used by Romer and Romer (2010), among others. In particular, two econometric specifications are used, first to establish whether these shocks materially impact other countries and then to determine whether the effects vary with the strength of linkages. The first specification estimates the average response of real GDP growth in other countries to current and past shocks originating in one of the major economies (China, euro area, Japan, United States). The second specification allows the output response to vary with the strength of trade and financial linkages between each country and the country where the shock originated, estimating spillovers from conventional channels.[19]

Several types of shocks are considered in the analysis. First, we consider *growth surprises* for China, the euro area, Japan, and the United States. These shocks are identified for a given country-quarter as the deviation from the country's average growth over the entire period and from average growth for all countries in the sample in that quarter (Morgan, Rime, and Strahan, 2004). The analysis then considers *financial shocks*, such as the Lehman Brothers bankruptcy; a measure of banking sector risk (based on credit default swap—CDS—spreads) for the euro area and the United States; and the excess bond premium of U.S. corporate bonds (Gilchrist and Zakrajšek, 2012). Finally, the analysis covers *fiscal policy shocks*, such as exogenous tax changes identified by Romer and Romer (2010) for the United States and by Devries and others (2011) for the euro area, and exogenous *monetary policy shocks* in the United States identified by Coibion (2012).[20]

Estimated Effects of Country-Specific Shocks

The analysis starts with an examination of the effect of growth surprises in large economies on output in other countries. Note that growth surprises as constructed above do not identify the underlying source of the shock, which could be real or financial. These regressions should thus be considered to be indicative of broad output linkages without any deep structure, and therefore we refrain from interpreting the sign of such growth surprises or the transmission mechanism behind the results. As discussed in the conceptual framework, growth surprises in one country can lead to an increase or decrease in other countries' growth rates depending on the type of shock that drives the growth surprise and the policy response to it.[21] After growth surprises, we study in greater detail well-iden-

[19]In terms of our conceptual framework, these shocks correspond to observable ε_{jt}. In the first specification, we estimate the spillover effects of these shocks, assuming linkages (ρ_{ijt}) do not vary over time, while in the second specification, we relax this assumption by allowing linkages to vary with trade and finance, and we estimate ρ^0, ρ^1, and ρ^2. Note that if we fail to control for all common and idiosyncratic shocks, and if these are correlated with the country-specific shocks considered in the analysis, the result will be inconsistent estimates of the ρ parameters. However, our series of shocks reflects events and policies that are unlikely to be related to other factors influencing foreign economic activity in the short term. Thus, there is no reason to expect systematic correlations between these shocks and other determinants of foreign output growth. Indeed, our results are essentially unchanged when we control for other factors influencing foreign output growth in the first specification (Appendix 3.3, Figure 3.16) and when we include time-fixed effects in the second specification (Table 3.2). See Appendix 3.3 for details.

[20]We analyze monetary policy shocks only for the United States, as these are the only ones for which we have exogenous measures. See Appendix 3.3 for details.

[21]The findings of positive spillover effects in the foreign country from a positive growth surprise in the home country are not inconsistent with our previous results of lower comovement for more financially integrated economies during normal times. Those regressions attempt to separate real and financial shocks by focusing on normal and crisis periods, and normal times are presumed to be periods during which countries mostly face real demand and supply shocks. The growth surprises constructed here do not identify the underlying source of the shock, which could be real or financial.

Table 3.2. Spillover Effects Identified via Financial and Trade Linkages

Linkages	Financial Shock		Fiscal Policy Shock		Monetary Policy Shock	
Financial × Shock	–5.917	–5.104	–0.129	–0.114	0.504	–0.052
	(18.27)	(13.27)	(0.04)	(0.03)	(0.43)	(0.00)
Trade × Shock	–0.520	–0.143	–2.676*	–3.331**	2.559	2.955
	(0.02)	(0.01)	(2.44)	(4.49)	(1.00)	(1.15)
Time-Fixed Effects	No	Yes	No	Yes	No	Yes
Observations (*N*)	2,183	2,183	1,633	1,633	3,567	3,567
Adjusted *R* Squared	0.390	0.320	0.210	0.250	0.260	0.330
Financial–Differential in Output (%)	–2.680	–2.300	–0.300	–0.100	0.230	–0.020
Trade–Differential in Output (%)	–0.230	–0.060	–0.900	–1.500	1.160	1.338

Note: Output effects for financial and policy shocks, and industrial production effects for monetary policy shocks are based on the estimated equation $\Delta y_{it} = \alpha_i + \beta_t + \varphi_1(l)\,Shock_{tm} + \varphi_2(l)Global_t + \varphi_3(l)Shock_{tm}\,(Link_{imt} - Link_{im}) + \varphi_4(l)Link_{imt} + \varepsilon_{it}$. Financial shock = Lehman crisis; fiscal shock = exogenous tax change (Romer and Romer, 2010); monetary policy shock = large exogenous increase in interest rates (Coibion, 2012). Linkages are defined as the product of the shock and financial and trade linkages with the United States. The differential in output (in percent) measures the output effect of the shock in a country at the 75th percentile of linkages compared with a country at the 25th percentile. All regressions include country-fixed effects. *F* statistics of joint significance, based on robust standard errors, are reported in parentheses.

tified shocks, such as exogenous fiscal and monetary policy shocks and financial shocks, and their spillovers.

Growth surprises: Growth surprises in the United States have larger and more long-lasting effects than shocks to economic activity in China, Europe, or Japan. In general, effects are modest for growth surprises occurring in major economies other than the United States, although the effects on neighboring countries tend to be higher.[22] In particular, a 1 percent positive growth surprise in the United States increases the level of output in other countries by 0.2 percent after two years; the effect of growth surprises in China and Japan is about 0.1 percent; for the euro area, it is close to zero (Figure 3.5). However, we also find evidence that effects of growth surprises in China and Japan tend to be higher on other Asian countries,[23] while the effects from euro area growth surprises tend to be much more significant for other European countries (Figure 3.6). The lower impact of growth surprises in China and Japan may simply reflect the difference in the size of these economies relative to the United States.

Financial shocks: Financial crises are typically associated with significant and long-lasting output effects (Cerra and Saxena, 2008; Reinhart and Rogoff, 2009; Chapter 4 of the October 2009 *World Economic Outlook*). The Lehman Brothers collapse was no exception. In particular, it reduced the level of output in other economies by about 7½ percent after eight quarters, compared with a drop in U.S. real GDP of about 9½ percent (Figure 3.7, panel 1). The nearly one-for-one drop corroborates the view that the Lehman crisis acted like a common shock, despite having originated in the United States (see Figure 3.4).

More generally, financial shocks in the United States tend to have significant effects on output in other economies, whereas financial shocks in the euro area have more limited effects. An increase of 1 standard deviation in the U.S. CDS-spreads-based risk indicator tends to reduce real GDP in other economies by about 2 percent after one year (Figure 3.7, panel 2), but the same size shock in the euro area reduces real GDP in other economies by only about ½ percent after one year (Figure 3.7, panel 3).[24] That is, an increase in the U.S. CDS-spreads-based risk indicator to the level observed during the Lehman crisis (when spreads rose by 1.8 standard deviations) would reduce output in other economies by about 3.2 percent; and an increase in the euro area CDS-spreads-based risk indicator to the level observed during the peak of European financial turmoil (when spreads rose by about 3½ standard deviations) would reduce output in other economies by about 1.8 percent. A renewal of stress in the U.S. banking sector would have the largest impact on Europe and Asia, whereas financial sector stress in the euro area would have a greater effect on other countries in Europe as well as those in Latin America (Figure 3.8).

Fiscal shocks: Existing estimates of fiscal spillovers suggest that while they are on average typically

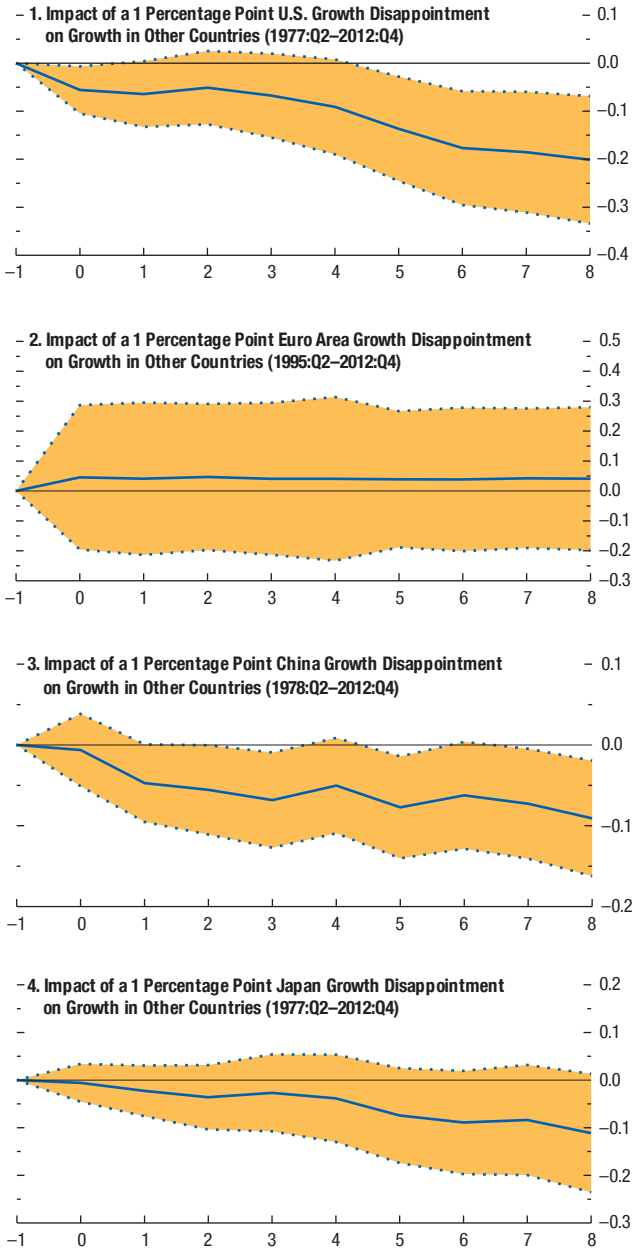
[22]Here we focus on the effect of growth innovations in the source country on the growth innovation (the idiosyncratic, uncommon growth component) in other countries.

[23]The results for China are consistent with the 2012 IMF spillover report and Ahuja and Nabar (2012), who find larger spillover effects on Asian supply chain countries.

[24]The effect of a U.S. (euro area) financial shock on U.S. (euro area) output is not statistically different from the effect in other countries. Given the relevance for nonbank financial institutions in the United States, we repeat the analysis using the excess bond premium of U.S. corporate bonds as a measure of financial shock. The results obtained using this measure confirm that U.S. financial shocks have sizable and statistically significant output spillover effects (Appendix 3.3).

Figure 3.5. Growth Surprises in the United States, Euro Area, and China and their Impact on Growth in Other Countries

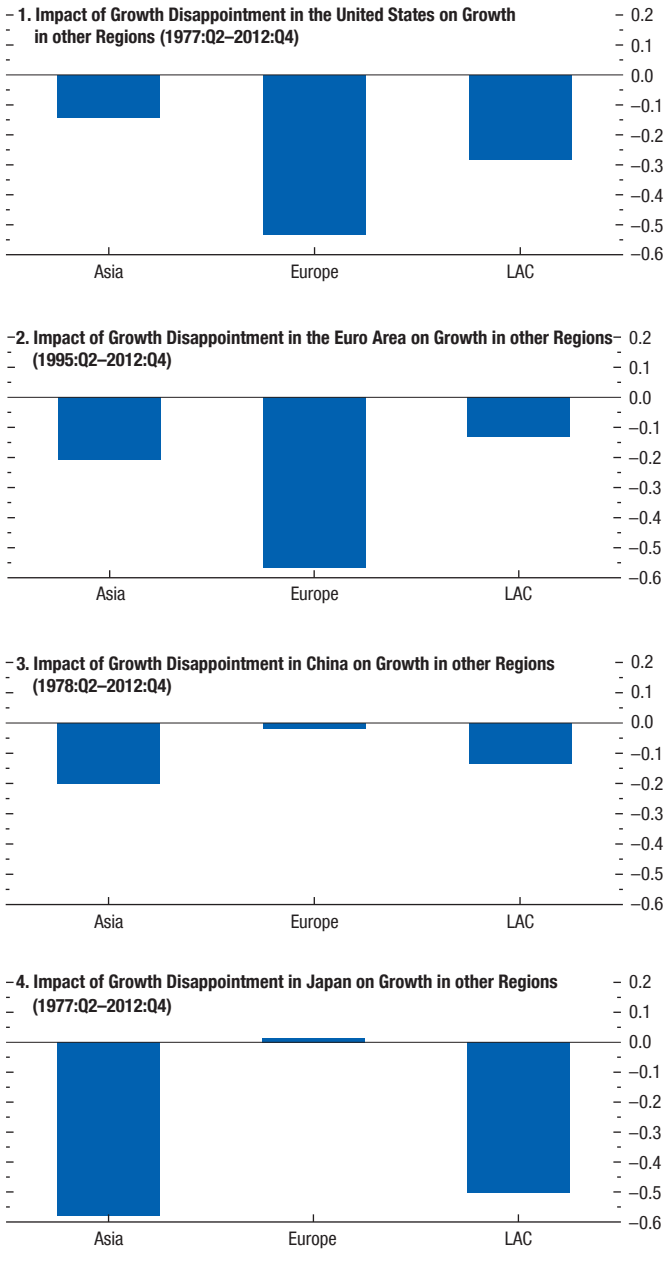
Spillovers from U.S. growth disappointments tend to be larger and more persistent than those from other large economies, such as China, the euro area, and Japan.



Source: IMF staff calculations.
Note: *X*-axis units are quarters; $t = 0$ denotes the quarter of the growth surprise. Dashed lines indicate the 90 percent confidence interval around the point estimate.

Figure 3.6. Peak Impact of Growth Disappointments on Other Regions

Negative growth surprises in the United States and the euro area would have the largest impact on Europe; a negative growth surprise in China and Japan would have the largest impact on Asia.

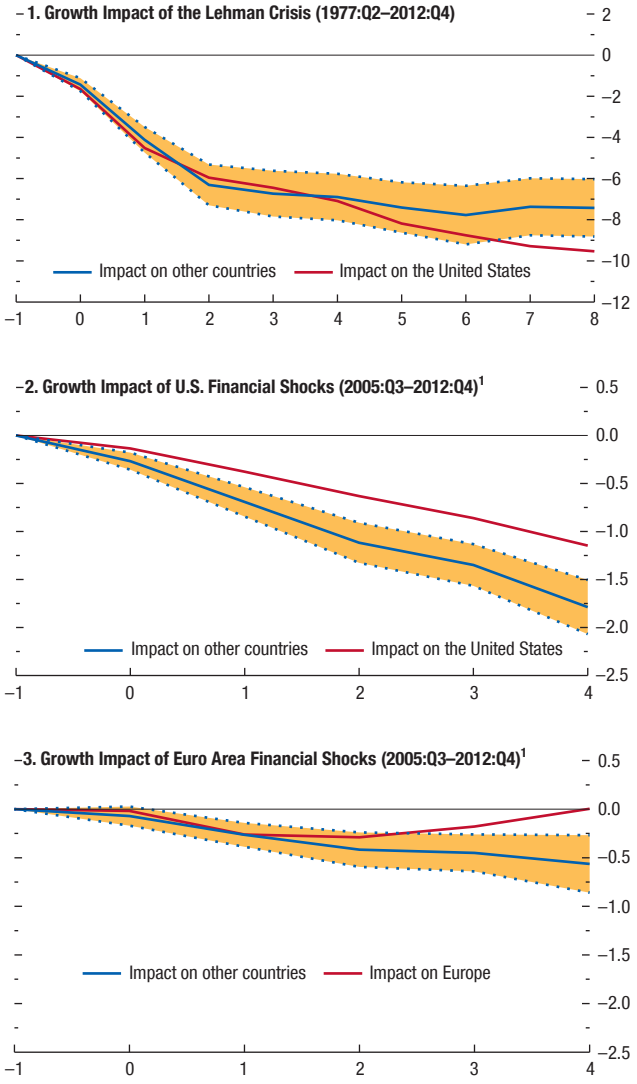


Source: IMF staff calculations.
Note: LAC = Latin America and the Caribbean.

Figure 3.7. Cross-Border Impact of Financial Shocks

(100 basis points)

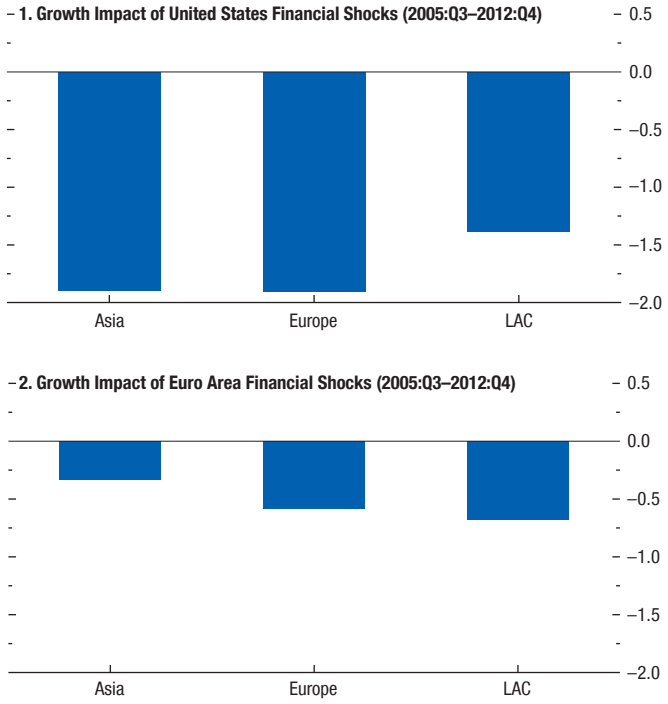
The Lehman crisis had a significant and persistent effect on output in other economies. More generally, financial shocks in the United States tend to have significant spillover effects on output in other economies, while financial shocks in the euro area have more limited effects.



Source: IMF staff calculations.
Note: *X*-axis units are quarters; $t = 0$ denotes the quarter of the financial shock. Dashed lines indicate the 90 percent confidence interval around the point estimate.
[1]The impact of U.S. and euro area financial shocks is estimated to four quarters because of the short time series for these shocks.

Figure 3.8. Impact of U.S. and Euro Area Financial Shocks

Renewed financial stress in the U.S. banking sector would have the largest impact on Europe and Asia, whereas financial sector stress in the euro area would have a greater effect on other countries in Europe and on those in Latin America.



Source: IMF staff calculations.
Note: LAC = Latin America and the Caribbean.

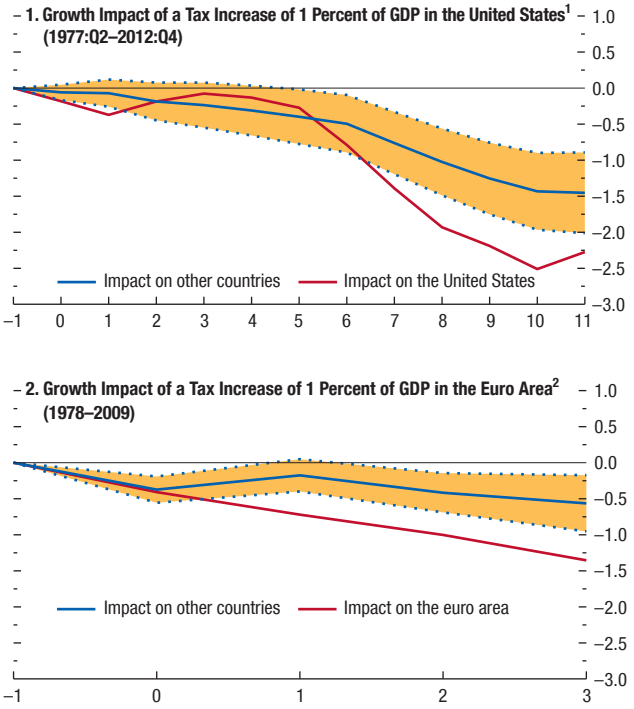
limited, they tend to become large for shocks emanating from large economies (Beetsma, Giuliodori, and Klaassen, 2006) and for shocks occurring during downturns (Auerbach and Gorodnichenko, forthcoming), and spillovers tend to become large for countries that are closely interconnected (Beetsma, Giuliodori, and Klaassen, 2006; Bénnasy-Quéré and Cimadomo, 2012). The results for U.S. fiscal shocks suggest that cross-country output effects tend to be important and long-lasting. In particular, a tax increase of 1 percent of GDP in the United States is found to typically reduce output in other economies by about 1½ percent after three years, compared with an output contraction in the United States of about 2½ percent (Figure 3.9, panel 1).[25] The effect is larger (above

[25]Similar results for fiscal shock spillovers have been obtained by Ilzetzki and Jin (2013), who find that a tax increase of 1 percent of GDP in the United States decreases foreign industrial production by about 1½ percent after two years.

Figure 3.9. Cross-Border Impact of Fiscal Policy Shocks

(100 basis points)

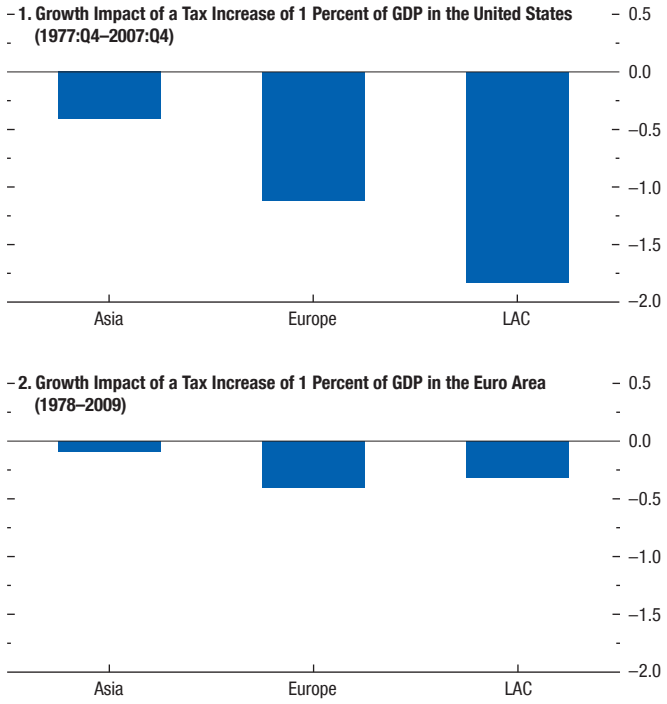
U.S. fiscal shocks tend to have sizable spillovers, while fiscal policy shocks in the euro area tend to have more limited effects.



Source: IMF staff calculations.
Note: Dashed lines indicate the 90 percent confidence interval around the point estimate.
[1]The *x*-axis units are quarters; $t = 0$ denotes the quarter of the policy shock.
[2]The *x*-axis units are years; $t = 0$ denotes the year of the policy shock.

Figure 3.10. Peak Impact of Fiscal Policy Shocks on Other Regions

Although the spillover effect of fiscal tightening in the United States is largest in Latin America, fiscal tightening in the euro area has the largest impact on Europe.



Source: IMF staff calculations.
Note: LAC = Latin America and the Caribbean.

1 percent) for Latin America and Europe and somewhat smaller (about 0.3 percent) for Asian economies (Figure 3.10). Although the estimates of the impact of U.S. tax shocks on U.S. economic activity are in line with those found by others (Romer and Romer, 2010, for the U.S.; Cloyne, 2013, for the United Kingdom; and Alesina, Favero, and Giavazzi, 2012; and Guajardo, Leigh, and Pescatori, forthcoming, for a panel of countries) there is a wide range of estimates in the literature. In addition, Appendix 3.3 examines the effect of spending-based policy shocks and finds that spending-based shocks have smaller and less persistent spillover effects than tax-based policy shocks.[26]

Fiscal policy shocks for the euro area tend to have more limited effects. In particular, a tax increase of 1 percent of GDP in the euro area is found to typically reduce output in other economies by about ½ percent after three years, compared with an output contraction in the euro area of about 1½ percent (Figure 3.9, panel 2).[27] The spillover effect of a euro area fiscal tightening is larger for other countries in Europe and for Latin America, while it is much smaller for Asian economies (Figure 3.10, panel 2).

[26]Various recent empirical studies find similar results (Alesina, Favero, and Giavazzi, 2012; Mountford and Uhlig, 2009; and Chapter 3 of the October 2010 *World Economic Outlook*, among others). In fact, while most estimates of spending multipliers are less than 2, some are as high as 5; see Ramey (2011) for details. The focus of the chapter, however, is not on the exact magnitude of fiscal multipliers, but rather on the impact of fiscal shocks on other economies relative to their domestic impact. For a more detailed discussion on fiscal multipliers, see IMF (2013).

[27]Because the euro area fiscal shocks used in the analysis are available at annual frequencies, spillover effects have been estimated using real annual GDP.

Monetary shocks: Monetary policy shocks in major economies—defined as changes in policy rates that are not a response to inflation or economic conditions—may have strong impacts on economic conditions in other countries, particularly those with pegged exchange rate regimes (di Giovanni and Shambaugh, 2008).[28] A key result is that U.S. monetary policy shocks tend to have a significant effect on economic activity in other countries.[29] In particular, this chapter's analysis finds that a surprise increase of 100 basis points in U.S. monetary policy rates typically contracts the level of industrial production in other countries by about 0.7 percent after eight months, compared with 1.7 percent in the United States (Figure 3.11).[30] The effect, however, varies across regions, with Latin American countries typically recording the largest contraction in output (Figure 3.12).

Transmission channels: The role of financial and trade linkages

The empirical evidence presented above suggests that U.S. idiosyncratic shocks tend, on average, to have important effects on economic activity in other countries. What is the role of trade and financial linkages in the transmission of such country-specific shocks?

For financial shocks, the literature on contagion provides compelling evidence that they spread mostly through financial linkages (Forbes, 2013; Claessens, Tong, and Zuccardi, 2012). For fiscal policy shocks, studies suggest that trade linkages are the most important channels (Auerbach and Gorodnichenko, forthcoming; Beetsma, Giuliodori, and Klaassen, 2006). For monetary policy shocks, there is evidence that they impact economic activity in other countries mostly through the interest rate channel, while financial and trade linkages are not found to play a significant role

[28]Similar results have been found by Reinhart and Reinhart (2001) and Frankel and Roubini (2001) for the emerging market and developing countries and by Kim (2001) for G7 economies.

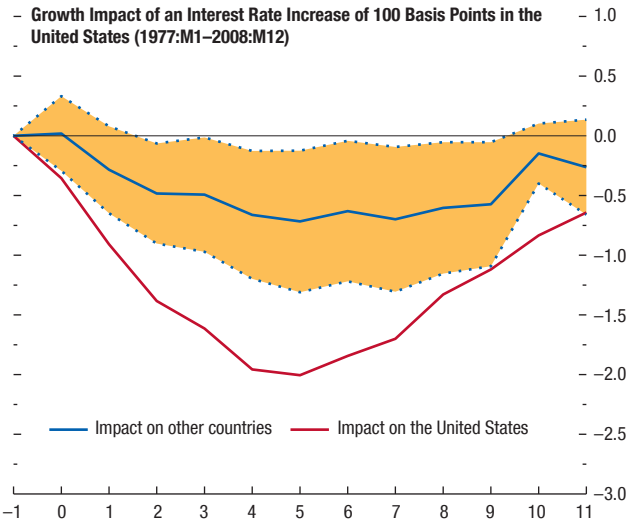
[29]Because the monetary policy shocks used in the analysis are available at monthly frequencies, spillover effects have been estimated using industrial production (see Romer and Romer, 2004).

[30]A 1 percent change in U.S. industrial production typically translates into a 0.3 percent change in U.S. GDP, suggesting that a surprise increase of 100 basis points in U.S. monetary policy rates will tend to lower U.S. GDP by about half a percent. The results for industrial production are consistent with Romer and Romer (2004), who also find relatively large effects of U.S. monetary policy shocks on industrial production. Estimated magnitudes using this methodology tend to be larger than those found in the literature based on the vector autoregression approach (Coibion, 2012).

Figure 3.11. Cross-Border Impact of Monetary Policy Shocks on Industrial Production

(100 basis points)

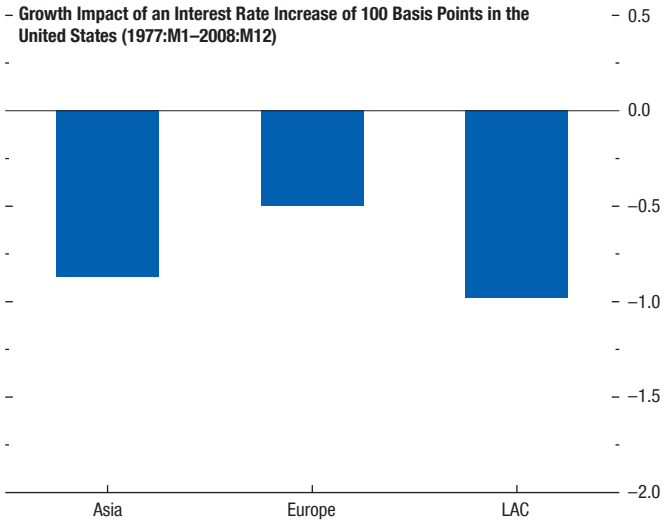
U.S. monetary policy shocks tend to have sizable spillovers.



Source: IMF staff calculations.
Note: Dashed lines indicate the 90 percent confidence interval around the point estimate. The *y*-axis shows the cumulative impact on the level of industrial production. *X*-axis units are months; $t = 0$ denotes the month of the policy shock.

Figure 3.12. Peak Impact of Monetary Policy Shocks on Other Regions

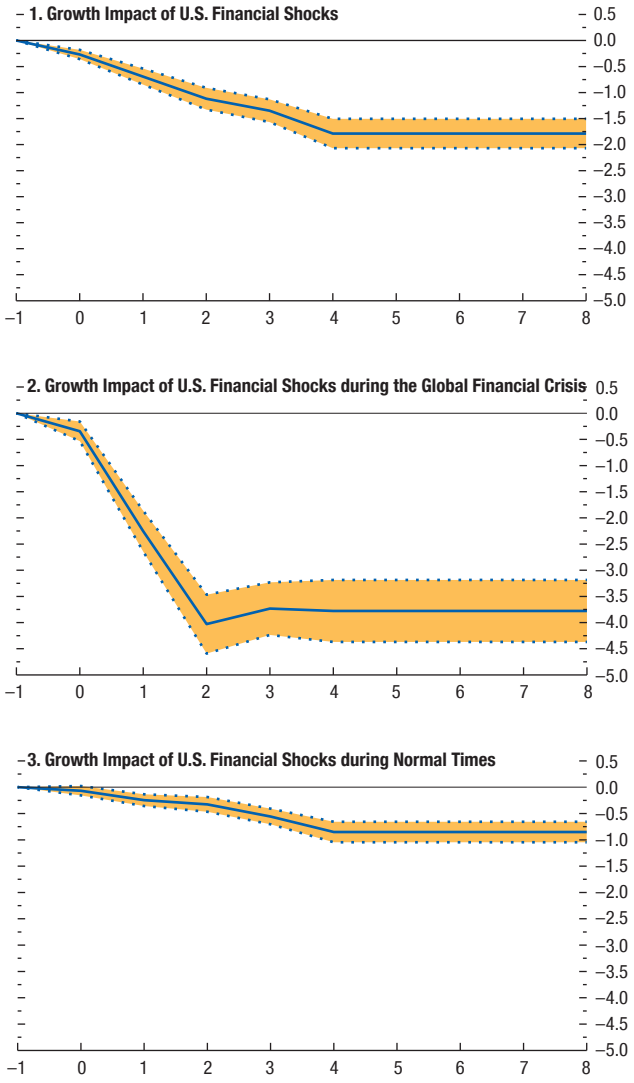
U.S. monetary policy tightening has the biggest effect in Latin America and Asia.



Source: IMF staff calculations.
Note: LAC = Latin America and the Caribbean.

Figure 3.13. Impact of U.S. Credit Supply Shocks

Spillovers from U.S. financial shocks were large during the global financial crisis but relatively small during other periods.



Source: IMF staff calculations.
Note: *X*-axis units are quarters; $t = 0$ denotes the quarter of the credit supply shock. Dashed lines indicate the 90 percent confidence interval around the point estimate.

(di Giovanni and Shambaugh, 2008). The results in this chapter's analysis corroborate those findings (Table 3.2), as follows.

Financial shocks are mostly transmitted through financial linkages. The spillover effect of financial shocks through financial linkages is negative and statistically significant, while the effect through trade is not statistically different from zero. These results are consistent with the comovement regressions shown in Table 3.1. In particular, the differential spillover effect from the Lehman crisis of a country that has relatively high financial linkages with the United States (at the 75th percentile) compared with a country that has relatively low financial linkages (at the 25th percentile) is between –2.3 and –2.7 percent, depending on whether time dummies are included or excluded from the regression. In other words, following the Lehman crisis, the contraction in the level of output in a country that has relatively high financial linkages with the United States has been between 2.3 and 2.7 percent higher than in a country that has relatively low financial linkages.

Fiscal shocks are mostly transmitted through trade linkages. Economies with stronger trade linkages with the United States have larger spillover effects from fiscal policy shocks. The contraction in the level of output in a country that has relatively high trade linkages with the United States (at the 75th percentile) is between 0.9 and 1½ percent higher, depending on whether time dummies are included in the regression, than in a country that has relatively low trade linkages (at the 25th percentile).

Monetary shocks are mostly transmitted through the interest rate channel; financial and trade linkages have limited effects. A U.S. monetary policy shock tends to raise interest rates and contract output in other countries, and the magnitude of the effect is larger for countries that peg their exchange rate to the U.S. dollar (Box 3.2).

Are spillovers larger during recessions?

We considered whether country-specific financial shocks have different effects on other countries during periods of crisis.[31] Figure 3.13 suggest that this is

[31]The analysis could not be repeated for the policy shocks because data for them are available only for periods before the crisis. See Appendix 3.3 for details.

the case. For financial shocks arising from U.S. credit default swaps, spillover effects were large (about a 4 percent reduction in the level of output after one year) during the global financial crisis, but relatively small (about 1 percent after one year) during other periods.[32] In addition, the strength of financial linkages as a transmission channel increased during the most recent recession. Thus, the impact of the global financial crisis has been much bigger than the level predicted by the magnitude of the underlying financial shock, suggesting that other unobservable factors, such as a global panic, or what Bacchetta and van Wincoop (2013) describe as "a self-fulfilling shock to expectations," played an important role.

Summary and Implications for the Outlook

The global financial crisis triggered a high degree of output synchronization unprecedented in the post–World War II era. This chapter documents that rise in comovement and also shows that, over the past two years, output comovements have declined to precrisis levels. The world seems to have returned to a more normal state of greater divergence in output movements, which is consistent with the observed "multispeed" recovery discussed in recent WEO reports.

Spikes in regional and global output correlations tend to occur during financial crises, but when the crisis occurs in an economy like the United States—which is both large and a global financial hub—the effects on global output synchronization are disproportionately large. These financial stresses spread in part through financial linkages, but other factors—such as global panic, increased uncertainty, and wake-up calls that change investors' perceptions—act as a common shock and play a much larger role. Thus, a large financial shock could again induce the world's economies to rise and fall in tandem. As the chapter shows, spikes in global output comovements have often been driven by large financial shocks, such as banking crises or the failure of a global financial institution, as occurred with the Lehman Brothers collapse in 2008. There are still many systemically important financial institutions whose reach spans the globe. And as highlighted in past issues of the *Global Financial Stability Report*, progress on global financial reform has been incomplete, so the world economy remains susceptible to the risk that one of these large systemically important financial institutions will fail.

While financial linkages transmit financial stresses across borders in normal times when real supply and demand shocks are dominant, those linkages facilitate the efficient international allocation of capital. The key is to preserve the benefits of increased financial integration while minimizing the attendant risks through better prudential oversight, including better policy coordination and collaboration.

Various shocks emanating from the major economies can affect output in other countries. In particular, the chapter sheds light on the potential spillover effects from various risks:

- Renewed financial turmoil in the euro area would have a significant effect on output in other economies, albeit one that is substantially smaller than financial shocks emanating from the United States. These effects would vary regionally: a renewal of stress in the U.S. banking sector would have the largest impact on Europe and Asia, whereas financial sector stress in the euro area would have a greater effect on other countries in Europe and in Latin America.
- A stronger-than-expected slowdown of growth in China is a major concern at present. The chapter finds that this would have the largest effect on Asia and Latin America.
- Because fiscal shocks are transmitted primarily through trade linkages, countries with stronger trade ties to the consolidating country will experience bigger spillovers. In response to fiscal tightening in the United States, real spillovers would be largest in Latin America.
- The effect of a normalization of U.S. interest rates that is faster than warranted by economic conditions is also currently of concern. In a given economy, the magnitude of spillovers in real terms from U.S. interest rate shocks does not seem to differ with the strength of its trade and financial linkages with the United States, but according to whether it fixes its exchange rate to the U.S. dollar. A rise in U.S. interest rates has the biggest effect on Latin America, but it also has significant effects on Asia and Europe.

For policymakers, these results indicate that not all potential spillovers are of equal concern: their size depends on the nature of the shock and the strength of

[32]Similarly, results have been obtained using the excess bond premium (Gilchrist and Zakrajšek, 2012) as a measure of U.S. financial shocks.

linkages. In general, shocks emanating from the United States still matter most from a global perspective, but China, the euro area, and Japan are important sources of spillovers for regions with strong linkages to these economies.

Regarding spillovers from monetary policy normalization in the United States, the chapter's findings suggest that these depend to a large extent on the recipient country's exchange rate regime. But the spillovers from an exit from quantitative easing are harder to assess because the exit is likely to entail a range of operational and other policy challenges.[33] While the Federal Reserve has various tools to help manage its exit from the current highly accommodative policy stance, enhanced policy agility, careful calibration of the timing, and effective communication will be essential.

Finally, the importance of common shocks in generating synchronized output collapses may give policy coordination a special role to play during such periods.[34] One element of policy coordination during crises is on the financial side. During global panics, liquidity is in short supply for everyone, and coordinated liquidity provision—for example, in the form of swap lines across central banks, which can be critical in supporting liquidity and funding stability in various interbank markets—is an essential part of the crisis response. But there can also be a macroeconomic element to policy coordination. As noted by Spilimbergo and others (2008), the international dimension of these crises means that without coordination, countries can end up providing too little fiscal stimulus (because of leakages reducing the domestic impact or incentives to free-ride on others' stimulus) or too much (since leakages imply the need to do much more to achieve a given level of output stabilization). If all countries act in concert, then the amount of stimulus needed by each country is reduced, supporting a coordinated approach to providing fiscal stimulus. The need for multilateral surveillance remains critical even during tranquil periods in order to prevent synchronized output collapses generated by another crisis.

[33]For an in-depth discussion of the challenges involved in exiting from unconventional monetary policy, see the *Selected Issues* Paper "Exiting from Unconventional Monetary Policy: Potential Challenges and Risks" that accompanied the 2013 IMF *Article IV Staff Report on the United States*.

[34]See Spilimbergo and others (2008) and Ostry and Ghosh (forthcoming).

Appendix 3.1. Data Definitions, Sources, and Country Groupings

Data Definitions and Sources

The primary data sources for this chapter are the Organization for Economic Cooperation and Development (OECD); the Bank for International Settlements (BIS); Haver Analytics; Bloomberg, L.P.; and the IMF's World Economic Outlook (WEO), Global Data Source (GDS), and Direction of Trade Statistics (DOTS) databases. The variables are listed in Table 3.3, with multiple sources listed in their splice order. Table 3.4 lists the countries included in the analysis and the definitions of the country groupings used in the chapter.

Bilateral trade linkages are constructed using (log) bilateral real exports and imports as a share of the two countries' total exports and imports, with data from the DOTS database.

Bilateral financial linkages are constructed as the (log) of real banks' bilateral assets and liabilities as a share of the two countries' total assets and liabilities, using confidential data from BIS locational banking statistics.

All comovement measures are based on quarterly real GDP in local currency prices. They are taken from the WEO database and spliced with GDS and OECD data. The primary measure of comovement used in the chapter is the correlation of real GDP growth rates, but correlations based on detrended output are also used for comparison. The detrended output correlations in the main text and Figures 3.1 and 3.2 are based on a backward-looking moving average filter. We also examined a Hodrick-Prescott (1997) filter, which removes low-frequency long-term trends from the output series; the band-pass filter of Baxter and King (1999), which retains output fluctuations with frequencies between 6 and 32 quarters; and the random walk filter of Christiano and Fitzgerald (2003). Figure 3.14 shows a comparison of output comovements using these filters. Detrended output correlations using these filtering methods show similar patterns, particularly the large spike in the late 2000s; however, the sharp rise in recent years *precedes* the global financial crisis. This is because the synchronized output collapse in late 2008 and early 2009 pulls the trend down, even in earlier quarters (due to the two-sided nature of these filters, in contrast to the one-sided backward-looking moving average filter), which induces a spurious increase in comovements as early as 2006 and 2007.

Table 3.3. Data Sources

Variable	Source
Global Conditions	
Real GDP (quarterly, seasonally adjusted, in local currency)	IMF, World Economic Outlook Database; IMF, Global Data Source; Organization for Economic Cooperation and Development
Trade and Financial Linkages	
Trade Linkages (percent of total trade)	IMF, Direction of Trade Statistics Database
Financial Linkages (percent of total trade)	Bank for International Settlements
Synchronization Measures	
Bilateral Moving Correlation of GDP Growth	IMF, World Economic Outlook Database; IMF, Global Data Source; Organization for Economic Cooperation and Development
Bilateral Moving Correlation of Cyclical Components (natural logarithm of GDP, measure based on the Hodrick-Prescott filter)	IMF, World Economic Outlook Database; IMF, Global Data Source; Organization for Economic Cooperation and Development
Bilateral Moving Correlation of Cyclical Components (natural logarithm of GDP, measure based on moving averages)	IMF, World Economic Outlook Database; IMF, Global Data Source; Organization for Economic Cooperation and Development
Bilateral Moving Correlation of Cyclical Components (natural logarithm of GDP, measure based on the Baxter-King filter)	IMF, World Economic Outlook Database; IMF, Global Data Source; Organization for Economic Cooperation and Development
Bilateral Moving Correlation of Cyclical Components (natural logarithm of GDP, measure based on the Christiano-Fitzgerald filter)	IMF, World Economic Outlook Database; IMF, Global Data Source; Organization for Economic Cooperation and Development
Average Quasicorrelations	IMF, World Economic Outlook Database; IMF, Global Data Source; Organization for Economic Cooperation and Development
Multivariate Generalized Autoregressive Conditional Heteroscedasticity (mGARCH) Dynamic Conditional Correlations (DCC)	IMF, World Economic Outlook Database; IMF, Global Data Source; Organization for Economic Cooperation and Development
Macroeconomic Shocks	
Growth Innovation Shocks	IMF, World Economic Outlook Database; IMF, Global Data Source; Organization for Economic Cooperation and Development
Global Uncertainty	Chicago Board Options Exchange S&P 100 Volatility Index (VXO)
Financial Shocks	Bloomberg, L.P.; IMF staff calculations
U.S. Fiscal Policy Shocks	Romer and Romer (2010)
U.S. Monetary Policy Shocks	Coibion (2012)

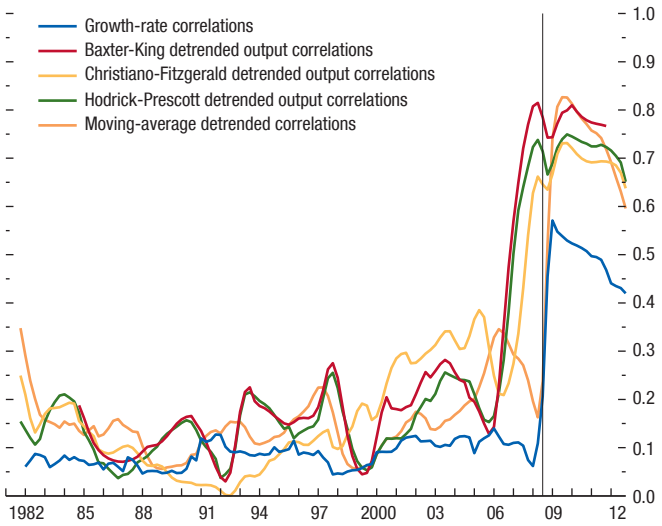
Table 3.4. Economy Groups

Advanced Economies[1]	Emerging Market and Developing Economies[2]
United States	Emerging Europe
Euro Area	Bulgaria
Germany	Croatia
France	Hungary
Italy	Latvia
Spain	Lithuania
Netherlands	Poland
Belgium	Romania
Austria	Serbia
Greece	Turkey
Portugal	Developing Asia
Finland	China
Ireland	India
Slovak Republic	Indonesia
Slovenia	Malaysia
Luxembourg	Philippines
Estonia	Thailand
Cyprus	Vietnam
Malta	Latin America and the Caribbean
Japan	Argentina
United Kingdom	Brazil
Canada	Chile
Korea	Colombia
Australia	Mexico
Taiwan Province of China	Peru
Sweden	Venezuela
Hong Kong SAR	Commonwealth of Independent States
Switzerland	Belarus
Singapore	Moldova
Czech Republic	Russia
Norway	Ukraine
Israel	Middle East, North Africa, Afghanistan, and Pakistan
Denmark	Pakistan
New Zealand	Sub-Saharan Africa
Iceland	South Africa

[1]Advanced economies (AEs) are listed by the size of the economy. San Marino, which is part of the WEO AE group, is excluded from the analysis in this chapter because quarterly data are not available. The G7 group comprises Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

[2]The emerging market and developing economies are listed by region because the chapter occasionally uses regional classifications.

Figure 3.14. Comparison of Various Output Comovement Measures



Sources: Haver Analytics; IMF, *World Economic Outlook*; Organization For Economic Cooperation and Development; and IMF staff calculations.
Note: Vertical line indicates the third quarter of 2008, when Lehman Brothers filed for bankruptcy.

Appendix 3.2. Multiperiod Comovement Regressions

We estimate a multiperiod version of the two-period regression described in the main text. The econometric framework follows Kalemli-Ozcan, Papaioannou, and Perri (2013), which contains a more thorough description and discussion. The regressions, on quarterly data, use a period-by-period synchronization index defined as the negative of the absolute value of growth differences between countries. This index, which follows Giannone, Lenza, and Reichlin (2010), is simple and easy to grasp. Moreover, it is not sensitive to the choice of filtering method, which can affect detrended output correlations, or to the length of the rolling period used, which can affect correlations more generally.

We estimate the following "difference-in-difference" regression:

$$Comvmt_{ij,t} = \alpha_{ij} + \beta \times Finlink_{ij,t-1} + \gamma \times Tradelink_{ij,t-1} + Crisis_t + \omega \times Finlink_{ij,t-1} \times Crisis_t + \lambda \times Tradelink_{ij,t-1} \times Crisis_t + \varepsilon_{ij,t}, \quad (3.1)$$

in which $Comvmt_{ij,t}$ is the growth rate correlation between countries i and j in period t; $Finlink_{ij,t-1}$ and $Tradelink_{ij,t-1}$ denote the (lagged) bilateral financial and trade linkages, respectively, between countries i and j; and $Crisis_t$ is a dummy variable equal to 1 during the crisis period.

Table 3.5. Multiperiod Financial Linkages and International Comovement

	(1)	(2)
Financial Linkages	–0.40***	–0.39***
	(–5.43)	(–4.35)
Crisis	0.27	
	(0.56)	
Financial Linkages × Crisis	0.47***	0.35***
	(4.73)	(3.59)
Country-Pair Fixed Effects	Yes	Yes
Time-Fixed Effects	No	Yes
Observations (*N*)	24,835	24,835
R Squared (within)	0.71	0.71

Note: The table reports panel (country-pair) fixed-effect coefficients estimated over the period 1978:Q1–2012:Q4, using all country pairs. The dependent variable (GDP synchronization) is minus one times the absolute value of the difference in the growth rate of GDP between countries *i* and *j* in quarter *t*. Financial linkages are measured by the log of the share of the stock of bilateral assets and liabilities between countries *i* and *j* in the previous quarter relative to the sum of the two countries' external assets and liabilities in the entire world in the previous period. The crisis indicator variable equals 1 in all quarters between 2008:Q3 and 2009:Q2 (and zero everywhere else). *t* stats for robust errors are reported. *** denotes significance at the 1 percent level.

For the multiperiod version of the regression using the full sample period (from 1978 to 2012), the estimates are in line with the results reported in the main text (Table 3.5). The effect of finance during normal times is negative, but it is positive during crisis periods. Including or excluding time dummies does not affect these results.

The economic impact of financial linkages is highly significant. The coefficient of –0.4 during normal times implies that a rise in bilateral integration from the 25th percentile to the 75th percentile of the distribution, which is similar to the increase in integration between Italy and Portugal during our sample period, is followed by an average decrease in output synchronization of 1 percentage point—that is, on average, the difference in their growth rates increases by 1 percentage point more than before. But during crisis periods and for the same pair, the effect of banking integration on output synchronization turns positive, with a 0.8 percentage point increase in synchronization (that is, on average the difference in their growth rates declines by 0.8 percentage point). Given that the median degree of synchronization is 4 percent in terms of GDP growth rate differences, these are significant effects.

The effects are also sizable from the perspective of changes. The actual average increase in synchronization is 2 percentage points during the global financial crisis. Thus, our estimates on financial linkages can explain two-fifths of the actual change in output comovements during the crisis. The estimated crisis effect of financial linkages is higher when we do not control for the direct effect of the crisis itself, since most of the impact

in that case is attributed to transmission via financial linkages. In this case, we can explain up to three-fifths of the actual increase in comovement during the crisis period, and the remainder is explained by the commonality of the shock.

Appendix 3.3. Growth Regressions

Empirical Methodology

The statistical techniques used to assess the output spillover impact of country-specific shocks, and the role of trade and financial linkages in transmitting these shocks, is standard and follows the approach used by Romer and Romer (2010), among others.

We use two econometric specifications: one to establish whether these shocks materially impact other countries and the other to determine whether the effects vary with the strength of linkages. In the first specification, we estimate the *average* response of real GDP growth in other countries to current and past shocks originating in one of the major economies (China, euro area, United States). Including lags allows for a delayed impact of country-specific shocks on output in other countries.

The first regression specification we estimate is as follows:

$$\Delta y_{it} = \alpha_i + \beta t + \varphi_1(l)Shock_i^m + \varphi_2(l)Global_t + \varepsilon_{it}, \quad (3.2)$$

in which the subscript i denotes the ith country, the subscript t denotes the tth quarter, the superscript m (with m different from i) denotes the country where the shock originated, y is the log of real GDP, and *Shock* is the country-specific shock examined. The specification includes a full set of country dummies (α_i) to account for differences in countries' long-term growth rates, a time trend to take account of a common trend in growth rates across countries, and a set of global factors, including oil prices and global financial uncertainty (*Global*). A similar approach has been used by Ilzetzki and Jin (2013) to assess the dynamic impact of U.S. fiscal and monetary policy shocks on economic activity in other countries.

In the second specification, we allow the output response to vary with the strength of trade and financial linkages between each country and the country where the shock originated. In particular, the set of explanatory variables is augmented to include the linkages between country i and country m and the interaction of these linkages with the shock in country m:

$$\Delta y_{it} = \alpha_i + \beta t + \varphi_1(l)Shock_t^m + \varphi_2(l)Global_t + \varphi_3(l)Shock_t^m Link_{imt} + \varphi_4(l)Link_{im,t} + \varepsilon_{it}, \quad (3.3)$$

in which the coefficient φ_3 represents the difference in the spillover effect on an economy with stronger (trade or financial or both) linkages versus an economy with weaker linkages. Linkages have been demeaned from the average country's linkage to keep the interpretation of φ_1 consistent across the two specifications (Balli and Sørensen, forthcoming). The equation is alternatively estimated using a full set of time dummies to take account of unobserved global and country-specific shocks.

Finally, we also assess whether country-specific shocks have different effects on other countries during periods of crisis.[35] To do so, we estimate the flowing regression:

$$\Delta y_{it} = \alpha_i + \beta t + \varphi_1^C(l)Shock_t^m D_t + \varphi_1^{NC}(l)Shock_t^m(1 - D_t) + \varphi_2(l)Global_t + \gamma D_t + \varepsilon_{it}, \quad (3.4)$$

in which D takes a value of 1 during the U.S. recession (2008:Q3–2009:Q2) and zero otherwise.

The regression equations are estimated on quarterly data for an unbalanced panel of 34 advanced economies and 29 emerging market and developing economies over the period 1978:Q1–2012:Q4 (see Appendix 3.1).

Description of Shocks

The shocks considered in the analysis include (1) growth surprises for the United States, euro area, China, and Japan; (2) financial shocks for the United States and the euro area; (3) fiscal policy shocks for the United States and the euro area; and (4) U.S. monetary policy shocks.[36]

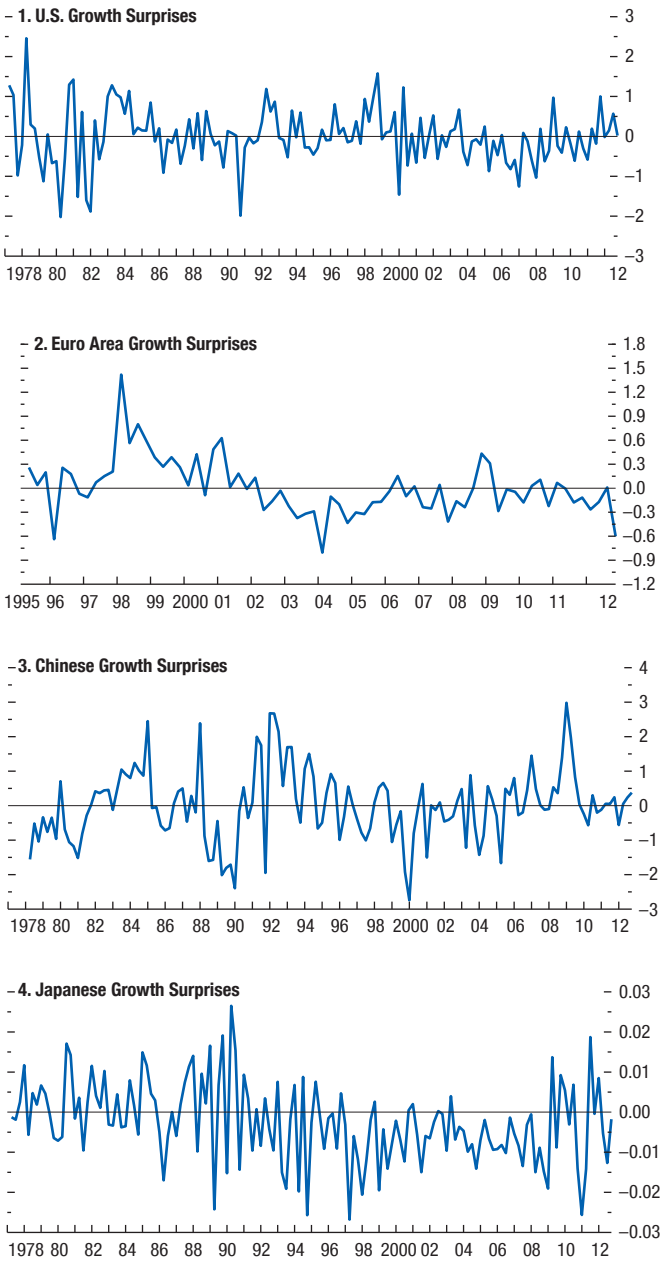
Growth surprises for the United States, the euro area, China, and Japan (Figure 3.15a) are identified for a given country-quarter as the deviation from the average growth for that country over the entire period and from average growth for all countries in the sample in that quarter. In particular, following Morgan, Rime, and Strahan (2004), growth surprises are identified as the residuals ($\hat{\varepsilon}_{it}$) of the following regression:

$$\Delta y_{it} = \alpha_i + \gamma_t + \varepsilon_{it}, \quad (3.5)$$

[35]The analysis focuses only on financial shocks, because data for policy shocks are available only before the crisis.

[36]We analyze monetary policy shocks only for the United States because these are the only ones for which we have exogenous measures.

Figure 3.15a. Growth Surprise Shocks
(Percent)



Source: IMF staff calculations.

in which y is the log of real GDP and α_i and γ_t are country- and time-fixed effects, respectively.

The *financial shocks* considered in the analysis are (1) the Lehman Brothers bankruptcy, (2) a measure of banking sector credit default swap (CDS)-spreads-based risk for the United States and the euro area, and (3) the excess bond premium of U.S. corporate bonds (Gilchrist and Zakrajšek, 2012).

The Lehman Brothers bankruptcy is identified as a dummy that takes a value of 1 in 2008:Q3 and zero otherwise.[37] The measure of banking sector risk for the United States (the euro area) is obtained by extracting the first principal component of the 6 (45) largest U.S. (euro area) banks' CDSs and considering innovations in the first principal component that are orthogonal to past and expected current output growth. In detail, innovations are obtained as the residuals ($\hat{\nu}_t$, Figure 3.15b, panels 2 and 3) of the following equation:

$$P_t = \alpha + \rho(l)P_{t-1} + \theta_1 E_{t-1}\Delta y_t + \theta_2(l)\Delta y_{t-1} + \nu_t, \quad (3.6)$$

in which P_t is the first principal component of U.S. (euro area) banks' CDSs, Δy_{t-j} are past real GDP growth rates, and $E_{t-1}\Delta y_t$ is the expected current output growth proxied by *World Economic Outlook* growth forecasts.[38] Finally, the excess bond premium of Gilchrist and Zakrajšek (2012) is the unpredictable component of U.S. corporate bonds (Figure 3.15b, panel 4). As argued by Gilchrist and Zakrajšek (2012), an increase in the excess bond premium represents a reduction in the effective risk-bearing capacity of the financial sector and therefore a contraction in the supply of credit.

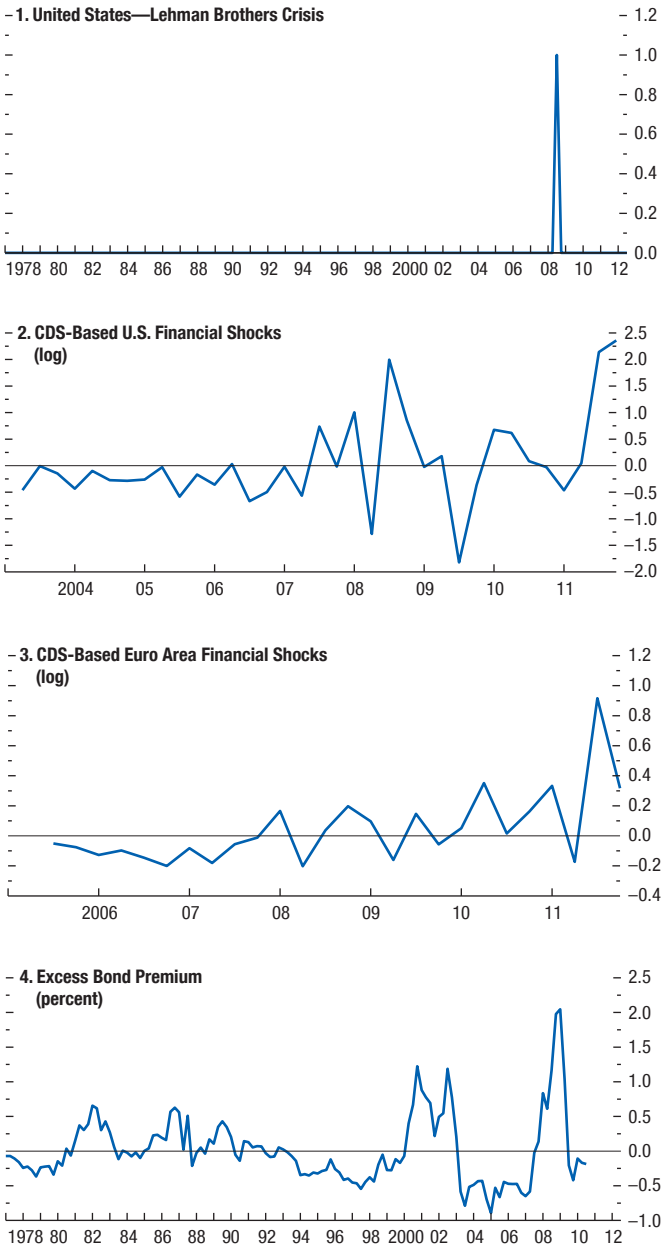
Fiscal policy shocks (Figure 3.15c, panel 1) for the United States consist of legislative tax changes, identified by Romer and Romer (2010) using narrative records such as presidential speeches and congressional reports, that are unrelated to countercyclical actions and factors that may affect output in the near future. Fiscal policy shocks for the euro area are computed by aggregating the tax-based consolidation measures identified by Devries and others (2011), using a similar narrative approach.

[37]Similar results are obtained when we let the dummy take value 1 during the period 2008:Q3–2009:Q2, and zero otherwise.

[38]We consider the forecasts in the April *World Economic Outlook* reports for output growth in the last two quarters of the same year and the forecasts in the October reports for output growth in the first two quarters of the following year.

Figure 3.15b. Financial Shocks

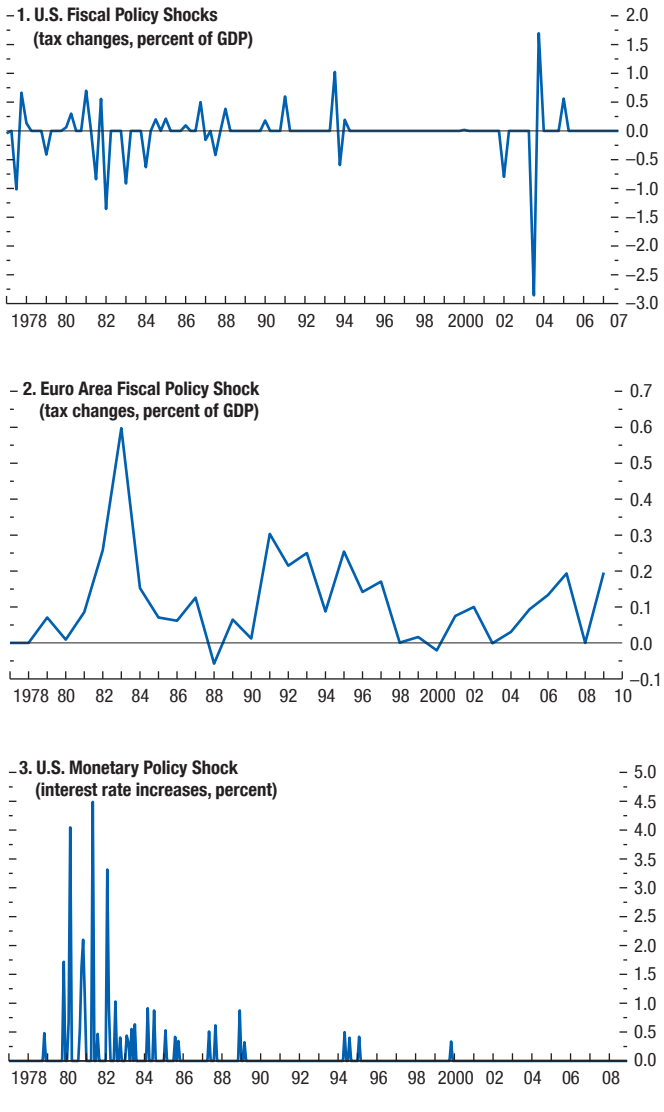
(Percent)



Sources: Bloomberg, L.P.; Gilchrist and Zakrajšek (2012); and IMF staff calculations.
Note: CDS = credit default swap.

Figure 3.15c. Policy Shocks

(Percent)



Sources: Coibion (2012); Romer and Romer (2010); and IMF staff calculations.

Monetary policy shocks (Figure 3.15c, panel 3) are exogenous innovations in the U.S. federal funds rate identified by Coibion (2012) as the residuals from an estimated Taylor rule with time-varying parameters.[39] The approach is similar to the one originally proposed by Romer and Romer (2004), but it allows a distinction between innovations to the central bank's rule (policy shocks) and changes in the rule itself. In this approach, random innovations to the rule are classified as monetary policy shocks, but policy changes such as regime changes or changes in the inflation target or GDP growth target are captured by the time-varying parameters of the rule and are therefore not classified as shocks.

Robustness checks

Our series of shocks reflects events and policies that are essentially unrelated to other factors likely to influence foreign economic activity in the short term. Thus, there is no reason to expect systematic correlation between these shocks and other determinants of foreign output growth. From an econometric point of view, this implies that the series of shocks is unrelated to the error term in equation (3.1) and that ordinary least squares estimates of ϕ_1 are in principle unbiased. Here, we assess how our baseline results are affected by adding lagged foreign output growth as a control:

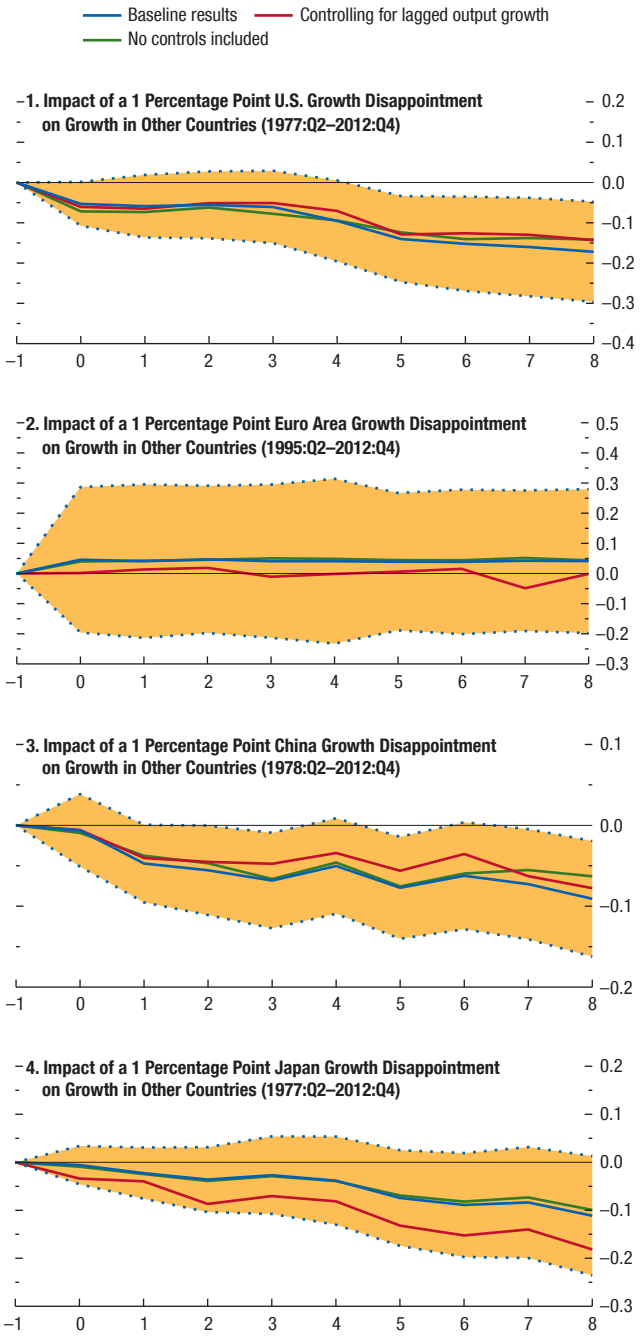
$$\Delta y_{it} = \alpha_i + \beta t + \rho(l)\ \Delta y_{it-1} + \varphi_1(l) Shock_t^m + \varphi_2(l) Global_t + \varepsilon_{it}. \qquad (3.7)$$

Including lagged output growth helps control for the normal dynamic of output. Because determinants affecting output growth are typically serially uncorrelated, it also helps control for various factors that may influence output growth in the near term.

Figures 3.16a–c show the results obtained by estimating equation 3.2 (blue lines) and equation 3.7, which control for lagged output growth (red line). The impulse response function from equation 3.7 now includes not only the direct impact of shocks on foreign output, but also the effects propagated through past growth. The figure shows that controlling for lagged output growth has almost no effect on the results. The two sets of impulse response functions are very close to each other, and the

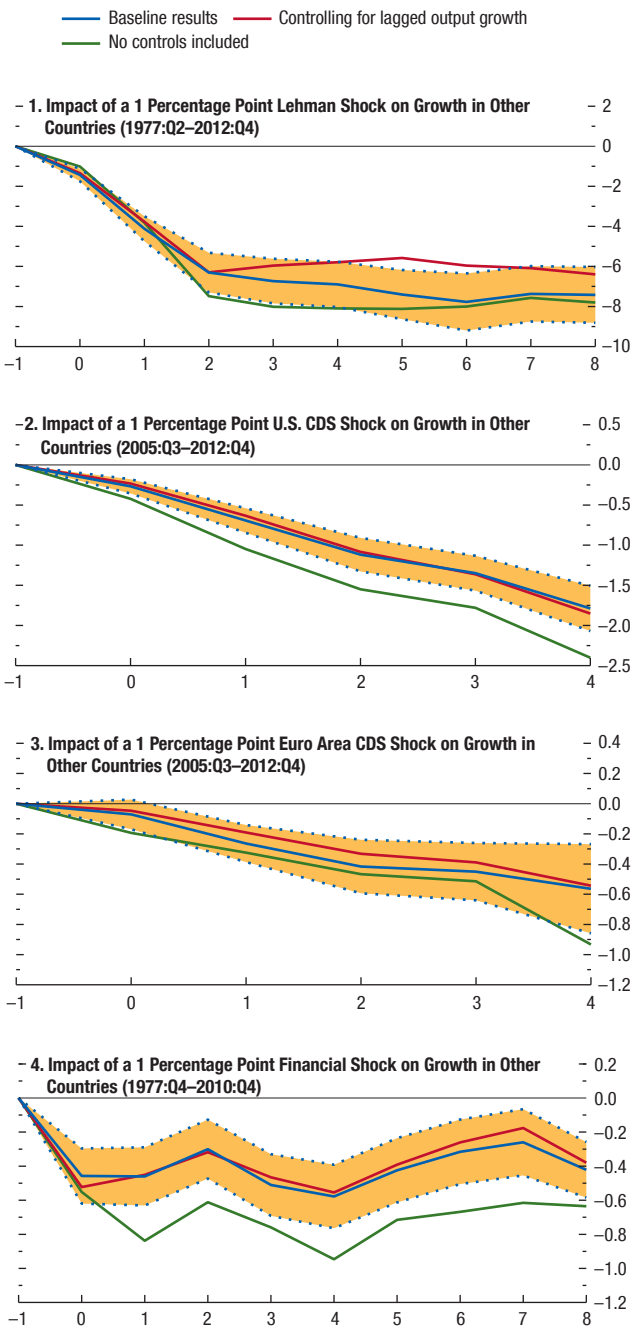
[39]In order to limit possible measurement errors associated with the monetary policy shocks, in the analysis we focus on interest rate increases greater than 30 basis points, which corresponds to the average size of exogenous increases in U.S. monetary policy. It is worth noting that the effect for smaller monetary shocks is not statistically significantly different from zero.

Figure 3.16a. Cross-Border Impact of Growth Surprises in the United States, Euro Area, and China on Growth in Other Countries



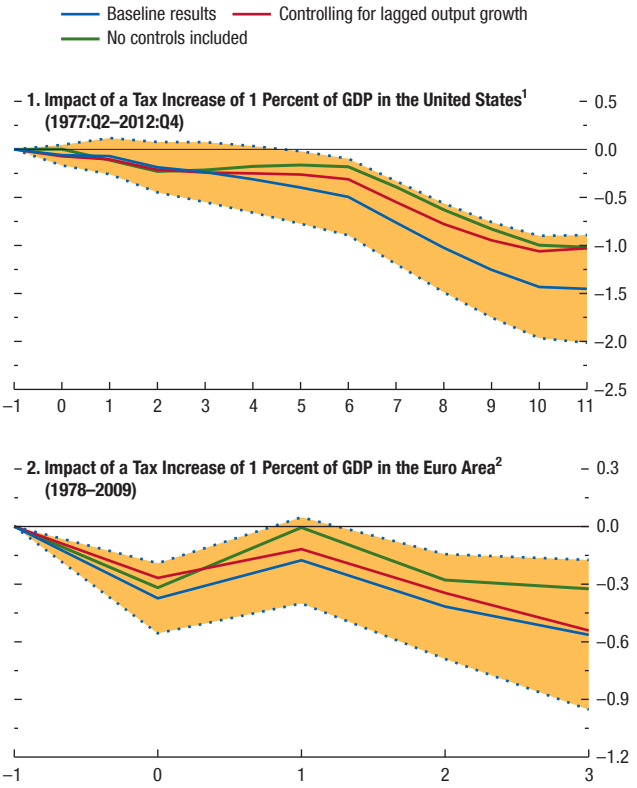
Source: IMF staff calculations.
Note: *X*-axis units are quarters; $t = 0$ denotes the quarter of the growth surprise. Dashed lines indicate the 90 percent confidence interval around the point estimate.

Figure 3.16b. Cross-Border Impact of Growth Surprises in the United States and Euro Area on Growth in Other Countries



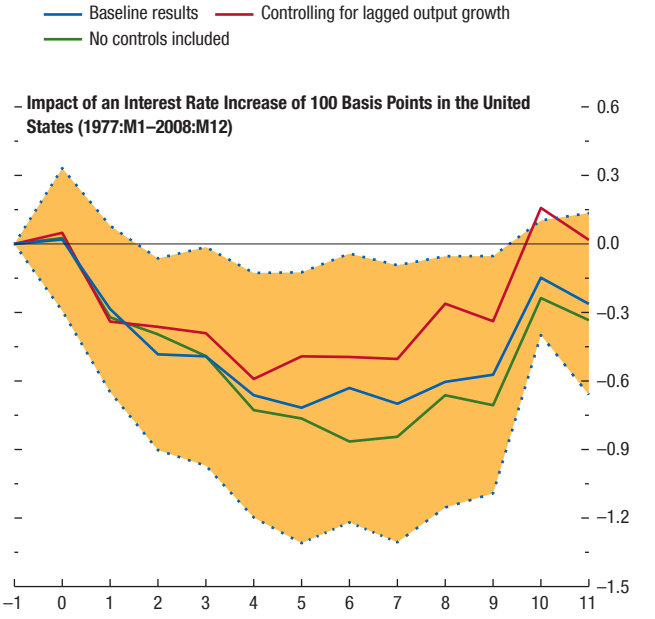
Source: IMF staff calculations.
Note: CDS = credit default swap. *X*-axis units are quarters; $t = 0$ denotes the quarter of the growth surprise. Dashed lines indicate the 90 percent confidence interval around the point estimate.

Figure 3.16c. Cross-Border Impact of Fiscal Policy Shocks on Growth in Other Countries



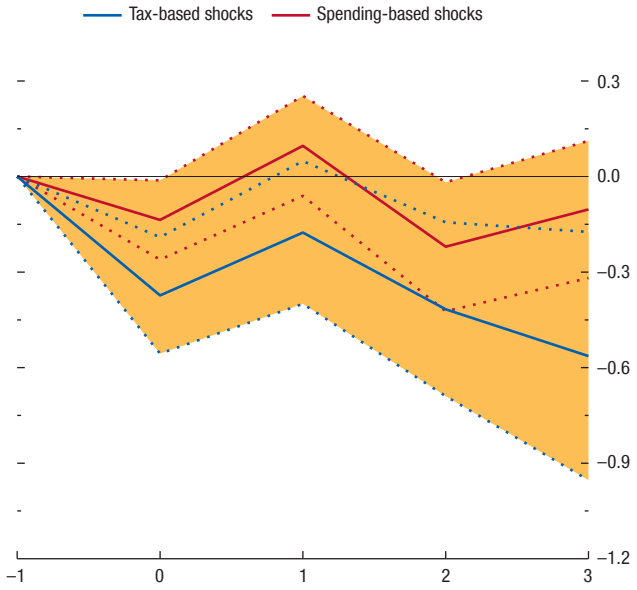
Source: IMF staff calculations.
Note: Dashed lines indicate the 90 percent confidence interval around the point estimate.
[1]The *x*-axis units are quarters; $t = 0$ denotes the quarter of the policy shock.
[2]The *x*-axis units are years; $t = 0$ denotes the year of the policy shock.

Figure 3.16d. Cross-Border Impact of Monetary Policy Shocks on Growth in Other Countries



Source: IMF staff calculations.
Note: *X*-axis units are quarters; $t = 0$ denotes the quarter of the shock. Dashed lines indicate the 90 percent confidence interval around the point estimate.

Figure 3.17. Cross-Border Output Impact of Tax- versus Spending-Based Shocks



Source: IMF staff calculations.
Note: Dashed lines indicate the 90 percent confidence interval around the point estimate. *X*-axis units are years; $t = 0$ denotes the year of the policy shock.

impulse response function obtained with lagged output growth falls within the confidence bands associated with our baseline results.

Because there is no reason to expect systematic correlation between these shocks and other determinants of foreign output growth, we should also expect that the results are robust when the set of "global" controls is excluded from the analysis. Figures 3.16a–c (yellow line) suggest that this is generally the case. Indeed, the figure shows that excluding the global controls from the analysis has almost no effect on the results. Exceptions are the results for financial shocks, which suggest that spillover effects tend to be larger when global control variables are excluded from the analysis. This, however, is not surprising giving the high correlation between financial shocks and global financial uncertainty.

Tax- versus spending-based output spillover effects

A number of studies suggest that spending-based shocks tend to have a smaller effect on domestic output than tax-based shocks.[40] A natural question is whether tax- and spending-based shocks have different spillover effects. Our results suggest that this is the case. Figure 3.17 shows the impulse response function obtained estimating equation 3.2 using euro area tax-based shocks (blue lines) and spending-based shocks (red lines) and shows that tax-based shocks tend to have large spillover effects both in the short and in the medium term.

[40]For a review, see Guajardo, Leigh, and Pescatori (forthcoming) and Ramey (2011), among others.

Box 3.1. Output Synchronicity in the Middle East, North Africa, Afghanistan, and Pakistan and in the Caucasus and Central Asia

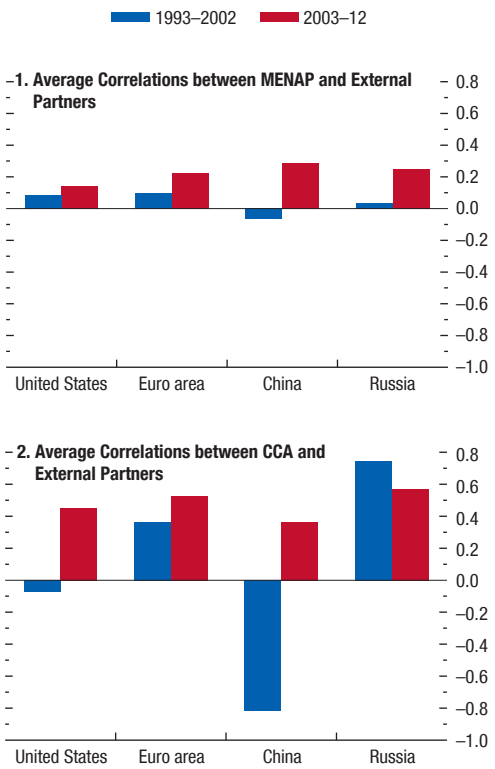
Over the past decade, growth in the Middle East, North Africa, Afghanistan, and Pakistan (MENAP) and the Caucasus and Central Asia (CCA) has become more synchronized with developments in other advanced and emerging market economies. Correlations between annual output growth in the MENAP and CCA countries and the rest of the world increased to moderate levels during 2003–12 from the low levels a decade earlier (Figure 3.1.1). The increase in output synchronicity likely reflects a number of factors, including greater trade openness of the MENAP and CCA countries, increased labor migration and remittance flows, and large shocks, such as the recent global financial crisis.[1]

One of the most striking changes has been the significant rise in output correlations between the MENAP and CCA countries and China. Although the output cycles of the MENAP and CCA economies have also become more synchronized with those in the United States and Europe (their traditional trading partners), increases in output correlations with China were much larger, in some cases turning positive from previously negative levels. Although still high, output correlations between the CCA and Russia's economy weakened over the past decade, reflecting the reorientation of the CCA trade linkages from Russia to China after the breakup of the Soviet Union.

Within the MENAP region, output cycles are not closely synchronized. Output correlations within both MENAP oil exporters and importers and between MENAP oil exporters and importers increased over the past decade but only slightly, and from low levels (Figure 3.1.2). Increased comovement within the MENAP region in 2011 was caused in part by the onset of the Arab Spring. With the rise of social unrest, several economies in the region (Egypt, Jordan, Libya, Morocco, Syria, Tunisia, Yemen) experienced disruptions in oil and non-oil production, as well as negative shocks to confidence, trade, and tourism. Other countries in the region—for example, in the Gulf Cooperation Council and Algeria—reacted to developments in the neighboring economies by also increasing public sector wages and social spending to support growth, which led to increased correlations among them. Despite these effects, average correlations in the MENAP region remain low, reflecting limited integration of the region. Correlations between the MENAP and CCA countries are also low.

Output correlations among the CCA economies declined during the past decade relative to the previous decade. After the breakup of the former Soviet Union in 1991, the CCA countries embarked on a process of socioeconomic transition. This common experience, together with the common shock of the Russian crisis in 1998, explains high output correlations of the CCA economies during 1993–2002 (see Figure 3.1.2). In the subsequent decade, the CCA economies started to

Figure 3.1.1. Output Comovements between MCD Groups and External Partners



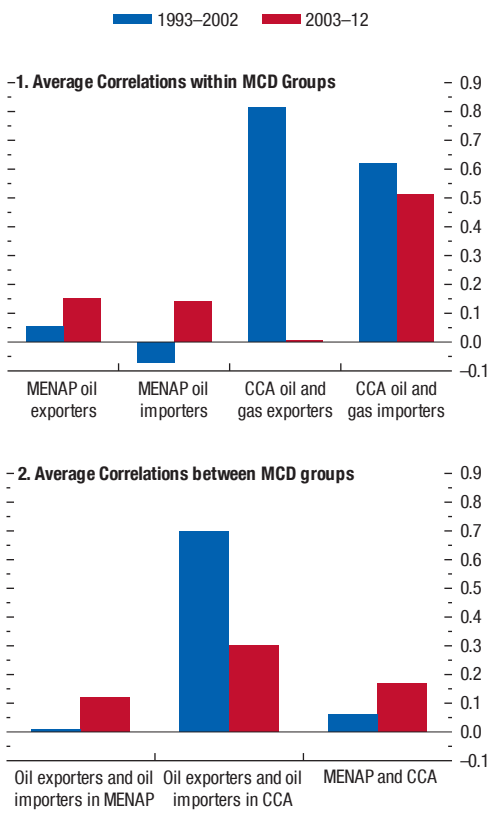
Sources: Haver Analytics; IMF, *World Economic Outlook*; Organization For Economic Cooperation and Development; and IMF staff calculations.
Note: CCA = Caucasus and Central Asia; MCD = Middle East and Central Asia; MENAP = Middle East, North Africa, Afghanistan, and Pakistan.

The authors of this box are Alberto Behar and Davide Furceri.

[1]For more details, see Box 3.3 of the November 2012 *Regional Economic Outlook: Middle East and Central Asia* (MCD REO) and Annex I of the October 2013 MCD REO.

Box 3.1 *(continued)*

Figure 3.1.2. Output Comovements in Middle East and Central Asia Country Groups



Sources: Haver Analytics; IMF, *World Economic Outlook*; Organization for Economic Cooperation and Development; and IMF staff calculations.
Note: CCA = Caucasus and Central Asia; MCD = Middle East and Central Asia; MENAP = Middle East, North Africa, Afghanistan, and Pakistan.

develop closer linkages with other countries, especially China, which caused trade and output correlations among the CCA economies to decline. The decline was much more pronounced in the CCA oil and gas exporters than in the CCA importers, where intra-regional correlations plummeted during 2003–12. Oil and gas production in these transitioning and opening economies was driven primarily by idiosyncratic factors, such as expansion of domestic productive capacity, which proceeded at an uneven pace across countries, and only weakly by common shocks reflected in global oil and gas market developments.

Box 3.2. Spillovers from Changes in U.S. Monetary Policy

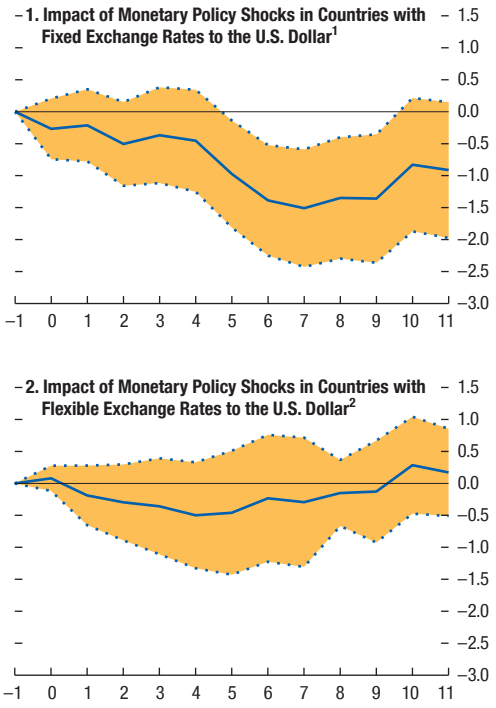
The issue of spillover effects from U.S. monetary policy is especially important in light of the possibility that interest rate normalization in the United States may proceed faster than expected. Even though current times are exceptional from a historical point of view, a look at how past U.S. monetary policy shocks have affected output in other countries may help us understand their potential effects and transmission channels. The approach here assesses how monthly movements in the U.S. policy rate (the federal funds rate) affect output and the short-term interest rates of a group of advanced economies and a group of emerging market and developing economies for which data are available.[1]

Figure 3.2.1 shows that the output effect of a U.S. monetary policy shock varies with the exchange rate regime. In particular, while an increase of 100 basis points in the federal funds rate reduces output by about 1½ percent after six months in countries with an exchange rate regime pegged to the U.S. dollar—compared with an output contraction in the United States of about 2 percent—it has no significant effect for countries that float their currency against the dollar. A plausible explanation of the difference is that a country that pegs its currency to the dollar "imports" the U.S. monetary policy stance, with implications for its domestic short-term rates and, thus, its domestic economy. In practice, however, not all peggers allow perfect capital mobility; therefore, how much a country's interest rate is affected by changes in U.S. monetary policy is an empirical question that we investigate.

Our results show a wide range of interest rate reactions to changes in the U.S. policy rate (Figure 3.2.2); among the largest reactions are those in countries with histories of pegging against the dollar (Hong Kong SAR, Israel, Korea). But the rate reaction in Canada, a floater, is also among the largest, which exemplifies the possibility that, in the presence of common shocks (or a well-synchronized business cycle), what we label interest rate spillovers may instead represent underlying comovements.

For example, if the United States and Canada have synchronized business cycles—perhaps because of geographical proximity—then Canadian rates are highly likely to move with the U.S. policy rate. However, this could simply reflect synchronized economic fluctuations faced by the U.S. and Canadian central banks. To mitigate this complication, we instrument movements in the federal funds rate with the nonsystematic unexpected component of the U.S. monetary policy—specifically, with the exogenous monetary policy shocks constructed by Coibion (2012).[2] Instrumenting

Figure 3.2.1. Impact of Monetary Policy Shocks
(100 basis points)



Source: IMF staff calculations.
Note: Dashed lines indicate the 90 percent confidence interval around the point estimate.
[1]The *y*-axis is the cumulative impact on the level of industrial production. *X*-axis units are months; $t = 0$ denotes the month of the policy shock.
[2]The *x*-axis units are months; $t = 0$ denotes the month of the policy shock.

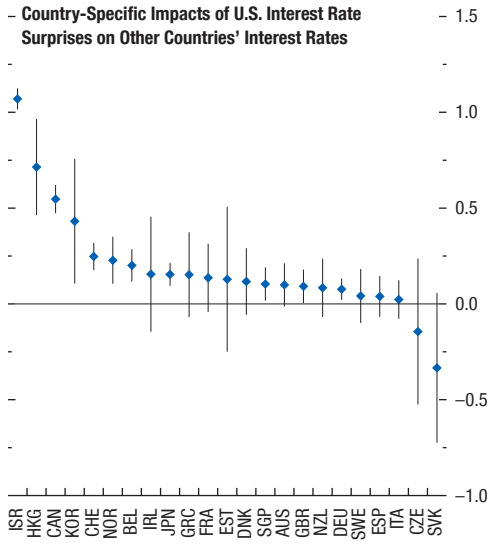
The author of this box is Andrea Pescatori.

[1]The sample period covers January 1977 to December 2008. The data are monthly and the panel is unbalanced. Our preferred definition of the short-term interest rate was monthly averages of either the policy rate or an overnight interest rate; when one of those was not available, government Treasury bill rates were used. Because of the monthly frequency, industrial production is used as the measure of output.

[2]Coibion (2012) extends the series of monetary policy shocks derived in Romer and Romer (2004). This series is constructed by first using a narrative approach to extract measures of the change in the Federal Reserve's (Fed's) target interest rate at each

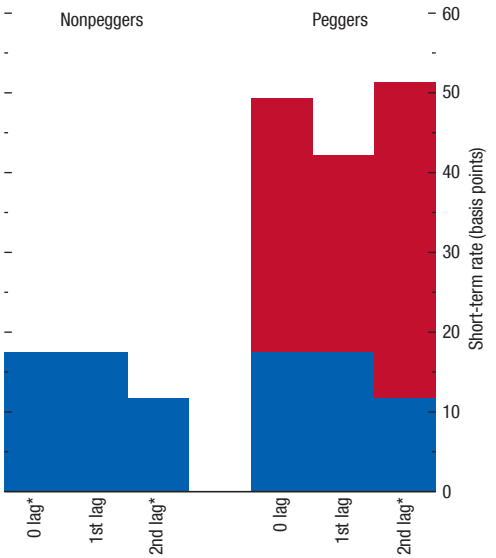
Box 3.2 *(continued)*

Figure 3.2.2. Monthly Percent Increase on Short-Term Rates



Source: IMF staff calculations.
Note: AUS = Australia; BEL = Belgium; CAN = Canada; CHE = Switzerland; CZE = Czech Republic; DEU = Germany; DNK = Denmark; ESP = Spain; EST = Estonia; FRA = France; GBR = United Kingdom; GRC = Greece; HKG = Hong Kong SAR; IRL = Ireland; ISR = Israel; ITA = Italy; JPN = Japan; KOR = Korea; NOR = Norway; NZL = New Zealand; SGP = Singapore; SVK = Slovak Republic; SWE = Sweden. Changes in short-term interest rates are regressed on changes in the federal funds rate and controls at monthly frequencies. A random coefficient model allows for heterogeneous slopes. Black vertical lines represent 95 percent confidence bands.

Figure 3.2.3. Response to Federal Funds Rate Shocks



Source: IMF staff calculations.
Note: Impact coefficients of current and lagged federal funds surprise changes for nonpeggers and peggers. Changes in short-term interest rates are regressed on changes in the federal funds rate instrumented by federal funds rate shocks, a peg dummy, and interaction terms.
* means the bar is statistically significant at the 5 percent level.

the U.S. rate changes with monetary policy surprises, and introducing a dummy for pegging vis-à-vis the U.S. dollar allows us to test whether the magnitude of U.S. interest rate spillovers varies with the exchange rate regime.[3]

For all countries, peggers or not, a surprise increase of 100 basis points in the U.S. policy rate results in a statistically significant rise in interest rates of at least 18 basis points in the same month. Over the entire quarter following a U.S. surprise, all countries see a statistically significant increase of at least 30 basis points (Figure 3.2.3).

The interaction terms are also significant, supporting the view that the exchange rate regime plays an important role.[4] Countries that peg their currency to the dollar have an additional impulse of at least 40 basis points, for a total of about 70 basis points. Statistically, we cannot reject the possibility that the interest rate of a pegging country reacts one to one to movements in the federal funds rate, as theory would predict for a perfectly credible peg. Even when the exchange rate is free to adjust, interest rates are affected by U.S. monetary policy. This result may help us reconcile the fact that the output response of floaters to U.S. monetary policy shocks is not significantly different from zero. In fact, a 10 basis point surprise increase in the U.S. policy rate causes the dollar to appreciate by

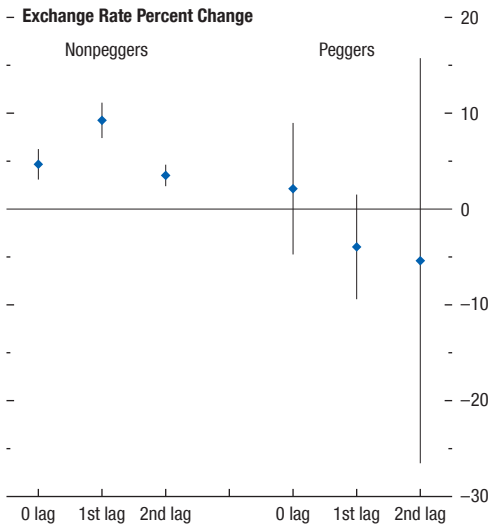
Federal Open Market Committee meeting between 1969 and 2007. This measure of policy changes is then regressed on the Fed's real-time forecasts of past, current, and future inflation; output growth; and unemployment. The residuals from this regression constitute the series of monetary policy shocks used to instrument federal funds rate changes in our analysis.

[3]The exchange rate flexibility measure comes from Lane and Shambaugh (2010).

[4]While capital controls may also affect the spillover effect of U.S. monetary policy, with the expectations that more open countries will be more affected, previous studies typically find weak evidence in support of this hypothesis (di Giovanni and Shambaugh, 2008).

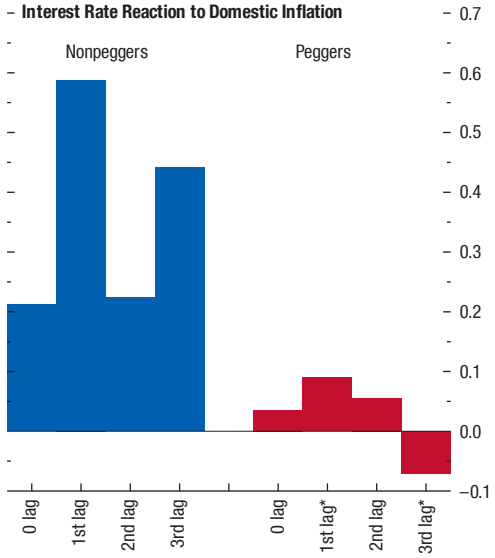
Box 3.2 *(continued)*

Figure 3.2.4. The Exchange Rate Response to Federal Funds Rate Surprises



Source: IMF staff calculations.
Note: Current, first, and second month impact coefficient of a 10 basis point federal funds rate surprise change on the change in the exchange rate (local currency per U.S. dollar) of advanced economies divided, at times, into peggers and nonpeggers. Exchange rate log differences are regressed on country-fixed effects and three lags of federal funds rate changes instrumented by surprises. Regressions are run separately for peggers and nonpeggers. Standard errors are robust, and confidence bands are shown at the 5 percent level.

Figure 3.2.5. Monetary Policy Autonomy



Source: IMF staff calculations.
Note: Impact coefficients of current and lagged federal funds rate surprise changes for nonpeggers and peggers. Changes in short-term interest rates are regressed on changes in the federal funds rate instrumented by federal funds rate shocks, a peg dummy, and interaction terms.
* means the bar is statistically significant at the 5 percent level.

4 percent in the current month and by a cumulated 18 percent during the quarter, stimulating exports to the United States and thus output (Figure 3.2.4). This beneficial effect, however, is probably offset by the partial increase in domestic interest rates.

The question is nonetheless still open as to why floaters are affected by U.S. monetary policy shocks. We propose two possible explanations. First, it is still possible that we are not able to perfectly control for common factors. However, this explanation seems unlikely since surprises in the federal funds rate should be orthogonal to common factors, to the extent that these influence inflation and output gaps. Moreover, this result is robust to domestic output and domestic inflation as control variables. Second, and more likely, it is possible that no country completely disregards its exchange rate with the dollar. In this case, the magnitude we found gives some idea of the trade-off that a central bank faces between stabilizing the exchange rate and responding to domestic economic conditions.

Responding to changes in U.S. policy rates should result in a loss of monetary policy autonomy because it would reduce the space available for domestic monetary policy to respond to domestic economic conditions. This is the open-economy trilemma: an open economy can pursue only two of three goals: fixed exchange rates, domestic monetary autonomy, and capital mobility. Analyzing this question empirically, we find, as expected, that when a country pegs its exchange rate, it is less likely to react to domestic inflation (Figure 3.2.5).

Finally, when the same analysis is performed on a sample of emerging market and developing economies, the results are obscured by the various episodes of high inflation in those economies during the sample period. However, once we exclude these episodes, the results are qualitatively similar to those for advanced economies although statistical significance declines.

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CHAPTER 4

THE YIN AND YANG OF CAPITAL FLOW MANAGEMENT: BALANCING CAPITAL INFLOWS WITH CAPITAL OUTFLOWS

When foreign capital surges into countries, there are two possible means of adjustment: financial adjustment through increases in resident capital outflows or reserves accumulation, or real adjustment through a larger current account deficit. Historically, surges in capital inflows to emerging market economies tended to lead to domestic booms and current account deficits and, when the flows reversed, as they almost inevitably did, painful adjustments and sometimes financial crisis. The global financial crisis, however, marked a change from the past. While some countries experienced the classical boom-and-bust cycle in response to volatile international capital flows, many did not. Rather, as international capital flows dried up, domestic residents stepped in to replace them by drawing down their own foreign assets. This pattern of buffering foreign capital flows with offsetting resident flows was a key contributor to these economies being more resilient to fluctuations in foreign capital inflows. This chapter examines the underlying explanations for this behavior and assesses whether it is possible for policymakers to encourage such behavior in countries where it may not currently occur.

Capital flows to emerging market economies are a source of particular and enduring concern to many policymakers. These concerns stem from bitter experience, best exemplified by the 1997–98 Asian crisis, when surges in capital inflows fueled excessive credit growth, expanded current account deficits, appreciated exchange rates, and a loss of competitiveness. When the inflows reversed, there was a painful adjustment characterized by severe financial disruptions.[1] The experience of the past decade has only intensified these concerns as inflows have increased in magnitude and volatility (Figure 4.1). A surge in inflows—greater even than the surge preceding the Asian crisis—halted abruptly with the global financial crisis. But the rebound was rapid, in part because of low interest rates in advanced economies. Yet now that economic prospects in the United States are picking up, flows seem poised to reverse—again.

Such volatile capital inflows create many challenges for emerging market policymakers. For example, when low interest rates in advanced economies stimulate capital flows to emerging markets, tightening of monetary policy or sterilized intervention can lead to even larger capital inflows, thus boosting rather than dampening credit growth and widening the gap between domestic demand and output. Furthermore, calibrating policy to deal with temporary rather than structural fluctuations, such as those that occur when markets oscillate between "risk on" and "risk off" episodes, adds another layer of difficulty to the policymaker's task.[2]

What, then, can policymakers do? One approach that has enjoyed increased support in recent years is intervention to reduce the volatility of capital inflows and the associated effects on the exchange rate. Recent research has provided a rationale for the use of capital controls ("capital flow management measures") and foreign exchange intervention, and the IMF has supported this approach in particular circumstances as part of a comprehensive economic management approach.[3] And a number of countries, including Brazil, India, and Indonesia, have actively used these tools.

Such intervention is not, however, universal. For example, Chilean Central Bank Governor Rodrigo Vergara observed in January 2013 that "We've seen inflows but mostly aimed at [long-term] investments and this has been offset somewhat by outflows as Chilean

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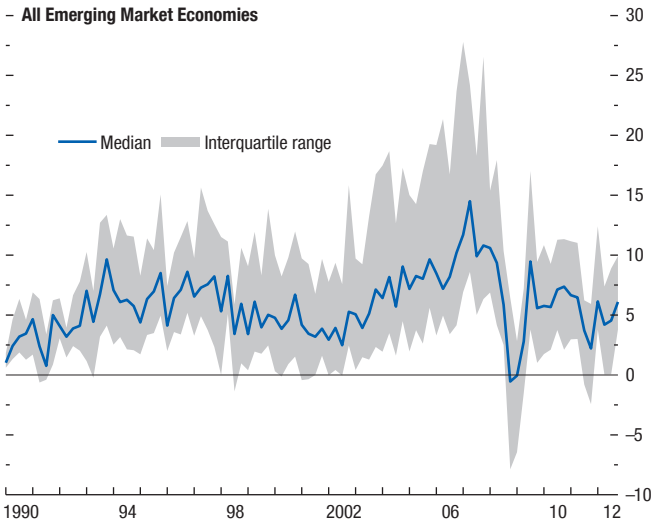
[1]See Cardarelli, Elekdag, and Kose (2009) for a more comprehensive assessment of the effects of net capital inflow surges.

[2]Risk on and risk off refer to changing global investment behavior driven by shifting perceptions and tolerance of risk. A risk off episode occurs when perceptions of risk are high or tolerance of risk is low and global investors tend to retreat from investments, such as those in emerging markets, perceived to be higher risk.

[3]See Ostry and others (2010, 2011), Korinek (2011), and IMF (2012).

Figure 4.1. Gross Capital Inflows
(Percent of GDP)

Capital inflows to emerging market economies have shown substantial variability over the past decade. Median flows peaked at about 15 percent of GDP just prior to the global financial crisis before dropping to zero. They have since rebounded but continue to demonstrate significant volatility. As seen in the interquartile range, this pattern is common to most emerging market economies.



Sources: IMF, *Balance of Payments Statistics;* and IMF staff calculations.

companies and private pension fund managers invest abroad."[4] Chile's policy response—careful monitoring but limited direct intervention—reflects the relatively benign domestic effects of these flows. More broadly, only some countries that experience strong capital inflows experience unsustainable booms, current account blowouts, and subsequent painful adjustments.

These differences in behavior and experience point to an important distinction among countries. From the balance of payments identity we know that a surge in capital inflows can be absorbed either via current account deterioration ("real" adjustment) or via offsetting capital outflows ("financial" adjustment). In some economies there is a tendency for strong capital inflows to fuel booms that, particularly when the flows reverse, require traumatic real adjustment. It is these experiences that have stimulated the extensive body of research on how best to moderate the flows of capital. In other economies, however, capital inflows lead to financial adjustment that tends to buffer those inflows and lower the required real adjustment. We show that this difference has been associated with greater economic resilience to capital inflows. Thus, instead of asking what emerging market economies can do to stem the flow of capital, an area of research that has been covered extensively previously, we focus on the related and complementary question: Given volatile capital inflows, how can countries encourage stabilizing financial adjustment that minimizes the required real adjustment? In particular this chapter explores the following questions: Are these economies really more resilient? What are the policies and characteristics of countries where financial adjustment helps minimize real adjustment? How might this financial adjustment work? And how did these economies become resilient?

To answer these questions, this analysis first categorizes emerging market economies into two broad groups based on whether they experience more or less real adjustment in response to capital inflows. Examination of GDP, consumption, and unemployment in these two groups of countries after the global financial crisis reveals that, on average, countries that experienced less real adjustment were indeed more resilient. The chapter then looks in more detail at the policies and characteristics of these two groups. This investigation reveals some surprisingly clear distinctions. The more resilient emerging market economies have (1) more countercyclical fiscal policy and better monetary policies; (2) better institutions; (3) more flexible exchange rate regimes; and (4) more stable net capital flows because of greater financial adjustment that reflects private rather than official buffering of capital inflows. Also of interest are the dimensions along which the groups do not differ: (1) Both groups had approximately the same share of resources and manufacturing. (2) Both had similar levels of real GDP per capita. And most notably (3) both faced a similar level and volatility of gross capital inflows.

The chapter then briefly considers various theories that may explain the findings. It appears that, when domestic and international financial markets are relatively free of distortions, the natural consumption-smoothing behavior of domestic investors tends to offset and buffer volatile foreign capital flows with financial adjustment rather than real adjustment.[5]

While it is helpful to identify the defining characteristics of these more resilient economies, it is

[4] *Wall Street Journal*, January 23, 2013 (http://online.wsj.com/article/BT-CO-20130123-709695.html).

[5] Such as might result from either misaligned exchange rates and impediments to the free flow of capital or by the tendency toward imprudent boom-and-bust behavior in poorly developed or poorly regulated capital markets.

equally important to understand how these countries acquired these characteristics and which characteristics appear to promote resilience rather than being merely a consequence of resilience. Thus, the second half of this chapter examines how some currently resilient economies have developed this quality. In particular, it focuses on the experiences of three countries that have considerably increased their resilience to swings in capital inflows: Chile, the Czech Republic, and Malaysia. While each of these countries took a somewhat different path, their greater resilience can be linked to a mix of policy measures that included better prudential regulation and financial supervision, more countercyclical fiscal and monetary policy, greater exchange rate flexibility, and a more liberal regime for capital outflows. Overall, the success of these countries has been based on embracing these reforms in a comprehensive manner. Incomplete reforms tended to be associated with destabilizing effects—too rapid financial development or premature opening to capital flows without appropriate prudential regulation can still lead to financial crisis.

Financial Adjustment and Resilience

The starting point for this empirical investigation is to divide countries into two broad groups based on whether they experience more or less real adjustment in response to capital inflows. The expectation is that the extent to which these countries adjust to capital inflows with real or financial adjustment corresponds with how resilient they are to those inflows—in other words, the extent to which they are prone to large current account movements and corresponding economic dislocation. Building on the discussion above, the categorization is based on the relationship between capital inflows and current account fluctuations. In particular, it is helpful to consider the following version of the balance of payments identity:

Gross inflows = current account deficit
+ gross outflows + reserves accumulation.

This identity shows how changes in gross inflows must be absorbed through changes in either the current account or in gross outflows and reserves.[6] In some countries, but not in others, surges in capital inflows are largely associated with increases in current account deficits that, as history demonstrates, can require painful adjustments when these inflows reverse. To distinguish countries that absorb swings in gross inflows more through changes in gross outflows and reserves than through the current account, we regress the current account on gross inflows for each country in a sample of 38 emerging market economies.[7] The countries are ranked according to the estimated relationship between inflows and the current account, and the sample is split at the median. We refer to the group of countries with larger positive coefficients, for which changes in gross inflows are associated with large changes in the current account deficit, as less resilient and to those with a lower or negative coefficient as more resilient.[8] As with any such metric, the exact allocation of countries between the groups may be affected by a number of confounding factors. And, since there may be only small differences between individual countries close to the median, undue weight should not be attached to the particular group any given country falls into. The division is designed to highlight the broad characteristics of the group of countries that display more or less financial adjustment in response to gross capital inflows rather than to precisely characterize any given country as more or less resilient.

Is Financial Adjustment Associated with Economic ("Real") Resilience?

While the historical experience has been that countries that undergo large current account corrections gener-

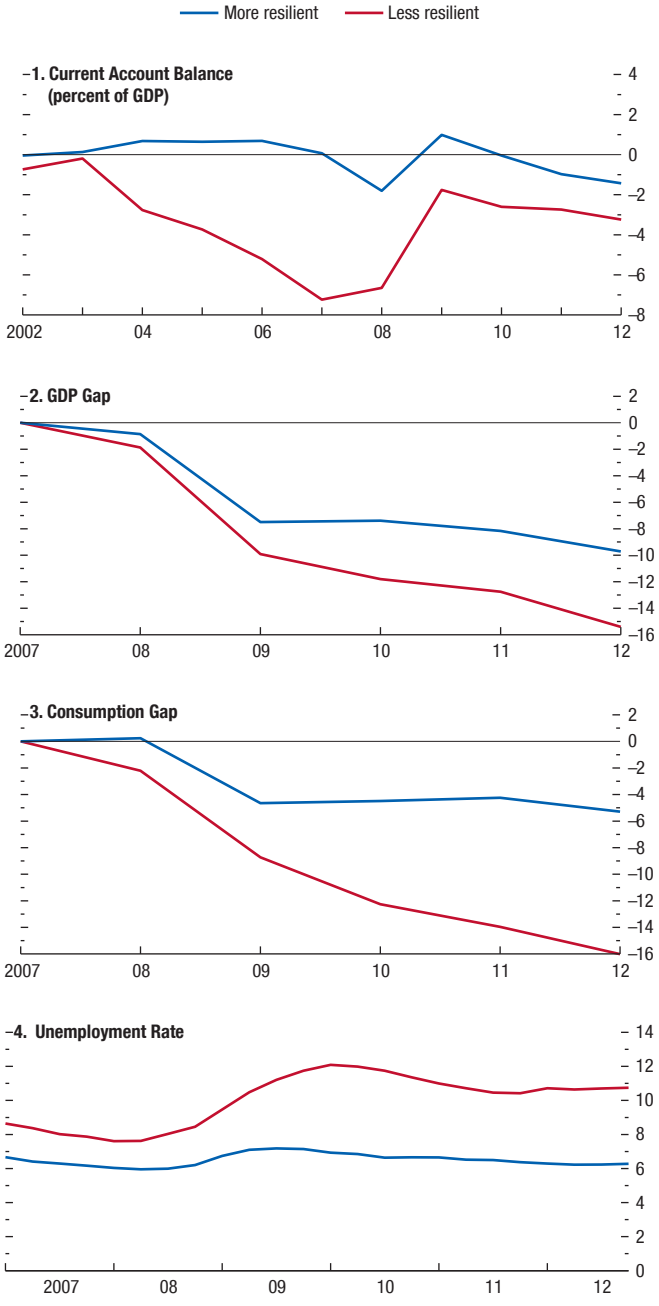
[6]To be precise, we should add to the left side of this equation the net capital account and errors and omissions. These terms are, however, generally small and therefore are included in gross inflows.

[7]The regression uses annual data from 2000 to 2012, and both the current account and capital inflows are expressed as a percent of GDP. The sample consists of the group of countries identified as emerging market economies in Chapter 4 of the April 2011 *World Economic Outlook* (WEO) minus countries affected by the Arab Spring, large oil exporters (countries where oil exports have averaged over 25 percent of GDP for the past three years), offshore financial centers, and countries that by 2000 were classified in the WEO as advanced economies. Among these countries are still some that have subsequently been reclassified as advanced economies. They are retained in the sample because their experiences, including the fact that they have transitioned to advanced economy status, are instructive.

[8]The high-coefficient group comprises Argentina, Belarus, Bulgaria, the Dominican Republic, Ecuador, Estonia, Hungary, India, Indonesia, Jordan, Latvia, Lithuania, Morocco, Pakistan, Romania, the Slovak Republic, South Africa, Turkey, and Venezuela. The low-coefficient group comprises Brazil, Chile, China, Colombia, Croatia, the Czech Republic, El Salvador, Guatemala, Malaysia, Mexico, Peru, the Philippines, Poland, Russia, Slovenia, Sri Lanka, Thailand, Ukraine, and Uruguay.

Figure 4.2. Current Account, GDP, Consumption, and Unemployment
(Percent, mean)

Less resilient countries witnessed a large deterioration of the current account in the years preceding the global financial crisis and a subsequent sharp reversal. Those countries also experienced a much stronger contraction of GDP and consumption relative to precrisis trends and a larger increase in unemployment.



Source: IMF staff calculations.

ally suffer large real consequences, it is important to check whether this remained the case for our sample of countries in recent years.[9] To do this we look at these countries' experiences with the capital inflow surge prior to the global financial crisis and the sudden stop associated with its onset. Figure 4.2 (panel 1) shows the evolution of the current account in the two groups of countries over the past decade. It is in line with the anticipated patterns. The countries where more of the adjustment to capital inflows occurred on the current account were also the countries that, on average, experienced a large blowout and correction during the 2000s. The subsequent panels trace the path of adjustment to the large current account corrections that occurred between 2007 and 2009. Panels 2 and 3 show the deviation of GDP and consumption from the precrisis trend (calculated from 2002 to 2007), and panel 4 shows the average unemployment rate for the two groups of economies. The relative performance of the less resilient group as a whole was clearly worse than that of the more resilient group. GDP was lower than precrisis trends in both groups, but the drop was larger for the less resilient group. The difference is even more dramatic for total consumption (private plus public) and unemployment. While domestic consumption was about 5 percent lower than precrisis trends in the more resilient group by 2012, it was 16 percent lower in the less resilient group. Similarly, unemployment rose by approximately 4 percentage points in the less resilient group, and is still higher than before the global financial crisis, whereas it was barely affected in the more resilient group.

Overall, these indicators suggest that countries whose current account was less responsive to capital inflows were more resilient in the face of both the surge in capital inflows experienced through the mid-2000s and the large decline in capital inflows during the global financial crisis. They faced less real adjustment, as reflected in more stable current accounts and better postcrisis GDP, consumption, and unemployment levels; instead, they undertook much more financial adjustment.

How Are the More Resilient Economies Different?

We now examine in more detail why some emerging market economies are more resilient to capital inflow

[9]See Cardarelli, Elekdag, and Kose (2009).

fluctuations. We consider how the more and less resilient groups differ in terms of their monetary and fiscal policy mix, institutions, capital flows, and other indicators of their economic structure. To benchmark our findings, the two groups in our sample are also compared with a selected group of small open advanced economies: Australia, Canada, Denmark, New Zealand, Norway, and Sweden. This analysis compares averages over the past 10 years for flow variables and the latest observation for stock variables. For example, the net international investment position as of 2010 (the latest available value) is used for comparisons across countries, while gross capital inflows are averaged over the past 10 years.

Policies and Institutions

Figure 4.3 shows that the more resilient economies have more flexible exchange rates but no meaningful or significant differences in capital account openness (at least as measured by the available, but admittedly imperfect, de jure measures). Monetary and fiscal policies appear to be better in the more resilient economies to the extent that inflation is significantly lower and fiscal policy is more countercyclical.[10] Finally, as measured by a very broad metric of institutional quality, which captures things like the quality of the bureaucracy and the rule of law, the more resilient economies have significantly better economic institutions.[11]

External Financial Integration

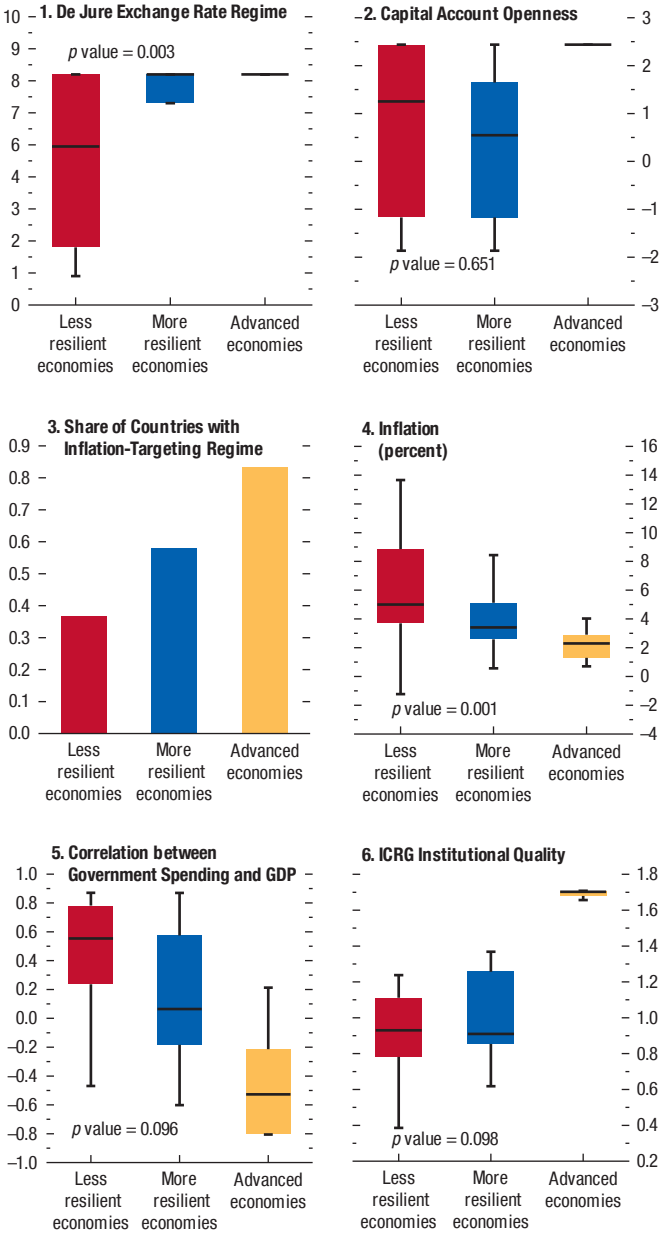
Although this analysis divides countries on the basis of the pass-through from gross inflows to the current account, there are a number of ways the pass-through could play out. For example, countries with low pass-through may also experience smaller or more stable inflows. Panels 1 and 2 of Figure 4.4 show that, in fact, the level and volatility of gross capital inflows are similar between the two groups. It is also interesting to note that advanced economies experience even more volatility in gross inflows than either of the two

[10]The cyclicality of fiscal policy is measured by the correlation between the cyclical deviations in real primary government expenditure and the cyclical deviations in real GDP. This is one of the measures of fiscal policy cyclicality used by Frankel, Végh, and Vuletin (2011).

[11]This index corresponds to the average of four variables from the International Country Risk Guide data set: investment profile, corruption, law and order, and bureaucratic quality.

Figure 4.3. Policies and Institutions

Policies and institutions in more resilient economies are generally stronger than in less resilient economies. There is a higher share of inflation-targeting central banks, and inflation is generally lower and fiscal policy more countercyclical. More resilient economies tend to have more flexible exchange rates than less resilient economies, although there is no significant difference in de jure measures of capital account openness.

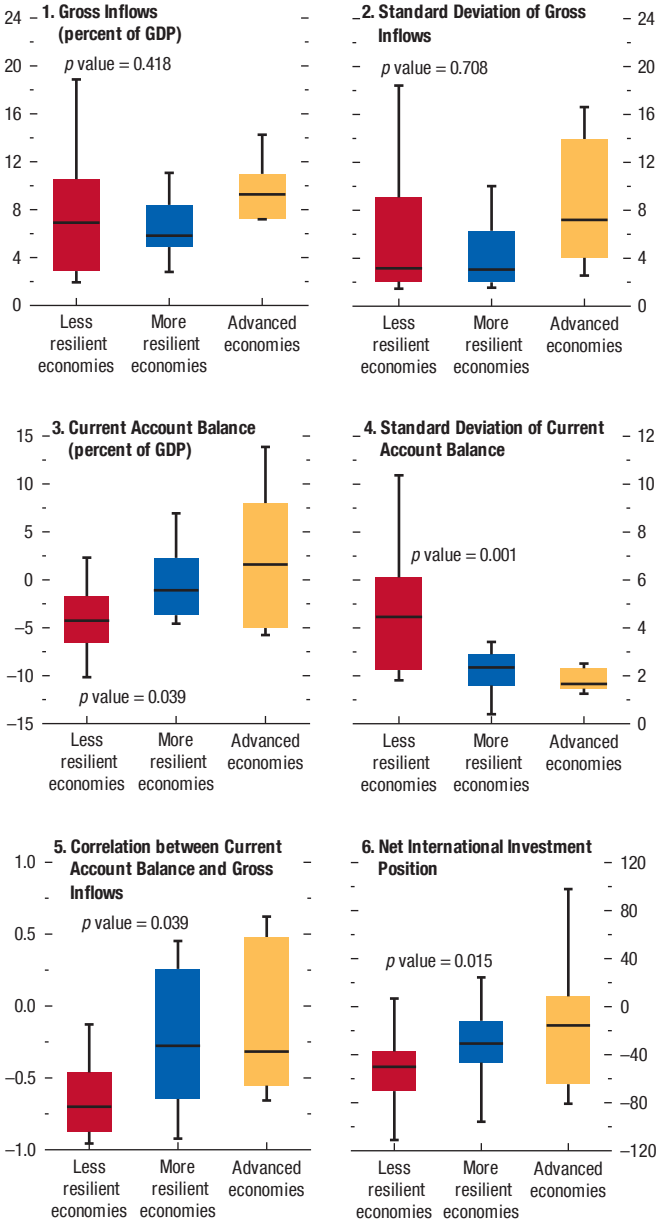


Sources: Chinn and Ito (2006) updated to 2010; IMF, *Annual Report on Exchange Arrangements and Exchange Restrictions;* PRS Group, Inc., *International Country Risk Guide (ICRG);* and IMF staff calculations.

Note: The horizontal line inside each box is the median within the group; the upper and lower edges of each box show the top and bottom quartiles. The distance between the black lines (adjacent values) above and below the box indicates the range of the distribution within that generation, excluding outliers. *p* value indicates the significance of the difference in distributions between less resilient economies and more resilient economies, based on the Kolmogorov-Smirnov test.

Figure 4.4. External Financial Integration

More resilient economies experienced gross inflows and gross inflow volatility similar to less resilient economies. However, reflecting greater buffering of these inflows with offsetting gross outflows, more resilient economies had smaller and more stable current account balances on average over the past 10 years. This is reflected in a better, although not on average positive, net international investment position.



Sources: IMF, *Balance of Payments Statistics;* Lane and Milesi-Ferretti (2007) updated to 2011; and IMF staff calculations.
Note: The horizontal line inside each box is the median within the group; the upper and lower edges of each box show the top and bottom quartiles. The distance between the black lines (adjacent values) above and below the box indicates the range of the distribution within that generation, excluding outliers. *p* value indicates the significance of the difference in distributions between less resilient economies and more resilient economies, based on the Kolmogorov-Smirnov test.

groups of emerging market economies in our sample. Panels 3 and 4 of Figure 4.4 confirm that, as suggested by Figure 4.2, net capital flows are larger and more volatile in the less resilient group.[12] In other words, there is much more stabilizing financial adjustment taking place in the more resilient economies. A different way of looking at this relationship is to note that there is a lesser correlation between gross inflows and the current account in the more resilient group (Figure 4.4, panel 5). In principle, financial adjustment can be performed by either the private sector or the official (public) sector through reserves management. In practice, most financial adjustment was undertaken by the private sector. In particular, between 2007 and 2009, when gross inflows to emerging market economies fell significantly, approximately 20 percent of the financial adjustment in both groups was accommodated with changes in reserves and 80 percent through changes in private flows. Finally, this analysis also finds that the more resilient economies have less negative net foreign asset positions (Figure 4.4, panel 6—although there are no significant differences in the average levels of assets or liabilities separately).

Income, Reserves, and Industrial Structure

Interestingly, there are few differences between the two groups of emerging market economies in terms of industrial structure or income levels (Figure 4.5). Both have the same average level of resources and manufacturing, and there is no significant difference in the average level of income. For example, more resilient economies do not appear to be those with greater mineral wealth or higher incomes. This analysis does, however, find that the resilient economies have somewhat higher levels of reserves. However, as mentioned above, at least during the global financial crisis, there was little difference in the use of reserves between the two groups, and the majority of the financial adjustment was actually performed by the private sector.[13]

[12]Given the balance of payments identity, net capital flows are equivalent to the current account.

[13]These observations are consistent with the findings of Alberola, Erce, and Serena (2012), who find that large holdings of international reserves prevent capital flight by domestic residents during global financial stress and make them more willing to repatriate capital invested overseas.

Summary

The main findings are that resilient emerging market economies have more flexible exchange rates, lower inflation, more countercyclical fiscal policy, better economic institutions, and more stable current accounts (net capital flows). Furthermore, the majority of the financial adjustment in resilient economies is through private rather than official flows. It should be understood, however, that identifying these characteristics does not address the question of causality: how countries became resilient and whether these characteristics explain their resilience or are simply consequences or indicators of resilience. The case studies that follow, however, by focusing on the sequence of events and development of these characteristics, allow clearer inferences about causality and provide some answers to the questions about why these countries are more resilient today. A comprehensive analysis of this evidence is presented in the final section of this chapter.

What Explains Financial Adjustment?

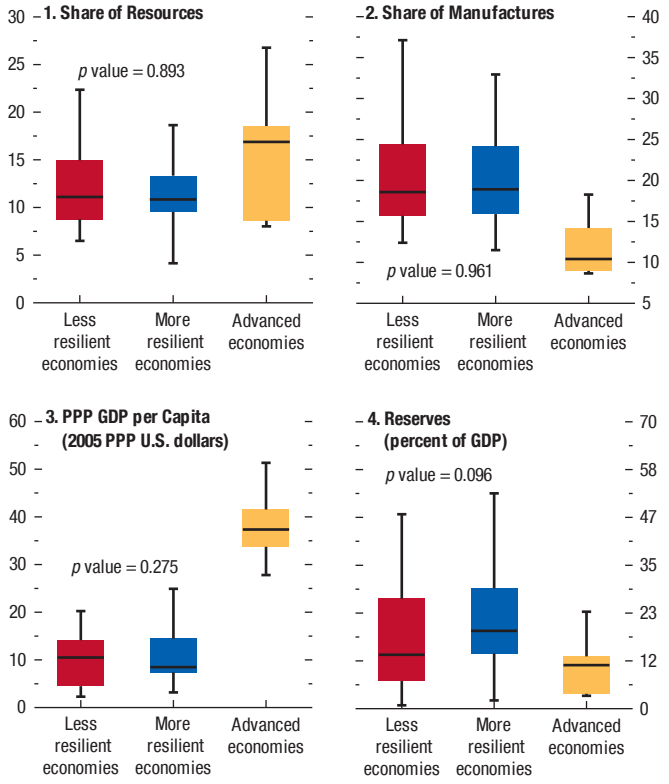
To provide some background before analyzing the different country experiences, we discuss some theoretical explanations for why capital outflows may move in the ways indicated by the data. In particular, we look at what might explain the fact that, in practice, the majority of financial adjustment is undertaken by the private sector.

At its simplest, financial adjustment is simply the embodiment of Adam Smith's invisible hand. When an investor withdraws money from a country, this tends to create forces that raise domestic interest rates and lower the exchange rate. And these changes tend to create incentives for others to step in. Impediments to the operation of these equilibrating mechanisms may prevent this adjustment from operating automatically. For example, in countries where exchange rates are fixed and, through the use of capital controls, domestic interest rates are independent of world interest rates, capital outflows must be met with changes in official reserves—the hand of the public sector replaces the invisible hand of the market. While either the public or the private sector can undertake financial adjustment, our analysis indicates that the majority of the adjustment observed over the past decade has been undertaken by the private sector.

The theory behind the financial adjustment mechanism discussed does not, however, say anything about the identity of the private investors on each end of such transactions. The important feature of how financial adjustment operates in practice is that inflows from foreigners are volatile and that these flows are buffered when residents (rather than other foreigners) step in when foreigners step out. Explaining these aspects of the financial adjustment process is more difficult, but there is nonetheless a growing theoretical and empirical literature that attempts to do so. First, Forbes and Warnock (2012) show that sharp reversals in gross capital flows are mostly associated with changes in global risk aversion rather than domestic factors. They show that episodes of higher global risk aversion are associated with an increase in home bias as evidenced by a contemporaneous reduction in both outflows and inflows. In a theoretical contribution, Tille and van Wincoop

Figure 4.5. Economic Structure and Reserves

More resilient economies are not clealy or significantly richer or endowed with greater resource wealth than less resilient economies. They do, however, have somewhat higher levels of reserves on average.



Sources: Lane and Milesi-Ferretti (2007) updated to 2011; World Bank, World Development Indicators database; and IMF staff calculations.
Note: The horizontal line inside each box is the median within the group; the upper and lower edges of each box show the top and bottom quartiles. The distance between the black lines (adjacent values) above and below the box indicates the range of the distribution within that generation, excluding outliers. *p* value indicates the significance of the difference in distributions between the less resilient economies and more resilient economies, based on the Kolmogorov-Smirnov test. PPP = purchasing power parity.

(2012) show, in a relatively standard financial model, that this buffering effect can result from the presence of asymmetric information that allows domestic investors to recognize shocks to domestic assets faster than foreigners and for domestic investors to take advantage of that superior information.[14]

While recent capital flows appear to have been mostly driven by global shocks, Broner and others (2013) show that, even when a domestic crisis is triggering an outflow of foreign investors' funds, domestic residents still tend to offset those flows. While both foreign and domestic investors may want to reallocate their investment portfolio out of the country during a domestic crisis, domestic consumers have an offsetting incentive to repatriate some of their foreign assets to smooth consumption. In line with this observation, Figure 4.2 shows that consumption was much smoother in the countries in our sample that had more financial adjustment. Alternatively or additionally, Broner, Martin, and Ventura (2010) posit that foreigners are more likely to be defaulted on than domestic residents during a crisis. Consequently, foreigners may have an incentive to sell domestic assets to domestic agents—leading to a reduction in both gross inflows and gross outflows during instability or crisis.

Overall, even though the theoretical models are still immature, they suggest that financial adjustment is the result of ordinary economic forces that tend to create different incentives for residents and nonresidents. That is, underlying these models are assumptions that financial markets are well developed and generally free of distortions. This provides an obvious explanation for the finding above that the countries with the greatest financial adjustment had the freest exchange rate arrangements. The case studies below shed further light on this mechanism and help assess whether more financial adjustment is associated with particular policy decisions.

Case Studies

The analysis above provides some indication of what characteristics are shared by more resilient economies, but it does not address the question of whether these characteristics contribute to resilience or merely reflect it. To shed some light on this question we turn to three case studies: Chile, the Czech Republic, and Malaysia.

These three countries had diverse initial conditions and cover the three major geographical regions that are home to emerging market economies. In addition, these economies are different: Chile has a significant resources sector; the Czech Republic has no resources to speak of but does have a large manufacturing sector; and Malaysia has elements of both, with a modest resources sector in addition to significant manufacturing activity. These countries are also among the most resilient, based on the correlation of changes in net and gross capital flows (Chile and Malaysia are in the top quintile) and on their credit default swap spreads (among the lowest in the sample). Furthermore, each country took a different approach in building its resilience—notably, there was much greater government involvement in Malaysia than in the Czech Republic or Chile.

Of additional interest is the fact that these economies were not always resilient. Each of them tried a number of policy mixes over a period of decades, and it is their earlier unsuccessful experiences, as much as their recent resilience, that sheds light on the factors that improve an economy's resilience. Furthermore, tracing the sequence of reform in these countries helps identify which characteristics appear to promote resilience and which reflect it. In particular, we focus on identifying whether the current resilience of these economies seems to be the result of particular policy choices or benign economic conditions and luck.

Chile

Over a period of decades punctuated by crises in the early 1980s and late 1990s, Chile has gradually moved toward a policy mix that combines an inflation-targeting framework, a freely floating exchange rate, a structural balance fiscal rule, and open capital markets with strong prudential and financial market regulation. This policy mix has delivered notable resilience to sometimes large fluctuations in gross capital inflows. Earlier policy mixes that were missing one or more elements of the current policy combination ended in crisis. These crises were, however, the catalyst for changes that resulted in the current policy mix.

In the mid-1970s Chile started deregulating its financial and capital markets as part of a general shift

[14]This is an idea with a long history. Smith (1776), when introducing the idea of the invisible hand, put it this way: "First, every individual endeavours to employ his capital as near home as he can…. He can know better the character and situation of the persons whom he trusts, and if he should happen to be deceived, he knows better the laws of the country from which he must seek redress."

toward free-market policies. Foreign capital flows were allowed, but tightly regulated, and the exchange rate was fixed. But prudential regulation of the domestic financial system was lax, particularly of related lending. The prevailing ethos was one of market discipline rather than explicit regulation. As a consequence, a number of banks collapsed. Furthermore, when financial institutions gained access to foreign capital markets in 1980, they expanded their foreign intermediation activities dramatically and, ultimately, imprudently. When a debt crisis hit in 1982, a large depreciation in the previously fixed exchange rate led to extensive corporate defaults and an ensuing financial crisis (Figure 4.6, panel 1). Weak prudential controls allowed financial and foreign exchange risks to build up, and when the sovereign debt crisis occurred, they compounded the downturn.

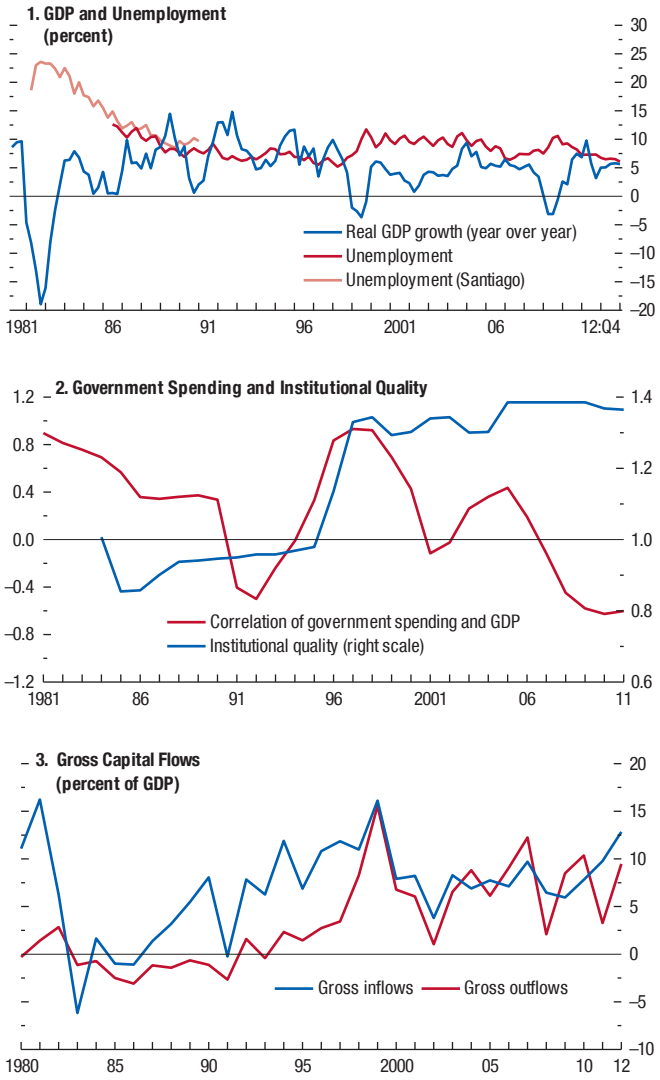
After spending much of the 1980s excluded from international capital markets, the government policy mix in the 1990s involved more economic flexibility than in the 1970s and early 1980s, but it was still relatively interventionist. The government pursued an export-led growth model that targeted a stable and depreciated exchange rate managed in a moving band to maintain a sustainable external balance. It was thought that this approach would minimize the country's vulnerability to the kind of financial turmoil that led to the 1982 crisis. The government, however, also wanted the ability to run independent monetary policy to reduce the still-high level of inflation. As a result, capital controls were necessary, and Chile used an unremunerated reserve requirement known as the *encaje* that allowed for a wedge between global and domestic interest rates.[15] In addition, reflecting the lessons learned in the early 1980s financial crisis, prudential regulation was much improved, particularly regarding related lending.

This approach led to many tensions. In line with the trend in other emerging market economies, capital inflows to Chile increased markedly during the 1990s. The exchange rate was consistently pushing against the strong side of the band, requiring extensive sterilized intervention. At the same time, the central bank was trying to maintain high domestic interest rates as it aimed to deliver price stability, which exacerbated the

[15]The empirical evidence on the effectiveness of these capital controls is mixed. Cowan and others (2007), for instance, argue that it did not change the volume of inflows—only their composition.

Figure 4.6. Chile

Since the late 1990s, Chile has followed a policy mix of inflation targeting, a floating exchange rate, and free capital flows. It has also improved its general institutional quality and implemented more countercyclical fiscal policy. The net effect has been that fluctuations in gross capital inflows are buffered by gross capital outflows, and the country has been much less affected by fluctuations in gross inflows than in the past.



Sources: Haver Analytics; IMF, *Balance of Payments Statistics;* IMF, *International Financial Statistics;* PRS Group, Inc., *International Country Risk Guide;* and IMF staff calculations.

costs involved in defending the exchange rate.[16] The tensions inherent in Chile's chosen policy framework eventually came to a head with the Russian bond crisis.

Russia's default led to a sharp deterioration in sentiment toward emerging markets in general. Interest rates on Chilean sovereign and commercial debt rose, and the terms of trade deteriorated as the price of copper fell. Now, instead of defending the exchange rate against appreciation, the policy framework required the defense of the exchange rate against depreciation.[17] As a result, monetary policy was tightened, which exacerbated the domestic downturn. Although there was no "sudden stop" in gross capital inflows, there was still a sharp reduction in net inflows that contributed to the strength of the downturn because of a "sudden start" in gross capital outflows. This was partially a result of poor timing: limits on foreign investment by the private pension funds had been gradually relaxed through the 1990s. But, because Chile had been growing strongly and domestic returns were high, these relaxations had not translated into strong outflows. When the crisis started, however, the authorities' attempt to prevent depreciation of the exchange rate provided domestic investors with the strong incentive to move money abroad in order to benefit from a possible depreciation.

The outcome, while better than in 1982, was still not ideal. Unemployment rose from about 6 percent to almost 12 percent, and the economy experienced its first year of negative growth since 1983 (see Figure 4.6, panel 1). The improvement in prudential controls did, however, prevent a financial crisis and any related worsening of the situation.

Reflecting on the 1998 crisis, the authorities recognized that the framework in place required a procyclical monetary policy response and that this framework also encouraged exacerbating private portfolio flows because investors could anticipate exchange rate movements and make one-way bets.[18] The central bank decided on an inflation-targeting framework under which most capital controls were removed and the exchange rate was allowed to float freely. It was hoped that the increased exchange rate volatility associated with free floating would serve as a natural disincentive to the kinds of short-term capital transactions that were a traditional source of concern. Fiscal policy was also improved with the introduction of a structural balanced budget rule in 2001, which made fiscal policy more countercyclical than in the past. (The effect can be seen in Figure 4.6, panel 2.)

The regulatory framework for banks was reformed to encourage financial development. In particular, pension funds were natural counterparties to nonfinancial corporate in the foreign exchange market, and the relaxation of regulations allowed the development of the markets each needed to hedge their foreign exchange risk, with banks acting as intermediaries. Furthermore, with controls on capital outflows relaxed and pension funds free to hold a significant fraction of their assets overseas, gross capital flows in Chile began to behave much more like those in advanced economies, where gross outflows and gross inflows offset each other and generally stabilize net inflows and activity (Figure 4.6, panel 3).

The net result of these policies was that the Chilean economy now seems much more resilient to global shocks and capital flow volatility. Large fluctuations in gross capital flows during the global financial crisis and earlier Latin American crises had less effect on net capital flows. Furthermore, Chile has been able to respond to downturns with countercyclical and stabilizing fiscal and monetary policies, assisted by the automatic stabilizer that a floating exchange rate provides.

Malaysia

During the Asian crisis, faced with the prospect of a sudden stop in capital inflows and capital flight, Malaysia closed its financial account and fixed its exchange rate. Over the following decade, it carefully built financial sector resilience, moved to a flexible exchange rate regime, and gradually relaxed restrictions on capital flows. The improvements in resilience have been such that, despite more open capital markets, highly volatile gross inflows during the global financial crisis did not lead to a sudden stop in net flows or domestic financial instability.

In the early 1990s, Malaysia experienced strong growth characterized by high investment and large current

[16]This was because it involved the accumulation of foreign reserves that paid a lower rate of interest than the central bank was paying on its liabilities.

[17]Theoretically, the authorities could have allowed the exchange rate to depreciate, but multiple, relatively familiar, justifications were offered for why this would be dangerous. For example, it was suggested that depreciation would raise inflation and undermine the central bank's inflation-targeting credibility and destabilize financial markets, with an adverse effect on those with foreign currency exposure.

[18]See Carrière-Swallow and García-Silva (2013).

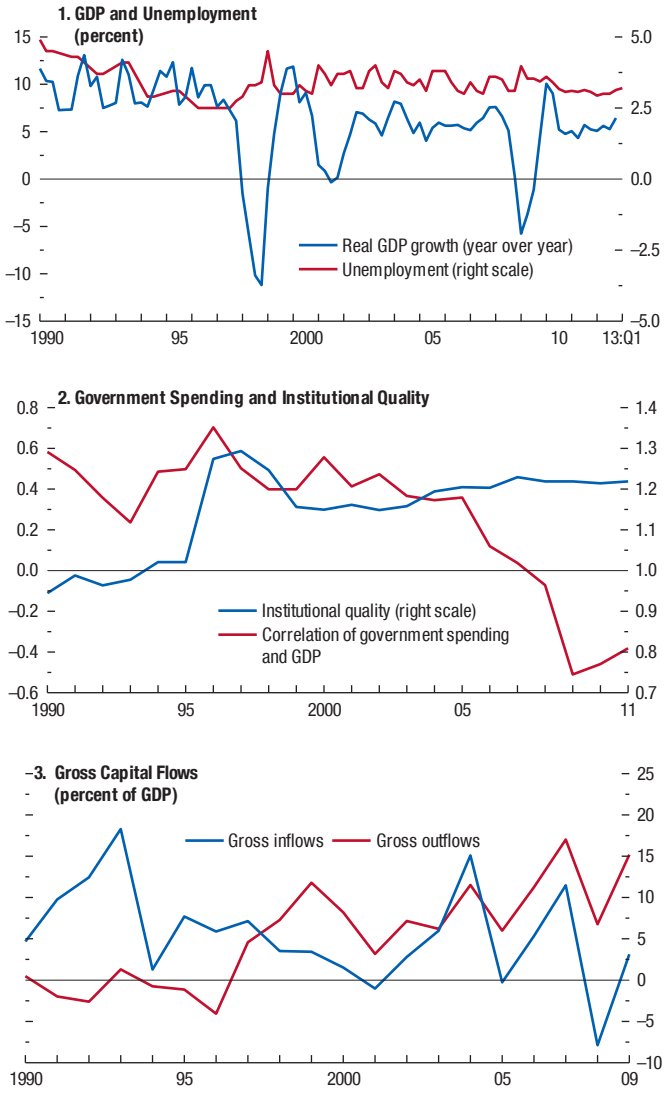
account deficits that reached 10 percent of GDP in 1995 (Figure 4.7, panel 1). The sudden stop of capital inflows in 1998 as part of the Asian crisis led to a dramatic contraction of investment and GDP as well as a sharp reversal of the current account. In order to avoid a hemorrhaging of foreign capital, prevent an even larger depreciation of the currency, and allow for monetary and fiscal easing, Malaysia introduced capital controls and fixed the exchange rate with respect to the U.S. dollar on September 2, 1998. The economy rebounded quickly, returning to healthy growth rates by the end of 1999.

Although capital flow restrictions and the fixing of the exchange rate may have helped avoid a more severe financial crisis in the short run (Kaplan and Rodrik, 2002), the Malaysian authorities concluded that international financial integration remained crucial for the ultimate success of the country. They therefore embarked on a staged process of reforms that involved both strengthening the domestic financial sector and gradually reopening the financial account. This strategy foresaw the development of the domestic financial sector over the subsequent 10 years through three *ex ante* planned phases: During the first three years policy efforts focused on enhancing the capacity and capability of the existing banks. The subsequent three to four years saw increased competition through the deregulation and liberalization of the sector. Finally, during the last phase, the authorities promoted greater international integration by allowing new players into the domestic economy and supporting investment abroad. Another important step that increased the resilience of the financial sector was to foster the development of equity and bond markets, which expanded financing beyond bank lending. Finally, the Malaysian authorities took considerable steps to improve financial regulation and supervision by adopting risk-based capital requirements, stress testing, peer group comparisons, and horizontal reviews.

The strengthening of the financial sector was accompanied by a gradual easing of restrictions on capital flows and exchange rate transactions in order to increase efficiency and reduce the costs of conducting business internationally. A notable consequence of fewer restrictions on capital outflows was the gradual accumulation of a substantial gross international asset position. While international liabilities stayed relatively constant as a proportion of GDP, Malaysia more than doubled its gross foreign holdings between 1997 and 2012, leading to a large correction in the net foreign asset position, which turned positive.

Figure 4.7. Malaysia

Despite larger swings in gross capital inflows, Malaysia weathered the global financial crisis much better than the Asian crisis. This is due in part to more countercyclical use of fiscal policy and larger capital outflows that significantly offset movements in gross inflows.



Sources: IMF, *Balance of Payments Statistics;* IMF, *International Financial Statistics;* PRS Group, Inc., *International Country Risk Guide;* and IMF staff calculations.

The accumulation of international assets was initially fueled by the increase in official reserves accumulated to offset appreciation pressure on the exchange rate. Importantly, the accumulation of reserves limited the incentives for private agents to invest abroad, given the possibility of eventual appreciation of the currency. As in the case of Chile during the late 1990s, this behavior is emblematic of the distortionary effects a large accumulation of official reserves can have on capital outflows. When official reserves are used to resist fundamental movements in exchange rates, they present private investors with the opportunity for a one-way bet against the continuation of policy intervention, which can lead to inefficient allocation of private capital.

Indeed, when Malaysia moved its exchange rate regime to a managed float in 2005, allowing the local currency to appreciate and further removing restrictions on international transactions, the accumulation of foreign assets accelerated. Gross outflows in U.S. dollars increased by about 50 percent during 2006–09 compared with 2002–05, with a dramatic increase in private outflows. The proportion of official reserves in total private and official outflows fell from more than 50 percent during 2002–05 to less than 20 percent during 2006–09. This increase in private capital outflows was characterized by strong growth of foreign direct investment by Malaysian companies fueled by a desire to seek new markets and benefit from economies of scale. A similarly rapid increase was recorded in bank lending abroad and in foreign deposits. Overall, the increase in gross private outflows contributed to a considerable improvement in the net foreign asset position of Malaysia, which was also reflected in a positive net foreign asset position by domestic banks.

The accumulation of foreign assets has played an important role in reducing the volatility of net capital flows. Indeed, the reduction in capital inflows during the Great Recession was largely offset by the sales of foreign reserves and the repatriation of domestic capital invested abroad. In particular, large sales of domestic bonds by foreign investors were absorbed with minimal impacts on yields by the Employee Provident Fund and other deep-pocketed domestic institutional investors. The stabilizing role of reserves and private outflows, coupled with the greater flexibility of the exchange rate and strength of domestic financial institutions, allowed Malaysia to weather the global financial crisis much better than during the crisis of the late 1990s, despite the larger reduction in gross capital inflows. An additional element that has strengthened the resilience of Malaysia to swings in capital flows has been a significant change in the dynamics of public spending. While government spending was positively correlated with GDP fluctuations during the 1990s, it has become much more countercyclical during the 2000s, especially by providing fiscal stimulus during downturns (Figure 4.7, panel 2).

The Czech Republic

After a rocky start in the 1990s, when strong capital flows, a weak financial sector, and a fixed exchange rate regime contributed to a large recession in 1998, the Czech Republic has developed into a stable advanced market economy. This followed the adoption of credible fiscal and monetary policies that contributed to lower sovereign and corporate interest rate premiums, which, unlike in some other central and eastern European nations, minimized incentives for destabilizing inflows and outflows.

Capital flows into the Czech economy started right after the change of the political regime in the early 1990s. The Czech Republic's membership of the Organization for Economic Cooperation and Development (OECD) from 1996, and the associated commitment to phase out capital controls, meant that capital controls were generally unavailable, necessitating different policy approaches than those used in Chile and Malaysia.[19] Capital inflows put the currency under appreciation pressure and facilitated growing imbalances on the current account, which the Czech National Bank (CNB) attempted to deal with by pegging the currency against an effective exchange rate basket and sterilizing inflows. In 1995, with the pressure intensifying, the CNB introduced a surcharge on foreign exchange transactions and a limit on short-term borrowing by banks. It also broadened the exchange rate band to ±7.5 percent in 1996. Notwithstanding these actions, imbalances grew and were magnified by fiscal expansion and strong wage growth. The framework was challenged in May 1997 with a speculative attack on the currency triggered by a combination of political uncertainty and contagion from southeast Asia. The defense of the currency saw interest rates rise substantially as monetary policy was forced to operate procyclically (Figure 4.8, panel 2).

[19]See Ötker-Robe and others (2007) for a more detailed discussion of the Czech Republic's experiences.

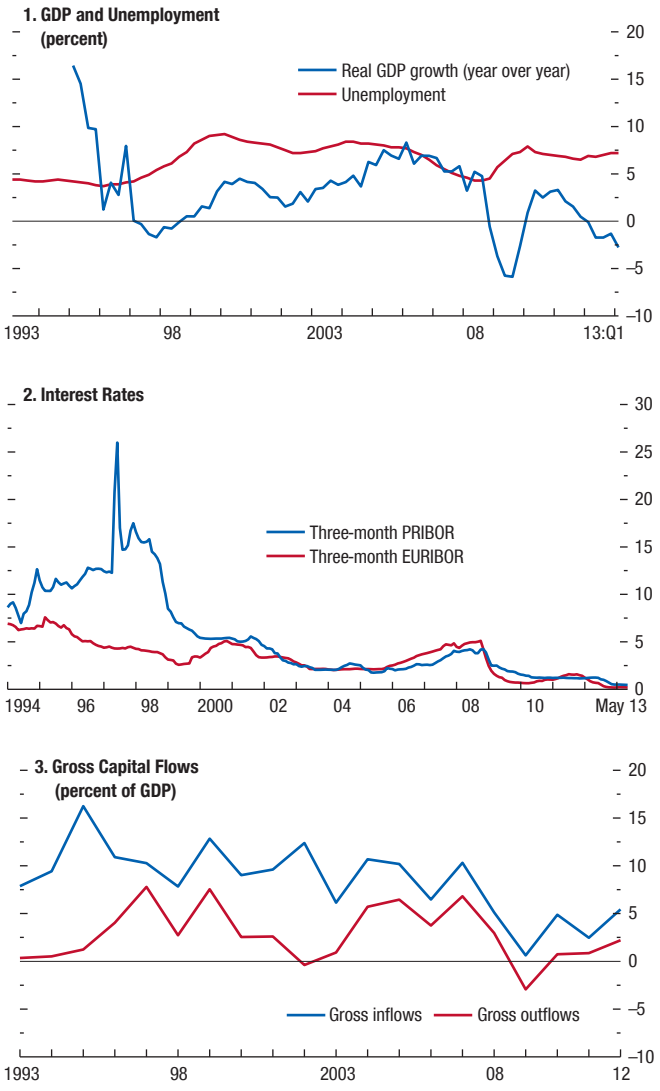
A recession ensued and was exacerbated by weakness in the financial sector, which was a holdover from the previous regime of inefficient government-controlled financial institutions. While lending was not well managed and inefficiently allocated due to government control, there was a lack of infrastructure to support large-scale foreign exchange lending, and so, somewhat by accident, the Czech Republic did not experience the sort of disruption that foreign currency borrowing induced in a number of central and eastern European economies over the past decade or so. During the global financial crisis, many local banks suffered large losses, and most were eventually sold to foreign investors, significantly improving the financial infrastructure.

With the fixed exchange rate regime unsustainable in the face of speculative attacks, and capital controls ruled out by membership in the OECD, the CNB decided to adopt inflation targeting and a freely floating exchange rate regime in 1998. Monetary policy quickly gained a large degree of credibility, albeit at a relatively large real cost, as inflation was reduced by means of a tight monetary policy. The CNB also stayed clear of the foreign exchange market, exposing households and firms to a freely floating currency. Fiscal policies were also rather conservative during the 1990s and 2000s, generating deficits between 2 and 4 percent of GDP, with the extra benefit of a very favorable starting point (gross government debt started at less than 20 percent of GDP in the early 1990s): gross government debt has never exceeded 50 percent of GDP. On average, as measured by the correlation between the cyclical deviations of primary government spending and GDP, fiscal policy was slightly countercyclical during this period.

As a result of the credible monetary policy regime and sustainable fiscal debt, the interest rate differential vis-à-vis world currencies disappeared (with the nominal three-month interbank rate dropping below the three-month euro interbank offered rate early in 2002; see Figure 4.8, panel 2). A noticeable consequence was that the vast majority of the net increases in foreign liabilities over this time were private foreign direct investment flows. Because of the small interest rate differentials, there were very few "hot money" private nondirect investment inflows and, similarly, few incentives for domestic residents to borrow in foreign currencies. This situation is rather uncommon in the context of emerging market economies but highlights some of the benefits of strong fundamentals that are expressed in low

Figure 4.8. The Czech Republic

After a recession in 1997, the Czech Republic adopted a policy mix of inflation targeting, floating exchange rates, free capital flows, and credible fiscal policy. The interest rate differentials, which had previously been very high, declined to practically zero. Consequently, and in contrast with a number of other central and eastern European countries, there were few incentives for foreign currency borrowing, and most capital inflows were foreign direct investment. As a result, the Czech economy was much more resilient to capital inflow fluctuations. The drop in capital inflows associated with the global financial crisis was matched by a reduction in outflows, which lent stability to net flows.



Sources: Haver Analytics; IMF, *Balance of Payments Statistics;* IMF, *International Financial Statistics;* PRS Group, Inc., *International Country Risk Guide;* and IMF staff calculations.
Note: EURIBOR = euro interbank offered rate; PRIBOR = Prague interbank offered rate.

interest rate differentials.[20] Furthermore, reflecting better prudential management, domestic credit expansion was very moderate compared with similar central and eastern European countries during this period. Domestic credit rose from about 30 percent of GDP in 2001 to about 50 percent of GDP in 2008, and almost all the lending was in domestic currency.

When the global financial crisis hit, these policy settings and institutional features meant that the effects on financial stability and the current account were relatively muted and much smaller than during the earlier episode at the end of the 1990s. The nominal exchange rate was allowed to depreciate (which it did by about 15 percent), but it quickly returned to its precrisis levels. The CNB was free to run countercyclical monetary policy and cut rates from 3.5 percent in August 2008 to 1.0 percent by the end of 2009, and then further to 0.05 percent in 2012. Fiscal policy was also countercyclical, facilitated by contained gross debt levels and limited changes in long-term government bond yields. A large reduction in gross inflows was offset by a corresponding reduction in gross outflows (Figure 4.8, panel 3). There were no reversals on the current or financial accounts, and the performance of Czech banks remained strong.

Overall Analysis

This chapter began by showing that emerging market economies differ with respect to how changes in gross inflows are absorbed through financial versus real adjustment and that this difference was reflected in their level of resilience during the global financial crisis. The empirical section documented the country characteristics associated with higher financial adjustment, and the case studies told how Chile, the Czech Republic, and Malaysia reformed their economies and moved toward a regime with more financial adjustment that buffered capital inflows. This section brings together the accumulated evidence to address a few key questions. First, how has financial adjustment operated in these economies and, particularly, to what extent was financial adjustment driven by government intervention or private behavior? Second, what policy reforms (and their ordering) might assist policymakers in other emerging market economies in strengthening resilience and encouraging more buffering through financial adjustment?

How Did Financial Adjustment Operate in the Case Studies?

The empirical and case study evidence underlines that the majority of financial adjustment in more resilient economies was undertaken by private agents. And an important element underlying the buffering behavior of private agents was a relatively flexible exchange rate regime. When country authorities try to resist fundamental changes in the exchange rate, they create incentives for both foreigners and residents to take the opposite position. As the case of Chile demonstrates, when depreciation can be anticipated, as it usually can with managed exchange rate regimes during periods of pressure, there is a tendency toward destabilizing capital outflows from both domestic residents and nonresidents. Conversely, during the global financial crisis, when the exchange rates of both Chile and the Czech Republic were allowed to adjust and depreciate, gross capital outflows served to stabilize the net flows because domestic residents either slowed their normal outflows or repatriated foreign funds.

Although reserves management can contribute to financial adjustment, the case studies and evidence from the global financial crisis show that private agents can themselves manage their foreign assets in a stabilizing way. This analysis has already reviewed several reasons private agents may have strong incentives to reduce outflows when inflows dry up. The case studies provide some concrete examples. In Chile, for example, the primary actors are the private pension funds, which invest the pension savings of Chileans and hold approximately 40 percent of their assets abroad. During the global financial crisis, multiple incentives combined to encourage a significant rebalancing: pension funds repatriated foreign assets and, thereby, offset the reduction in foreign investors' inflows.[21] In particular, the freely floating exchange rate combined with limited capital controls and well-developed financial markets to quickly and efficiently encourage and facilitate financial adjustment that buffered volatile gross inflows.

The case of Malaysia shows a larger use of foreign reserves to offset private inflows, particularly during the early stages of Malaysia's recovery from the Asian crisis. However, during the global financial crisis

[20]Box 4.1 presents a series of simulations that illustrate these benefits. The simulated economy with no foreign currency borrowing is much more resilient to international financial market volatility than the simulated economy with 50 percent of borrowing in foreign currency.

[21]See Carrière-Swallow and Garcia-Silva (2013) for more details.

changes in nonofficial outflows also contributed greatly to buffering. In particular, bond markets remained stable thanks to purchases by the Employees Provident Fund and other well-capitalized institutional investors. These operations may have been somewhat influenced by public officials given the higher level of government involvement in the Malaysian economy, but these purchases mirrored the behavior of the private pension funds in Chile, suggesting that simple market incentives played an important role.

Finally, it is worth noting that, even though the private sector may undertake the majority of the financial adjustment in response to shocks in the cases studied, this does not rule out a role for the official sector. In both Chile and Malaysia, the central banks intervened in the foreign exchange market from time to time to smooth fluctuations or to address a temporary overshooting of the equilibrium exchange rate.

How Can Emerging Market Economies Encourage Stabilizing Financial Adjustment and Increase Their Resilience?

Each of the countries studied has increased its resilience to volatile capital inflows by improving prudential regulation, fostering financial development, strengthening the credibility and countercyclical use of fiscal and monetary policy, moving toward more flexible exchange rate regimes, and allowing for greater openness in the financial account—in particular with respect to capital outflows. The net effect has been that highly volatile gross capital inflows now have much less influence on the current account and economic stability than in the past.

An important question is whether these policy changes led to resilience or vice versa. The evidence points to the former conclusion. In each case, reforms that improved financial supervision and relaxed restrictions on capital flows and exchange rates were the result of conscious policy choices rather than the outcome of resilience to capital flows obtained through other propitious events. Indeed, most of these policy changes were implemented during times of weakness and crisis after previous policy mixes were found to be inadequate in dealing with capital flow reversals. That said, reforms were sequenced in all three countries, and not all reforms were implemented at the same time. For example, measures to strengthen domestic financial development typically preceded steps toward more exchange rate flexibility.

Much can also be learned from the previous regimes, which failed to ensure macroeconomic stability and steady economic growth in the face of volatile capital inflows. Policy mixes that contained some but not all of the elements of resilience were found lacking. For example, the case of the Czech Republic demonstrates how open financial accounts alone, without appropriate institutional backing, can be destabilizing. Weak financial systems also exacerbated downturns after capital flow reversals. And speculative attacks on managed currencies required procyclical monetary policy responses that destabilized the domestic economy even when other elements of resilience were in place.

The empirical and case study analysis also shows a much higher incidence of countercyclical fiscal policy in resilient economies. Previous research, for example, by Cardarelli, Elekdag, and Kose (2009) highlights the beneficial effects of countercyclical fiscal policy. However, what is less clear is whether resilience allows countries to adopt countercyclical fiscal policies or vice versa. Frankel, Végh, and Vuletin (2011) find that over the past decade, about one-third of their sample of emerging market economies was able to escape fiscal policy procyclicality and become countercyclical. Importantly, they attribute this critical shift in fiscal policy to an improvement in the quality of institutions. The evidence from the case studies suggests that the adoption of sound fiscal policies tends to precede resilience. Thus, it seems that countercyclical fiscal policy (or a general improvement in institutions) contributes to resilience. Furthermore, when surpluses are saved in a sovereign wealth fund that is invested abroad, as in Chile, this can directly contribute to financial adjustment during a downturn because the repatriation of such funds can buffer falls in capital inflows and support fiscal stimulus.

Conclusions

Emerging markets have faced unprecedented volatility in capital inflows during the past decade. In 2011 policymakers worried that excessive inflows might cause overheating, but more recently concerns have shifted to the disruption that might result from sudden stops as interest rates in the United States normalize. A key question for many policymakers is how best to respond to the challenges such volatile capital inflows present. As illustrated in Box 4.1 and discussed in other research from the IMF, capital flow management measures and foreign exchange intervention can be useful in moderating the volatility of capital flows

and exchange rates in less resilient emerging market economies in some circumstances.[22] But policymakers are not limited to these tools.

Policymakers can implement important reforms that can help increase the resilience of their economies to swings in gross inflows by encouraging stabilizing financial adjustment. Such adjustment means that swings in gross inflows need not necessarily translate into disruptive fluctuations in the current account. Rather, when gross capital inflows increase, residents will tend to offset these flows by accumulating foreign assets that are later repatriated when foreign inflows decline. And this chapter documents how countries with such greater financial adjustment better withstood the sharp contraction in gross inflows during the global financial crisis, experiencing a smaller fall in both GDP and consumption.

The particular reforms and characteristics that appear to have supported stabilizing financial adjustment are highlighted in the empirical analysis and case studies. A first important characteristic is the strength of their institutional frameworks.[23] In particular, resilient emerging market economies have more credible fiscal and monetary policies that are used countercyclically. In this regard, it is important to note that countercyclical fiscal measures should not be used only in downturns, when some emerging market economies may actually be limited in their ability to finance a fiscal stimulus. It is equally important to tighten fiscal policy during episodes of strong growth, when capital inflows tend to contribute to overheating. In fact, investing such fiscal savings abroad, as Chile does through its sovereign wealth fund, can help buffer gross inflow surges. Furthermore, as the case of the Czech Republic demonstrates, prudent fiscal and monetary management can reduce the interest rate differential with the rest of the world and limit the incentives for both hot money inflows and the domestic accumulation of foreign currency debt.

Second, resilient emerging market economies are characterized by improved prudential regulation and supervision that limit excessive risk taking without preventing the development of the domestic financial sector. Third, stabilizing financial adjustment obviously requires a relatively open capital account that allows residents to both accumulate a stock of gross foreign assets and efficiently move money in and out of the country as necessary to buffer gross inflows. Furthermore, as Figure 4.3 suggests and the case of Chile demonstrates, more flexible exchange rate regimes have encouraged such buffering behavior in recent years. A heavily managed exchange rate, on the other hand, may undermine residents' incentives to reduce outflows during sudden stops, because an anticipated depreciation creates very strong incentives to send assets offshore, thereby exacerbating capital flow volatility. A caveat is that these findings reflect the responses to global shocks that have been very much in evidence over recent years. Domestic shocks may encourage different capital flow behavior.[24]

The case studies also provide important insights about the appropriate sequencing of reforms. Reforms to strengthen the domestic financial system typically preceded other policy measures, while steps toward greater openness to capital flows and exchange rate flexibility came toward the end. For example, the experience of the Czech Republic in the late 1990s demonstrates that merely opening up the financial account without other policies in place does not lead to resilience. Rather, the case studies suggest that countries that improved prudential policies and adopted credible monetary and fiscal policy regimes (such as inflation targeting in the cases of Chile and the Czech Republic) were then able to relax remaining restrictions on capital flows or the exchange rate and thereby benefit from the stabilizing role played by fluctuations in the exchange rate and capital outflows. The role of reserves in contributing to this adjustment is less clear. While they are used in Malaysia, there is also a growing stock of private gross assets that played a more significant role in stabilizing net flows in recent years. At any rate, both Chile and the Czech Republic (and advanced economies more generally) demonstrate that a large stock of official reserves is not a prerequisite for net capital flow stability.

A possible concern with these findings is that the ability to improve institutions and run countercyclical

[22]As discussed in IMF (2012), pp. 35–36, "a key role needs to be played by macroeconomic policies, including monetary, fiscal, and exchange rate management, as well as by sound financial supervision and regulation and strong institutions. CFMs [capital flow management measures] should not be used to substitute for or avoid warranted macroeconomic adjustment."

[23]The benefits of such strong frameworks are not limited to dealing with capital flows. IMF (2012) finds that recent improvements in policies and institutional frameworks are associated with significant improvements in the general resilience of emerging market and developing economies over the past decade.

[24] Although the evidence from Broner and others (2013) suggests that, even in the case of domestic shocks, residents may still act to buffer changes in gross capital inflows.

macroeconomic policies may be a benefit of resilience, rather than a direct cause of it. The case studies, however, suggest that this is not the case. A common element in all three cases is that neither increased resilience to capital flows nor benign economic conditions were a precondition for reform. Instead, policy reforms tended to be implemented in response to a crisis or recession. That is, these policies can be, and have been, implemented by less resilient economies at times of weakness as a way to build their resilience.

In sum, the countries that have demonstrated greater resilience to the yin of capital inflows are those that have encouraged the balancing yang of capital outflows.

Box 4.1. Simulating Vulnerability to International Capital Market Conditions

Sudden changes in international capital market conditions can create significant problems for domestic banking systems, capital formation, and growth. This box presents simulated scenarios of such boom-bust credit cycles and studies how outcomes depend on the composition of bank balance sheets and the policy environment. Three scenarios are considered: (1) a baseline in which all lending is in domestic currency; (2) an alternative in which half of all lending is in foreign currency; and (3) a variation of (2) in which half of all lending is in foreign currency and controls on capital outflows are implemented at the beginning of the bust phase of the credit cycle.

The simulations are based on the model of small open economies outlined in Benes, Kumhof, and Laxton (2013). In this model, bank loans are essential because they create the purchasing power needed by households and firms for all their economic transactions. In the model, changes in lending interest rates are asymmetrically large following negative shocks, because borrowers' loan-to-value ratios rise into high-risk territory and banks' capital adequacy ratios move closer to their legal minimum.

All simulations consist of two episodes characterized by the behavior of the interest rate risk premium faced by the country. During an initial three-year boom period, which is misperceived as being permanent, the risk premium drops by 200 basis points. At the reversal, the risk premium suddenly increases by 300 basis points, followed by a gradual decline back to its original level.

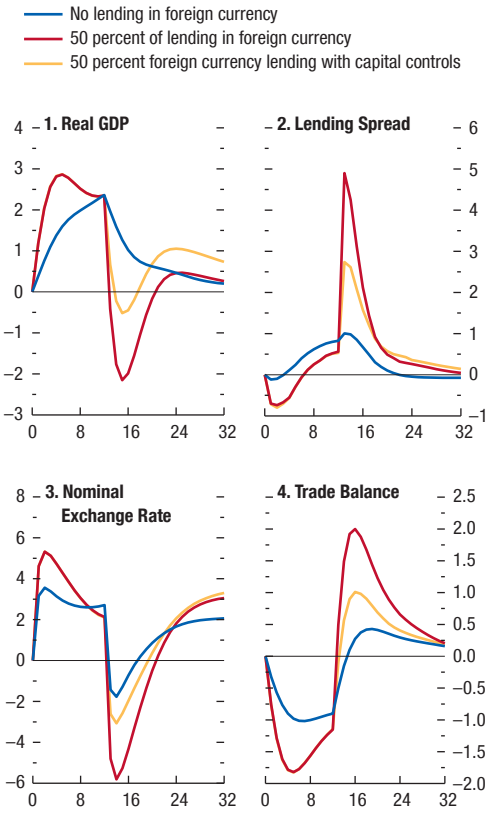
The initial shock reduces domestic real interest rates and appreciates the currency (Figure 4.1.1, panel 3). This increases income and wealth, and because wealth represents collateral to banks, domestic lending and therefore creation of purchasing power increases by about 4 to 5 percent, depending on the scenario. The effects are much stronger in the scenario in which half of all lending is in foreign currency, because the domestic currency value of existing debt declines on impact. Real GDP expands by almost 2.5 percent by the end of year three in all scenarios. Inflation declines due to the currency appreciation, despite the additional demand. The trade balance deteriorates by 1 to 2 percent of GDP depending on the scenario, leading to the accumulation of significant claims on the domestic economy by foreigners.

The foreign capital inflow is therefore a *consequence* of increased domestic bank lending, not vice versa. This must invariably be true, because foreign residents cannot deposit their goods in a domestic bank in exchange for a deposit, and domestic residents can purchase additional imports only if banks have first created the necessary additional purchasing power for them. The fact that the boom is not created by a capital inflow, but by increased domestic lending in response to lower interest rates and lower perceived risk, is critical for formulating policy advice on how to deal with such episodes.

The authors of this box are Jaromir Benes and Michael Kumhof.

Figure 4.1.1. Responses to Changes in International Capital Market Conditions

(Percent level deviation)



Source: IMF staff calculations.

Box 4.1 *(continued)*

The reversal of the boom leaves banks exposed to a loan book that is much riskier than anticipated when it was first made. Banks respond by reducing lending and raising lending spreads, which reduces purchasing power throughout the economy. This, together with the negative income and wealth effects of the reversal, reduces domestic demand. The exchange rate depreciates, which helps to unwind the previously accumulated foreign debt positions.

In the baseline scenario without foreign currency lending (Figure 4.1.1, blue line), the contraction is moderate and gradual. The riskiness of bank loans remains satisfactory, as seen in the very modest changes in asset prices, lending spreads, and bank capital buffers. GDP declines smoothly without negative output gaps, and inflation quickly returns to its target, facilitated by the depreciating exchange rate.

In the alternative scenario with 50 percent foreign currency lending (Figure 4.1.1, red line), the contraction is large and sudden. The exchange rate depreciation sharply increases the local currency values of domestic agents' liabilities. This reduces borrowers' wealth and increases banks' loan losses and lending risk. Lending contracts faster than in the baseline, and spreads increase steeply, by about 450 basis points. The lending rate therefore increases, despite further cuts to the policy rate. Domestic demand contracts by over 6 percent in two quarters, GDP by over 4 percent, and real incomes and asset prices decline by far more than in the baseline. Because this makes lending even riskier, a vicious cycle ensues that keeps spreads elevated for several years. Because of the strong real contraction, inflation remains subdued for a number of years, despite the sizable depreciation.

In the alternative scenario with a postreversal imposition of capital controls (Figure 4.1.1, yellow line), the real contraction is significantly less deep. Capital controls reduce the interest rate premium, which lowers the increase in lending spreads by about 200 basis points and limits the size of the exchange rate depreciation. Because borrowers benefit, banks' lending losses are significantly reduced, lending terms tighten less severely, and real GDP contracts by almost 50 percent less than in the baseline.

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ANNEX

IMF EXECUTIVE BOARD DISCUSSION OF THE OUTLOOK, SEPTEMBER 2013

The following remarks were made by the Acting Chair at the conclusion of the Executive Board's discussion of the World Economic Outlook, Global Financial Stability Report, *and* Fiscal Monitor *on September 23, 2013.*

Executive Directors broadly shared the staff's assessment of the state of the global economy and financial markets, risks, and key policy recommendations. They observed, in particular, that global growth remains subdued and that uncertainty and downside risks dominate the outlook. The recovery in the United States and Japan has gained ground and the euro area is pulling out of recession, while growth in many emerging market economies has slowed. Directors underscored that policymakers in all economies have a shared responsibility to sustain balanced growth while continuing to build resilience.

Directors stressed that changing growth dynamics, combined with the anticipation of the start of the normalization of U.S. monetary policy, pose new policy challenges, particularly in emerging market economies. Many of these countries have recently experienced increased capital outflows, currency depreciation, lower equity prices, and higher sovereign risk premiums. In addition, external financial conditions have generally tightened and the fiscal space has narrowed, while risks of interest rate and exchange rate overshooting have increased. In this regard, Directors took note of the U.S. Federal Reserve's guidance that monetary policy normalization will occur in the context of stronger U.S. growth and employment that, in turn, should be beneficial for global growth.

Directors noted that global growth is expected to improve modestly in the near term. Activity in advanced economies is accelerating as fiscal consolidation eases and monetary conditions remain accommodative. In the euro area, policy actions have reduced tail risks and stabilized financial markets, but growth remains fragile, given persistently high unemployment, financial fragmentation, and weak credit developments. Growth in emerging market economies, which continues to account for the bulk of global growth, remains driven by solid consumption and, in a historical perspective, still supportive fiscal, monetary, and financial conditions. However, lingering supply side bottlenecks in infrastructure, labor markets, and regulatory and financial systems could have lowered potential output for many of these economies. Growth in low-income countries remains robust, supported by enhanced policy frameworks, although less favorable commodity prices and external financing may weaken their fiscal positions.

Directors expressed concern that multiple vulnerabilities may have raised the risk of a prolonged period of lower global growth. They noted that important legacy risks are still present in advanced economies. These include unfinished financial sector reforms in the euro area, impaired monetary policy transmission and corporate debt overhang in some of its economies, and high levels of government debt and related fiscal and financial risks in many other advanced economies, including Japan and the United States.

Directors noted that downside risks to growth in emerging market economies have become more prominent, reflecting risks of further asset repricing in anticipation of the normalization of U.S. monetary policy as well as rising domestic vulnerabilities in some countries. Fiscal vulnerabilities are increasing as policy buffers are used, potential output declines, and public contingent liabilities build up. Nevertheless, Directors noted that, in general, these economies are in a stronger position now than in the past to withstand the looming turbulence, with improved fundamentals and policy frameworks, more flexible exchange rates, and higher international reserve buffers.

Directors underscored the need for credible policy actions to forestall downside risks and address old challenges decisively. In the euro area, priorities continue to be—building on recent progress—bank balance sheet repair, a comprehensive assessment of, and measures to reduce, corporate debt overhang in some countries, and completion of a full-fledged banking union, with an effective common backstop. Directors

underscored that, while the fiscal adjustment path is currently appropriate for the euro area as a whole, the speed and composition of fiscal consolidation in each country would need to take into account cyclical considerations, debt levels, and financing conditions. In Japan and the United States, Directors emphasized the importance of carefully pacing fiscal adjustment and placing government debt on a sustainable track, anchored in a medium-term plan that includes durable tax and entitlement reforms. Promptly lifting the debt ceiling is also a priority in the United States. More generally, Directors agreed that there is scope for broader tax reforms to improve efficiency and fairness, and for strengthening cooperation on international taxation. In most advanced economies, a sustained focus on structural reforms over the medium term remains crucial to reduce rigidities in labor and product markets, enhance competitiveness, and boost potential output.

Directors agreed that monetary conditions need to stay accommodative in major advanced economies. In the United States, it is important that monetary policy respond gradually to changing prospects for growth, inflation, and financial stability, accompanied by clear, well-timed communication about the policy direction and strategy. Directors also emphasized the need to address structural liquidity weaknesses and vulnerabilities in the shadow banking system, which would help reduce financial market volatility during the transition to higher interest rates.

Directors noted that policy priorities and options differ across emerging market economies, depending on the degree of economic slack, the nature of vulnerabilities, and available policy buffers. They pointed to the role of exchange rates as a shock absorber and the need to guard against excessive volatility, while macroprudential measures should be used to mitigate financial stability risks. A few Directors took the view that exploring policy options beyond the traditional toolkit could be useful, anchored in credible monetary policy frameworks. Directors emphasized the importance of prudential oversight and regulation to contain any further buildup of foreign currency mismatches and risks stemming from shadow banking activities in key emerging markets.

Directors noted that, in emerging market economies where inflation is low and expectations are firmly anchored, monetary policy should be used as the first line of defense if downside risks materialize. They stressed the need to rebuild fiscal buffers, unless growth deteriorates significantly. In countries with high debt, fiscal consolidation remains a high priority, taking advantage of still favorable cyclical conditions. Further structural reforms are also essential to boost potential growth, including improving infrastructure, productivity, and the investment climate. Low-income countries need to step up revenue mobilization, including from natural resources, to rebuild their fiscal buffers and support higher priority public spending.

Directors concurred that a further narrowing of global imbalances would help maintain more sustainable and stable global growth. They observed that the recent exchange rate depreciations have facilitated some rebalancing in many deficit emerging market economies. However, further efforts are needed to increase national saving and boost productivity and competitiveness in many countries, including Brazil, India, Russia, and South Africa. For the United States, gradual progress on fiscal deficit reduction through a comprehensive plan for medium-term consolidation would help support global rebalancing. In surplus countries, priorities include measures to promote more consumption-based growth in China and structural reforms and medium-term fiscal consolidation in Japan. Directors were of the view that further external rebalancing within the euro area requires deeper structural reforms, including sustained efforts to raise investment in Germany.

STATISTICAL APPENDIX

The Statistical Appendix presents historical data as well as projections. It comprises six sections: Assumptions, What's New, Data and Conventions, Classification of Countries, Key Data Documentation, and Statistical Tables.

The assumptions underlying the estimates and projections for 2013–14 and the medium-term scenario for 2015–18 are summarized in the first section. The second section presents a brief description of the changes to the database and statistical tables since the April 2013 issue of the *World Economic Outlook*. The third section provides a general description of the data and the conventions used for calculating country group composites. The classification of countries in the various groups presented in the *World Economic Outlook* is summarized in the fourth section. The fifth section provides information on methods and reporting standards for the member countries' national account and government finance indicators included in the report.

The last, and main, section comprises the statistical tables. (Statistical Appendix A is included here; Statistical Appendix B is available online.) Data in these tables have been compiled on the basis of information available through September 23, 2013. The figures for 2013 and beyond are shown with the same degree of precision as the historical figures solely for convenience; because they are projections, the same degree of accuracy is not to be inferred.

Assumptions

Real effective *exchange rates* for the advanced economies are assumed to remain constant at their average levels during the period between July 29 and August 26, 2013. For 2013 and 2014, these assumptions imply average U.S. dollar/SDR conversion rates of 1.514 and 1.527, U.S. dollar/euro conversion rates of 1.326 and 1.349, and yen/U.S. dollar conversion rates of 96.5 and 95.6, respectively.

It is assumed that the *price of oil* will average $104.49 a barrel in 2013 and $101.35 a barrel in 2014.

Established *policies* of national authorities are assumed to be maintained. The more specific policy assumptions underlying the projections for selected economies are described in Box A1.

With regard to *interest rates,* it is assumed that the London interbank offered rate (LIBOR) on six-month U.S. dollar deposits will average 0.4 percent in 2013 and 0.6 percent in 2014, that three-month euro deposits will average 0.2 percent in 2013 and 0.5 percent in 2014, and that six-month yen deposits will average 0.2 percent in 2013 and 0.3 percent in 2014.

With respect to *introduction of the euro,* on December 31, 1998, the Council of the European Union decided that, effective January 1, 1999, the irrevocably fixed conversion rates between the euro and currencies of the member countries adopting the euro are as follows.

1 euro	=	13.7603	Austrian schillings
	=	40.3399	Belgian francs
	=	0.585274	Cyprus pound[1]
	=	1.95583	Deutsche mark
	=	15.6466	Estonian krooni[2]
	=	5.94573	Finnish markkaa
	=	6.55957	French francs
	=	340.750	Greek drachmas[3]
	=	0.787564	Irish pound
	=	1,936.27	Italian lire
	=	40.3399	Luxembourg francs
	=	0.42930	Maltese lira[1]
	=	2.20371	Netherlands guilders
	=	200.482	Portuguese escudos
	=	30.1260	Slovak koruna[4]
	=	239.640	Slovenian tolars[5]
	=	166.386	Spanish pesetas

[1]Established on January 1, 2008.
[2]Established on January 1, 2011.
[3]Established on January 1, 2001.
[4]Established on January 1, 2009.
[5]Established on January 1, 2007.

See Box 5.4 of the October 1998 *World Economic Outlook* for details on how the conversion rates were established.

What's New

- On July 31, 2013, the U.S. Bureau of Economic Analysis released the Comprehensive Revision of the National Income and Product Accounts (NIPA). The revision includes improvements in methodology and data sources as well as significant changes in definitions and classifications. With this update, the accounts more accurately portray the evolution of the economy. Most notably, expenditures on research and development activities and for the creation of entertainment, literary, and artistic originals are now treated as capital expenditures. Furthermore, the treatment of defined-benefit pension plans is switched from a cash basis to an accrual basis. The revisions increase the level of GDP by 3.4 percent and boost the personal savings rate. The revised data also show that the Great Recession was shallower and the recovery was stronger through the first half of 2012, but also that cyclical weakness was greater during the past year. Overall, the revision does not significantly change the IMF staff's broad view on the U.S. economic outlook.
- Starting with the July 2013 *WEO Update,* India's data and forecasts are presented on a fiscal year basis.
- On July 1, 2013, Croatia became the 28th member state of the European Union.
- Projections for Cyprus, which were excluded from the April 2013 WEO due to the crisis, are once again included.
- As in the April 2013 WEO, data for Syria are excluded for 2011 onward due to the uncertain political situation.
- Data for Palau are included in the Developing Asia region.
- Zambia redenominated its currency by replacing 1,000 old Zambian kwacha notes with 1 new Zambian kwacha note. Local currency data for Zambia are expressed in the new currency starting with the October 2013 WEO database.

Data and Conventions

Data and projections for 189 economies form the statistical basis of the *World Economic Outlook* (the WEO database). The data are maintained jointly by the IMF's Research Department and regional departments, with the latter regularly updating country projections based on consistent global assumptions.

Although national statistical agencies are the ultimate providers of historical data and definitions, international organizations are also involved in statistical issues, with the objective of harmonizing methodologies for the compilation of national statistics, including analytical frameworks, concepts, definitions, classifications, and valuation procedures used in the production of economic statistics. The WEO database reflects information from both national source agencies and international organizations.

Most countries' macroeconomic data presented in the WEO conform broadly to the 1993 version of the *System of National Accounts* (SNA). The IMF's sector statistical standards—the *Balance of Payments and International Investment Position Manual, Sixth Edition* (BPM6), the *Monetary and Financial Statistics Manual* (MFSM 2000), and the *Government Finance Statistics Manual 2001* (GFSM 2001)—have been or are being aligned with the 2008 SNA.[1] These standards reflect the IMF's special interest in countries' external positions, financial sector stability, and public sector fiscal positions. The process of adapting country data to the new standards begins in earnest when the manuals are released. However, full concordance with the manuals is ultimately dependent on the provision by national statistical compilers of revised country data; hence, the WEO estimates are only partially adapted to these manuals. Nonetheless, for many countries the impact of conversion to the updated standards will be small on major balances and aggregates. Many other countries have partially adopted the latest standards and will continue implementation over a period of years.

Consistent with the recommendations of the *1993 SNA,* several countries have phased out their traditional *fixed-base-year* method of calculating real macroeconomic variable levels and growth by switching to a *chain-weighted* method of computing aggregate growth. The chain-weighted method frequently updates the weights of price and volume indicators. It allows countries to measure GDP growth more accurately by reducing or eliminating the downward biases in volume series built on index numbers that average volume components using weights from a year in the moder-

[1]Many other countries are implementing the 2008 SNA and will release national accounts data based on the new standard in 2014. A few countries use versions of the SNA older than 1993. A similar adoption pattern is expected for the BPM6. Although the conceptual standards use the BPM6, the WEO will continue to use the BPM5 presentation until a representative number of countries have moved their balance of payments accounts into the BPM6 framework.

ately distant past. Table F indicates which countries use a chain-weighted method.

Composite data for country groups in the WEO are either sums or weighted averages of data for individual countries. Unless noted otherwise, multiyear averages of growth rates are expressed as compound annual rates of change.[2] Arithmetically weighted averages are used for all data for the emerging market and developing economies group except inflation and money growth, for which geometric averages are used. The following conventions apply.

- Country group composites for exchange rates, interest rates, and growth rates of monetary aggregates are weighted by GDP converted to U.S. dollars at market exchange rates (averaged over the preceding three years) as a share of group GDP.
- Composites for other data relating to the domestic economy, whether growth rates or ratios, are weighted by GDP valued at purchasing power parity (PPP) as a share of total world or group GDP.[3]
- Composites for data relating to the domestic economy for the euro area (17 member countries throughout the entire period unless noted otherwise) are aggregates of national source data using GDP weights. Annual data are not adjusted for calendar-day effects. For data prior to 1999, data aggregations apply 1995 European currency unit exchange rates.
- Composites for fiscal data are sums of individual country data after conversion to U.S. dollars at the average market exchange rates in the years indicated.
- Composite unemployment rates and employment growth are weighted by labor force as a share of group labor force.
- Composites relating to external sector statistics are sums of individual country data after conversion to U.S. dollars at the average market exchange rates in the years indicated for balance of payments data and at end-of-year market exchange rates for debt denominated in currencies other than U.S. dollars.
- Composites of changes in foreign trade volumes and prices, however, are arithmetic averages of percent changes for individual countries weighted by the U.S. dollar value of exports or imports as a share of total world or group exports or imports (in the preceding year).
- Unless noted otherwise, group composites are computed if 90 percent or more of the share of group weights is represented.

Data refer to calendar years, except for a few countries that use fiscal years. Please refer to Table F, which lists the reference periods for each country.

Classification of Countries

Summary of the Country Classification

The country classification in the WEO divides the world into two major groups: advanced economies and emerging market and developing economies.[4] This classification is not based on strict criteria, economic or otherwise, and it has evolved over time. The objective is to facilitate analysis by providing a reasonably meaningful method of organizing data. Table A provides an overview of the country classification, showing the number of countries in each group by region and summarizing some key indicators of their relative size (GDP valued by PPP, total exports of goods and services, and population).

Some countries remain outside the country classification and therefore are not included in the analysis. Anguilla, Cuba, the Democratic People's Republic of Korea, and Montserrat are examples of countries that are not IMF members, and their economies therefore are not monitored by the IMF. Somalia is omitted from the emerging market and developing economies group composites because of data limitations.

General Features and Composition of Groups in the *World Economic Outlook* Classification

Advanced Economies

The 35 advanced economies are listed in Table B. The seven largest in terms of GDP—the United States, Japan, Germany, France, Italy, the United Kingdom,

[2]Averages for real GDP and its components, employment, GDP per capita, inflation, factor productivity, trade, and commodity prices, are calculated based on the compound annual rate of change, except for the unemployment rate, which is based on the simple arithmetic average.

[3]See Box A2 of the April 2004 *World Economic Outlook* for a summary of the revised PPP-based weights and Annex IV of the May 1993 *World Economic Outlook.* See also Anne-Marie Gulde and Marianne Schulze-Ghattas, "Purchasing Power Parity Based Weights for the *World Economic Outlook,*" in *Staff Studies for the World Economic Outlook* (Washington: International Monetary Fund, December 1993), pp. 106–23.

[4]As used here, the terms "country" and "economy" do not always refer to a territorial entity that is a state as understood by international law and practice. Some territorial entities included here are not states, although their statistical data are maintained on a separate and independent basis.

and Canada—constitute the subgroup of *major advanced economies* often referred to as the Group of Seven (G7). The members of the *euro area* are also distinguished as a subgroup. Composite data shown in the tables for the euro area cover the current members for all years, even though the membership has increased over time.

Table C lists the member countries of the European Union, not all of which are classified as advanced economies in the *World Economic Outlook.*

Emerging Market and Developing Economies

The group of emerging market and developing economies (154) includes all those that are not classified as advanced economies.

The *regional breakdowns* of emerging market and developing economies are *central and eastern Europe* (*CEE,* sometimes also referred to as emerging Europe); *Commonwealth of Independent States (CIS); developing Asia, Latin America and the Caribbean (LAC); Middle East, North Africa, Afghanistan, and Pakistan (MENAP);* and *sub-Saharan Africa (SSA)*.

Emerging market and developing economies are also classified according to *analytical criteria*. The analytical criteria reflect the composition of export earnings and other income from abroad; a distinction between net creditor and net debtor economies; and, for the net debtors, financial criteria based on external financing sources and experience with external debt servicing. The detailed composition of emerging market and developing economies in the regional and analytical groups is shown in Tables D and E.

The analytical criterion by *source of export earnings* distinguishes between categories: *fuel* (Standard International Trade Classification—SITC 3) and *nonfuel* and then focuses on *nonfuel primary products* (SITCs 0, 1, 2, 4, and 68). Economies are categorized into one of these groups when their main source of export earnings exceeds 50 percent of total exports on average between 2007 and 2011.

The financial criteria focus on *net creditor economies, net debtor economies,* and *heavily indebted poor countries* (HIPCs). Economies are categorized as net debtors when their current account balance accumulations from 1972 (or earliest data available) to 2011 are negative. Net debtor economies are further differentiated on the basis of two additional financial criteria: *official external financing* and *experience with debt servicing*.[5] Net debtors are placed in the official external financing category when 66 percent or more of their total debt, on average between 2007 and 2011, was financed by official creditors.

The HIPC group comprises the countries that are or have been considered by the IMF and the World Bank for participation in their debt initiative known as the HIPC Initiative, which aims to reduce the external debt burdens of all the eligible HIPCs to a "sustainable" level in a reasonably short period of time.[6] Many of these countries have already benefited from debt relief and have graduated from the initiative.

[5]During 2007–11, 39 economies incurred external payments arrears or entered into official or commercial bank debt-rescheduling agreements. This group is referred to as *economies with arrears and/or rescheduling during 2007–11*.

[6]See David Andrews, Anthony R. Boote, Syed S. Rizavi, and Sukwinder Singh, *Debt Relief for Low-Income Countries: The Enhanced HIPC Initiative,* IMF Pamphlet Series No. 51 (Washington: International Monetary Fund, November 1999).

Table A. Classification by *World Economic Outlook* Groups and Their Shares in Aggregate GDP, Exports of Goods and Services, and Population, 2012[1]

(Percent of total for group or world)

	Number of Economies	GDP		Exports of Goods and Services		Population	
		Advanced Economies	World	Advanced Economies	World	Advanced Economies	World
Advanced Economies	**35**	**100.0**	**50.4**	**100.0**	**61.0**	**100.0**	**14.8**
United States		38.7	19.5	16.1	9.8	30.5	4.5
Euro Area	17	26.9	13.5	40.7	24.8	32.1	4.8
Germany		7.6	3.8	12.9	7.9	7.9	1.2
France		5.3	2.7	5.7	3.5	6.2	0.9
Italy		4.3	2.2	4.4	2.7	5.9	0.9
Spain		3.3	1.7	3.2	1.9	4.5	0.7
Japan		10.9	5.5	6.6	4.1	12.4	1.8
United Kingdom		5.5	2.8	5.7	3.5	6.1	0.9
Canada		3.5	1.8	4.0	2.4	3.4	0.5
Other Advanced Economies	14	14.4	7.3	26.9	16.4	15.5	2.3
Memorandum							
Major Advanced Economies	7	75.9	38.3	55.4	33.8	72.4	10.7
		Emerging Market and Developing Economies	World	Emerging Market and Developing Economies	World	Emerging Market and Developing Economies	World
Emerging Market and Developing Economies	**154**	**100.0**	**49.6**	**100.0**	**39.0**	**100.0**	**85.2**
Regional Groups							
Central and Eastern Europe	14	6.8	3.4	8.7	3.4	3.0	2.6
Commonwealth of Independent States[2]	12	8.6	4.2	10.4	4.1	4.8	4.1
Russia		6.0	3.0	6.7	2.6	2.4	2.0
Developing Asia	29	50.4	25.0	42.6	16.6	57.6	49.1
China		29.7	14.7	25.6	10.0	22.9	19.5
India		11.4	5.7	5.1	2.0	20.7	17.7
Excluding China and India	27	9.3	4.6	11.9	4.6	14.0	11.9
Latin America and the Caribbean	32	17.5	8.7	14.2	5.5	9.9	8.4
Brazil		5.6	2.8	3.2	1.3	3.4	2.9
Mexico		4.4	2.2	4.4	1.7	2.0	1.7
Middle East, North Africa, Afghanistan, and Pakistan	22	11.7	5.8	18.7	7.3	10.3	8.8
Middle East and North Africa	20	10.3	5.1	18.4	7.2	6.8	5.8
Sub-Saharan Africa	45	5.1	2.5	5.3	2.1	14.3	12.2
Excluding Nigeria and South Africa	43	2.6	1.3	2.9	1.1	10.7	9.1
Analytical Groups[3]							
By Source of Export Earnings							
Fuel	26	17.9	8.9	29.3	11.4	11.0	9.4
Nonfuel	127	82.1	40.7	70.7	27.6	88.8	75.7
Of Which, Primary Products	27	3.0	1.5	3.1	1.2	6.6	5.7
By External Financing Source							
Net Debtor Economies	126	50.9	25.2	42.8	16.7	64.3	54.8
Of Which, Official Financing	33	4.2	2.1	3.2	1.2	12.1	10.3
Net Debtor Economies by Debt-Servicing Experience							
Economies with Arrears and/or Rescheduling during 2007–11	39	4.7	2.3	4.0	1.6	9.1	7.8
Other Net Debtor Economies	87	46.2	22.9	38.8	15.1	55.2	47.0
Other Groups							
Heavily Indebted Poor Countries	38	2.4	1.2	1.8	0.7	10.8	9.2

[1]The GDP shares are based on the purchasing-power-parity valuation of economies' GDP. The number of economies comprising each group reflects those for which data are included in the group aggregates.

[2]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

[3]South Sudan is omitted from the analytical groups composite for lack of a fully developed database.

Table B. Advanced Economies by Subgroup

Major Currency Areas		
United States		
Euro Area		
Japan		
Euro Area		
Austria	Germany	Netherlands
Belgium	Greece	Portugal
Cyprus	Ireland	Slovak Republic
Estonia	Italy	Slovenia
Finland	Luxembourg	Spain
France	Malta	
Major Advanced Economies		
Canada	Italy	United States
France	Japan	
Germany	United Kingdom	
Other Advanced Economies		
Australia	Israel	Singapore
Czech Republic	Korea	Sweden
Denmark	New Zealand	Switzerland
Hong Kong SAR[1]	Norway	Taiwan Province of China
Iceland	San Marino	

[1]On July 1, 1997, Hong Kong was returned to the People's Republic of China and became a Special Administrative Region of China.

Table C. European Union

Austria	Germany	Poland
Belgium	Greece	Portugal
Bulgaria	Hungary	Romania
Croatia	Ireland	Slovak Republic
Cyprus	Italy	Slovenia
Czech Republic	Latvia	Spain
Denmark	Lithuania	Sweden
Estonia	Luxembourg	United Kingdom
Finland	Malta	
France	Netherlands	

Table D. Emerging Market and Developing Economies by Region and Main Source of Export Earnings

	Fuel	Nonfuel Primary Products
Commonwealth of Independent States		
	Azerbaijan	Uzbekistan
	Kazakhstan	
	Russia	
	Turkmenistan	
Developing Asia		
	Brunei Darussalam	Mongolia
	Timor-Leste	Papua New Guinea
		Solomon Islands
Latin America and the Caribbean		
	Ecuador	Bolivia
	Trinidad and Tobago	Chile
	Venezuela	Guyana
		Paraguay
		Peru
		Suriname
		Uruguay
Middle East, North Africa, Afghanistan, and Pakistan		
	Algeria	Mauritania
	Bahrain	Sudan
	Iran	
	Iraq	
	Kuwait	
	Libya	
	Oman	
	Qatar	
	Saudi Arabia	
	United Arab Emirates	
	Yemen	
Sub-Saharan Africa		
	Angola	Burkina Faso
	Chad	Burundi
	Republic of Congo	Central African Republic
	Equatorial Guinea	Democratic Republic of the Congo
	Gabon	Côte d'Ivoire
	Nigeria	Guinea
		Guinea-Bissau
		Malawi
		Mali
		Mozambique
		Niger
		Sierra Leone
		Zambia
		Zimbabwe

Table E. Emerging Market and Developing Economies by Region, Net External Position, and Status as Heavily Indebted Poor Countries

	Net External Position		
	Net Creditor	Net Debtor[1]	Heavily Indebted Poor Countries[2]
Central and Eastern Europe			
Albania		*	
Bosnia and Herzegovina		*	
Bulgaria		*	
Croatia		*	
Hungary		●	
Kosovo		*	
Latvia		*	
Lithuania		*	
FYR Macedonia		*	
Montenegro		*	
Poland		*	
Romania		*	
Serbia		*	
Turkey		*	
Commonwealth of Independent States[3]			
Armenia		*	
Azerbaijan	*		
Belarus		*	
Georgia		*	
Kazakhstan		*	
Kyrgyz Republic		●	
Moldova		*	
Russia	*		
Tajikistan		●	
Turkmenistan	*		
Ukraine		*	
Uzbekistan	*		
Developing Asia			
Bangladesh		●	
Bhutan		●	
Brunei Darussalam	*		
Cambodia		*	
China	*		
Fiji		*	
India		*	
Indonesia		*	
Kiribati		●	
Lao P.D.R.		*	
Malaysia	*		
Maldives		*	
Marshall Islands		●	
Micronesia		●	
Mongolia		●	
Myanmar		*	
Nepal		*	
Palau		●	
Papua New Guinea		*	
Philippines	*		
Samoa		*	
Solomon Islands		*	
Sri Lanka		●	
Thailand		*	
Timor-Leste	*		
Tonga		*	
Tuvalu		●	
Vanuatu		*	
Vietnam		*	
Latin America and the Caribbean			
Antigua and Barbuda		*	
Argentina		*	
The Bahamas		*	
Barbados		*	
Belize		*	
Bolivia	*		●
Brazil		*	
Chile		*	
Colombia		*	
Costa Rica		*	
Dominica		*	
Dominican Republic		*	
Ecuador		●	
El Salvador		*	
Grenada		*	
Guatemala		*	
Guyana		*	●
Haiti		●	●
Honduras		*	●
Jamaica		*	
Mexico		*	
Nicaragua		*	●
Panama		*	
Paraguay		*	
Peru		*	
St. Kitts and Nevis		*	
St. Lucia		*	
St. Vincent and the Grenadines		●	
Suriname		●	
Trinidad and Tobago	*		

Table E. *(concluded)*

	Net External Position		
	Net Creditor	Net Debtor[1]	Heavily Indebted Poor Countries[2]
Uruguay		*	
Venezuela	*		
Middle East, North Africa, Afghanistan, and Pakistan			
Afghanistan		●	●
Algeria	*		
Bahrain	*		
Djibouti		*	
Egypt		*	
Iran	*		
Iraq	*		
Jordan		*	
Kuwait	*		
Lebanon		*	
Libya	*		
Mauritania		*	●
Morocco		*	
Oman	*		
Pakistan		●	
Qatar	*		
Saudi Arabia	*		
Sudan		●	*
Syria		●	
Tunisia		*	
United Arab Emirates	*		
Yemen		*	
Sub-Saharan Africa			
Angola	*		
Benin		*	●
Botswana	*		
Burkina Faso		●	●
Burundi		●	●
Cameroon		*	●
Cape Verde		*	
Central African Republic		●	●
Chad		*	*
Comoros		●	●
Democratic Republic of the Congo		●	●
Republic of Congo		●	●
Côte d'Ivoire		*	●
Equatorial Guinea		*	
Eritrea		●	*
Ethiopia		●	●
Gabon	*		
The Gambia		*	●
Ghana		*	●
Guinea		*	●
Guinea-Bissau		●	●
Kenya		*	
Lesotho		*	
Liberia		*	●
Madagascar		*	●
Malawi		●	●
Mali		●	●
Mauritius		*	
Mozambique		*	●
Namibia	*		
Niger		*	●
Nigeria	*		
Rwanda		*	●
São Tomé and Príncipe		●	●
Senegal		*	●
Seychelles		*	
Sierra Leone		*	●
South Africa		*	
South Sudan[4]		. . .	
Swaziland		*	
Tanzania		*	●
Togo		●	●
Uganda		*	●
Zambia		*	●
Zimbabwe		*	

[1]Dot instead of star indicates that the net debtor's main external finance source is official financing.
[2]Dot instead of star indicates that the country has reached the completion point.
[3]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[4]South Sudan is omitted from the analytical groups composite for lack of a fully developed database.

Table F. Key Data Documentation

Country	Currency	National Accounts Base Year[1]	National Accounts Reporting Period[2]	Use of Chain-Weighted Methodology[3]	Government Finance Reporting Period[2]
Afghanistan	Afghan Afghani	2002/03			Prior to 2012, the data are based on a solar year that runs from March 21 to March 20.
Albania	Albanian lek	1996		From 1996	
Algeria	Algerian dinar	2001		From 2005	
Angola	Angolan kwanza	2002			
Antigua and Barbuda	Eastern Caribbean dollar	2006[4]			
Argentina	Argentine peso	1993			
Armenia	Armenian dram	2005			
Australia	Australian dollar	2010/11		From 1980	
Austria	Euro	2005		From 1988	
Azerbaijan	Azerbaijan manat	2003		From 1994	
The Bahamas	Bahamian dollar	2006			July/June
Bahrain	Bahrain dinar	2001			
Bangladesh	Bangladesh taka	2005			July/June
Barbados	Barbados dollar	2000[4]			April/March
Belarus	Belarusian rubel	2009		From 2005	
Belgium	Euro	2010		From 1995	
Belize	Belize dollar	2000			April/March
Benin	CFA franc	2000			
Bhutan	Bhutanese ngultrum	2000[4]			July/June
Bolivia	Bolivian boliviano	1990			
Bosnia and Herzegovina	Convertible marka	2005		From 2000	
Botswana	Botswana pula	2006			April/March
Brazil	Brazilian real	1995			
Brunei Darussalam	Brunei dollar	2000			
Bulgaria	Bulgarian lev	2005		From 2005	
Burkina Faso	CFA franc	1999			
Burundi	Burundi franc	2005			
Cambodia	Cambodian riel	2000			
Cameroon	CFA franc	2000			
Canada	Canadian dollar	2007		From 1980	
Cape Verde	Cape Verde escudo	2007			
Central African Republic	CFA franc	2005			
Chad	CFA franc	2005			
Chile	Chilean peso	2008		From 2003	
China	Chinese yuan	1990[4]			
Colombia	Colombian peso	2005		From 2000	
Comoros	Comorian franc	2000			
Democratic Republic of the Congo	Congo franc	2000			
Republic of Congo	CFA franc	1990			
Costa Rica	Costa Rican colón	1991			
Côte d'Ivoire	CFA franc	2000			
Croatia	Croatian kuna	2005			
Cyprus	Euro	2005		From 1995	
Czech Republic	Czech koruna	2005		From 1995	
Denmark	Danish krone	2005		From 1980	
Djibouti	Djibouti franc	1990			
Dominica	Eastern Caribbean dollar	2006			July/June
Dominican Republic	Dominican peso	1991			
Ecuador	U.S. dollar	2007			
Egypt	Egyptian pound	2001/02	July/June		July/June
El Salvador	U.S. dollar	1990			
Equatorial Guinea	CFA franc	2006			
Eritrea	Eritrean nakfa	2000			

Table F. Key Data Documentation *(continued)*

Country	Currency	National Accounts Base Year[1]	National Accounts Reporting Period[2]	Use of Chain-Weighted Methodology[3]	Government Finance Reporting Period[2]
Estonia	Euro	2005		From 1995	
Ethiopia	Ethiopian birr	2010/11	July/June		July/June
Fiji	Fiji dollar	2005[4]			
Finland	Euro	2000		From 1980	
France	Euro	2005		From 1980	
Gabon	CFA franc	2001			
The Gambia	Gambian dalasi	2004			
Georgia	Georgian lari	2000		From 1996	
Germany	Euro	2005		From 1991	
Ghana	Ghanaian cedi	2011			
Greece	Euro	2005		From 2000	
Grenada	Eastern Caribbean dollar	2006			
Guatemala	Guatemalan quetzal	2001		From 2001	
Guinea	Guinean franc	2003			
Guinea-Bissau	CFA franc	2005			
Guyana	Guyana dollar	2006[4]			
Haiti	Haitian gourde	1986/87	October/September		October/September
Honduras	Honduran lempira	2000			
Hong Kong SAR	Hong Kong dollar	2011		From 1980	April/March
Hungary	Hungarian forint	2005		From 2005	
Iceland	Icelandic króna	2000		From 1990	
India	Indian rupee	2004/05	April/March		April/March
Indonesia	Indonesian rupiah	2000			
Iran	Iranian rial	1997/98	April/March		April/March
Iraq	Iraqi dinar	1998			
Ireland	Euro	2011		From 2011	
Israel	Israeli shekel	2010		From 1995	
Italy	Euro	2005		From 1980	
Jamaica	Jamaica dollar	2007			April/March
Japan	Japanese yen	2005		From 1980	
Jordan	Jordanian dinar	1994			
Kazakhstan	Kazakhstani tenge	1994		From 1994	
Kenya	Kenya shilling	2000			
Kiribati	Australian dollar	2006			
Korea	Korean won	2005		From 1980	
Kosovo	Euro	2002			
Kuwait	Kuwaiti dinar	2000			
Kyrgyz Republic	Kyrgyz som	1995			
Lao P.D.R.	Lao kip	2002			October/September
Latvia	Latvian lats	2000		From 1995	
Lebanon	Lebanese pound	2000		From 1997	
Lesotho	Lesotho loti	2004			April/March
Liberia	U.S. dollar	1992			
Libya	Libyan dinar	2003			
Lithuania	Lithuanian litas	2005		From 2005	
Luxembourg	Euro	2005		From 1995	
FYR Macedonia	Macedonian denar	1997			
Madagascar	Malagasy ariary	2000			
Malawi	Malawi kwacha	2007			July/June
Malaysia	Malaysian ringgit	2005			
Maldives	Maldivian rufiyaa	2003			
Mali	CFA franc	1987			
Malta	Euro	2005		From 2000	
Marshall Islands	U.S. dollar	2003/04	October/September		October/September
Mauritania	Mauritanian ouguiya	1998			
Mauritius	Mauritian rupee	2000		From 1999	

Table F. Key Data Documentation *(continued)*

Country	Currency	National Accounts Base Year[1]	National Accounts Reporting Period[2]	Use of Chain-Weighted Methodology[3]	Government Finance Reporting Period[2]
Mexico	Mexican peso	2008			
Micronesia	U.S. dollar	2004	October/September		October/September
Moldova	Moldovan leu	1995			
Mongolia	Mongolian togrog	2005			
Montenegro	Euro	2006			
Morocco	Moroccan dirham	1998		From 1998	
Mozambique	Mozambican metical	2000			
Myanmar	Myanmar kyat	2000/01	April/March		April/March
Namibia	Namibia dollar	2000			April/March
Nepal	Nepalese rupee	2000/01	August/July		August/July
Netherlands	Euro	2005		From 1980	
New Zealand	New Zealand dollar	1995/96		From 1987	
Nicaragua	Nicaraguan córdoba	2006		From 1994	
Niger	CFA franc	2000			
Nigeria	Nigerian naira	2000			
Norway	Norwegian krone	2010		From 1980	
Oman	Omani rial	2000			
Pakistan	Pakistan rupee	2005/06	July/June		July/June
Palau	U.S. dollar	2005	October/September		October/September
Panama	U.S. dollar	1996			
Papua New Guinea	Papua New Guinea kina	1998			
Paraguay	Paraguayan guaraní	1994			
Peru	Peruvian nuevo sol	1994			
Philippines	Philippine peso	2000			
Poland	Polish zloty	2005		From 1995	
Portugal	Euro	2006		From 1980	
Qatar	Qatari riyal	2004			April/March
Romania	Romanian leu	2005		From 2000	
Russia	Russian ruble	2008		From 1995	
Rwanda	Rwanda franc	2006			
Samoa	Samoa tala	2002	July/June		July/June
San Marino	Euro	2007			
São Tomé and Príncipe	São Tomé and Príncipe dobra	2000			
Saudi Arabia	Saudi Arabian riyal	1999			
Senegal	CFA franc	2000			
Serbia	Serbian dinar	2005		From 2005	
Seychelles	Seychelles rupee	2006			
Sierra Leone	Sierra Leonean leone	2006		From 2010	
Singapore	Singapore dollar	2005		From 2005	April/March
Slovak Republic	Euro	2005		From 1993	
Slovenia	Euro	2000		From 2000	
Solomon Islands	Solomon Islands dollar	2004			
South Africa	South African rand	2005			
South Sudan	South Sudanese pound	2010			
Spain	Euro	2008		From 1995	
Sri Lanka	Sri Lanka rupee	2002			
St. Kitts and Nevis	Eastern Caribbean dollar	2006[4]			
St. Lucia	Eastern Caribbean dollar	2006			April/March
St. Vincent and the Grenadines	Eastern Caribbean dollar	2006[4]			
Sudan	Sudanese pound	2007/08			
Suriname	Surinamese dollar	2007			
Swaziland	Swaziland lilangeni	2000			April/March
Sweden	Swedish krona	2012		From 1993	
Switzerland	Swiss franc	2005		From 1980	

Table F. Key Data Documentation *(concluded)*

Country	Currency	National Accounts Base Year[1]	National Accounts Reporting Period[2]	Use of Chain-Weighted Methodology[3]	Government Finance Reporting Period[2]
Syria	Syrian pound	2000			
Taiwan Province of China	New Taiwan dollar	2006			
Tajikistan	Tajik somoni	1995			
Tanzania	Tanzania shilling	2001			July/June
Thailand	Thai baht	1988			October/September
Timor-Leste	U.S. dollar	2010[4]			
Togo	CFA franc	2000			
Tonga	Tongan pa'anga	2010/11	July/June		July/June
Trinidad and Tobago	Trinidad and Tobago dollar	2000			October/September
Tunisia	Tunisian dinar	2005		From 2009	
Turkey	Turkish lira	1998			
Turkmenistan	New Turkmen manat	2005		From 2000	
Tuvalu	Australian dollar	2005			
Uganda	Uganda shilling	2000			
Ukraine	Ukrainian hryvnia	2007		From 2005	
United Arab Emirates	U.A.E. dirham	2007			
United Kingdom	Pound sterling	2010		From 1980	
United States	U.S. dollar	2009		From 1980	
Uruguay	Uruguayan peso	2005			
Uzbekistan	Uzbek sum	1995			
Vanuatu	Vanuatu vatu	2006			
Venezuela	Venezuelan bolívar fuerte	1997			
Vietnam	Vietnamese dong	2010			
Yemen	Yemeni rial	1990			
Zambia	Zambian kwacha	1994			
Zimbabwe	U.S. dollar	2009			

Source: IMF staff.

[1]National accounts base year is the period with which other periods are compared and for which prices appear in the denominators of the price relationships used to calculate the index.

[2]Reporting period is calendar year unless a fiscal year is indicated.

[3]Use of chain-weighted methodology allows countries to measure GDP growth more accurately by reducing or eliminating the downward biases in volume series built on index numbers that average volume components using weights from a year in the moderately distant past.

[4]Nominal GDP is not measured the same way as real GDP.

Box A1. Economic Policy Assumptions Underlying the Projections for Selected Economies

Fiscal Policy Assumptions

The short-term fiscal policy assumptions used in the *World Economic Outlook* (WEO) are based on officially announced budgets, adjusted for differences between the national authorities and the IMF staff regarding macroeconomic assumptions and projected fiscal outturns. The medium-term fiscal projections incorporate policy measures that are judged likely to be implemented. For cases in which the IMF staff has insufficient information to assess the authorities' budget intentions and prospects for policy implementation, an unchanged structural primary balance is assumed unless indicated otherwise. Specific assumptions used in some of the advanced economies follow. (See also Tables B5 to B9 in the online section of the Statistical Appendix for data on fiscal net lending/borrowing and structural balances.[1])

Argentina: The 2012 estimates are based on actual data on outturns and IMF staff estimates. For the outer years, the fiscal balance is projected to remain roughly at the current level.

Australia: Fiscal projections are based on the 2013 Pre-Election Economic and Fiscal Outlook, Australian Bureau of Statistics, and IMF staff projections.

Austria: Projections take into account the authorities' medium-term fiscal framework as well as associated further implementation needs and risks.

Belgium: IMF staff projections for 2013 and beyond are based on unchanged policies.

Brazil: For 2013, the projections are based on the budget approved in March 2013, subsequent revisions to the budget (the last of which was in July 2013), and fiscal outturns until July 2013. Projections for 2014 take into account the draft budget submitted in August 2013. In outer years, the IMF staff assumes adherence to the announced primary target.

Canada: Projections use the baseline forecasts in the Economic Action Plan 2013 "Jobs, Growth, and Long-Term Prosperity," March 21, 2013 (the fiscal year 2013/14 budget). The IMF staff makes some adjustments to this forecast for differences in macroeconomic projections. The IMF staff forecast also incorporates the most recent data releases from Statistics Canada's Canadian System of National Economic Accounts, including federal, provincial, and territorial budgetary outturns through the end of the second quarter of 2013.

Chile: Projections are based on the authorities' budget projections, adjusted to reflect the IMF staff's projections for GDP and copper prices.

China: The fiscal impulse is likely to be mildly expansionary during 2013.

Denmark: Projections for 2012–14 are aligned with the latest official budget estimates and the underlying economic projections, adjusted where appropriate for the IMF staff's macroeconomic assumptions. For 2015–18, the projections incorporate key features of the medium-term fiscal plan as embodied in the authorities' 2013 Convergence Program submitted to the European Union.

France: Projections for 2014 and beyond reflect the authorities' 2012–17 multiyear budget and the April 2013 stability plan, adjusted for fiscal packages and differences in assumptions on macro and financial variables, and revenue projections. The fiscal data for 2011 were revised following a May 15, 2013, revision by the statistical institute of both national accounts and fiscal accounts. Fiscal data for 2012 reflect the preliminary outturn published by the statistical institute in May 2013. The underlying assumptions for 2013 remain unchanged as the 2013 budget has not been revised, and thus there is no new fiscal measure announced for 2013. However, projections for 2013 reflect discussion with the authorities on monthly developments on spending and revenue.

Germany: The estimates for 2012 are preliminary estimates from the Federal Statistical Office of Germany. The IMF staff's projections for 2013 and beyond reflect the authorities' adopted core federal government budget plan, adjusted for the differences in the IMF staff's macroeconomic framework and assumptions about fiscal developments in state and local governments, the social insurance system, and

[1]The output gap is actual minus potential output, as a percent of potential output. Structural balances are expressed as a percent of potential output. The structural balance is the actual net lending/borrowing minus the effects of cyclical output from potential output, corrected for one-time and other factors, such as asset and commodity prices and output composition effects. Changes in the structural balance consequently include effects of temporary fiscal measures, the impact of fluctuations in interest rates and debt-service costs, and other noncyclical fluctuations in net lending/borrowing. The computations of structural balances are based on IMF staff estimates of potential GDP and revenue and expenditure elasticities. (See the October 1993 *World Economic Outlook,* Annex I.) Net debt is defined as gross debt minus financial assets of the general government, which include assets held by the social security insurance system. Estimates of the output gap and of the structural balance are subject to significant margins of uncertainty.

Box A1. *(continued)*

special funds. The estimate of gross debt includes portfolios of impaired assets and noncore business transferred to institutions that are winding up as well as other financial sector and EU support operations.

Greece: Fiscal projections for 2013 and the medium term are consistent with the policies discussed between the IMF staff and the authorities in the context of the Extended Fund Facility. Public debt projections assume an additional haircut (official sector involvement) to bring the debt ratio to 124 percent of GDP by 2020.

Hong Kong SAR: Projections are based on the authorities' medium-term fiscal projections.

Hungary: Fiscal projections include IMF staff projections of the macroeconomic framework and of the impact of recent legislative measures as well as fiscal policy plans announced as of June 30, 2013.

India: Historical data are based on budgetary execution data. Projections are based on available information on the authorities' fiscal plans, with adjustments for IMF staff assumptions. Subnational data are incorporated with a lag of up to two years; general government data are thus finalized well after central government data. IMF and Indian presentations differ, particularly regarding divestment and license auction proceeds, net versus gross recording of revenues in certain minor categories, and some public sector lending.

Indonesia: IMF projections for 2013–18 are based on a gradual increase in administrative fuel prices, the introduction beginning in 2014 of new social protections, and moderate tax policy and administration reforms.

Ireland: Fiscal projections are based on the 2013 budget and the "Medium-Term Fiscal Statement" (published in November 2012), which commits to an €8.6 billion consolidation over 2013–15. It also includes the estimated fiscal impact of the February 2013 promissory note transaction. The fiscal projections are adjusted for differences between the IMF staff's macroeconomic projections and those of the Irish authorities.

Italy: Fiscal projections incorporate the government's announced fiscal policy, as outlined in the April 2013 update to the government's "Economic and Financial Document," adjusted for different growth outlooks. The 2013 deficit also incorporates the impact of repealing the December property tax payment, a measure which has been announced but not yet funded. After 2014, the IMF staff projects a constant structural balance in line with Italy's fiscal rule, which implies small corrective measures in some years, as yet unidentified in the government's "Economic and Financial Document."

Japan: The projections include fiscal measures already announced by the government, including consumption tax increases, earthquake reconstruction spending, and the stimulus package. The medium-term projections assume that expenditure and revenue of the general government are adjusted in line with current underlying demographic and economic trends and recent fiscal stimulus.

Korea: Fiscal projections assume that fiscal policies will be implemented in 2013 in line with the budget. The medium-term projections assume that the government will continue with its consolidation plans and balance the budget (excluding social security funds) toward the end of the medium term.

Mexico: Fiscal projections for 2013 are broadly in line with the approved budget; projections for 2014 onward assume compliance with the balanced budget rule.

Netherlands: Fiscal projections for the period 2012–18 are based on the authorities' Bureau for Economic Policy Analysis budget projections, after adjusting for differences in macroeconomic assumptions.

New Zealand: Fiscal projections are based on the authorities' 2013 budget and on IMF staff estimates.

Portugal: Projections for 2013–14 reflect the authorities' commitments under the EU- and IMF-supported program; projections thereafter are based on IMF staff estimates.

Russia: Projections for 2013–18 are based on the oil-price-based fiscal price rule introduced in December 2012, with adjustments for the IMF staff's revenue forecast and for public spending already budgeted for 2013–15.

Saudi Arabia: The authorities base their budget on a conservative assumption for oil prices with adjustments to expenditure allocations considered in the event that revenues exceed budgeted amounts. IMF staff projections of oil revenues are based on WEO baseline oil prices. On the expenditure side, wage bill estimates incorporate 13th-month pay awards every three years in accordance with the lunar calendar; capital spending estimates over the medium term are in line with the authorities' priorities established in the National Development Plans.

Box A1. *(continued)*

Singapore: For fiscal year 2013/14, projections are based on budget numbers. For the remainder of the projection period, the IMF staff assumes unchanged policies.

South Africa: Fiscal projections are based on the authorities' 2013 budget review, released on February 27, 2013.

Spain: For 2013 and beyond, fiscal projections are based on the measures specified in the Stability Program Update 2013–16, the revised fiscal policy recommendations by the European Council in June 2013, and the 2013 budget, approved in December 2012.

Sweden: Fiscal projections are broadly in line with the authorities' projections based on the 2014 Budget Bill. The impact of cyclical developments on the fiscal accounts is calculated using the Organization for Economic Cooperation and Development's latest semi-elasticity.

Switzerland: Projections for 2012–18 are based on IMF staff calculations, which incorporate measures to restore balance in the federal accounts and strengthen social security finances.

Turkey: Fiscal projections assume that both current and capital spending will be in line with the authorities' 2013–15 Medium-Term Program based on current trends and policies.

United Kingdom: Fiscal projections are based on the U.K. Treasury's 2013 budget, published in March 2013. The authorities' revenue projections are adjusted for differences between IMF staff forecasts of macroeconomic variables (such as GDP growth). In addition, IMF staff projections exclude the temporary effects of financial sector interventions and the effect on public sector net investment during 2012–13 of transferring assets from the Royal Mail Pension Plan to the public sector. Real government consumption and investment are part of the real GDP path, which, according to the IMF staff, may or may not be the same as projected by the U.K. Office for Budget Responsibility. Transfers of profits from the Bank of England's Asset Purchases Facility affect general government net interest payments. The timing of these payments can create differences between fiscal year primary balances published by the authorities and calendar year balances shown in the WEO.

United States: Fiscal projections are based on the May 2013 Congressional Budget Office baseline adjusted for the IMF staff's policy and macroeconomic assumptions. This baseline incorporates the provisions of the American Taxpayer Relief Act, signed into law on January 2, 2013. The key near-term policy assumptions include replacement of automatic spending cuts ("sequester") with back-loaded consolidation measures in fiscal year 2015 and onward. (The sequester is assumed to be in full effect from March 1, 2013, to September 30, 2014.) Over the medium term, the IMF staff assumes that Congress will continue to make regular adjustments to Medicare payments ("DocFix") and will extend certain traditional programs (such as the research and development tax credit). The fiscal projections are adjusted to reflect the IMF staff's forecasts of key macroeconomic and financial variables and different accounting treatment of financial sector support and are converted to a general government basis.

Monetary Policy Assumptions

Monetary policy assumptions are based on the established policy framework in each country. In most cases, this implies a nonaccommodative stance over the business cycle: official interest rates will increase when economic indicators suggest that inflation will rise above its acceptable rate or range; they will decrease when indicators suggest that inflation will not exceed the acceptable rate or range, that output growth is below its potential rate, and that the margin of slack in the economy is significant. On this basis, the London interbank offered rate (LIBOR) on six-month U.S. dollar deposits is assumed to average 0.4 percent in 2013 and 0.6 percent in 2014 (see Table 1.1 in Chapter 1). The rate on three-month euro deposits is assumed to average 0.2 percent in 2013 and 0.5 percent in 2014. The interest rate on six-month Japanese yen deposits is assumed to average 0.2 percent in 2013 and 0.3 percent in 2014.

Australia: Monetary policy assumptions are in line with market expectations.

Brazil: Monetary policy assumptions are consistent with gradual convergence of inflation toward the middle of the target range over the relevant horizon.

Canada: Monetary policy assumptions are in line with market expectations.

China: The IMF staff assumes M2 growth of 13 percent in 2013, consistent with the authorities' target. Monetary policy is likely to remain steady.

Denmark: The monetary policy is to maintain the peg to the euro.

Box A1. *(concluded)*

Euro area: Monetary policy assumptions for euro area member countries are in line with market expectations.

Hong Kong SAR: The IMF staff assumes that the Currency Board system remains intact and projects broad money growth based on the past relationship with nominal GDP.

India: The policy (interest) rate assumption is based on the average of market forecasts.

Indonesia: Monetary policy assumptions are in line with market expectations and reduction of inflation by 2014 to within the central bank's targeted band.

Japan: The current monetary policy conditions are maintained for the projection period, and no further tightening or loosening is assumed.

Korea: Monetary policy assumptions incorporate maintenance of the current accommodative stance over the course of 2013.

Mexico: Monetary assumptions are consistent with attaining the inflation target.

Russia: Monetary projections assume unchanged policies, as indicated in recent statements by the Central Bank of Russia. Specifically, policy rates are assumed to remain at the current levels, with limited interventions in the foreign exchange markets.

Saudi Arabia: Monetary policy projections are based on the continuation of the exchange rate peg to the U.S. dollar.

Singapore: Broad money is projected to grow in line with the projected growth in nominal GDP.

South Africa: Monetary projections are consistent with South Africa's 3 to 6 percent inflation target range.

Sweden: Monetary projections are in line with Riksbank projections.

Switzerland: Monetary policy variables reflect historical data from the national authorities and the market.

Turkey: Broad money and the long-term bond yield are based on IMF staff projections. The short-term deposit rate is projected to evolve with a constant spread against the interest rate of a similar U.S. instrument.

United Kingdom: On monetary policy, the projections assume no changes to the policy rate or the level of asset purchases through 2014.

United States: Given the outlook for sluggish growth and inflation, the IMF staff expects the federal funds target to remain near zero until late 2014. This assumption is consistent with the Federal Open Market Committee's statement following its January 2013 meeting (and reaffirmed in subsequent meetings) that economic conditions are likely to warrant an exceptionally low federal funds rate at least through late 2014.

List of Tables

Table A1. Summary of World Output[1]

(Annual percent change)

	Average									Projections		
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
World	**3.6**	**4.7**	**5.2**	**5.3**	**2.7**	**–0.4**	**5.2**	**3.9**	**3.2**	**2.9**	**3.6**	**4.1**
Advanced Economies	**2.8**	**2.8**	**3.0**	**2.7**	**0.1**	**–3.4**	**3.0**	**1.7**	**1.5**	**1.2**	**2.0**	**2.5**
United States	3.4	3.4	2.7	1.8	–0.3	–2.8	2.5	1.8	2.8	1.6	2.6	3.1
Euro Area	2.2	1.7	3.2	3.0	0.4	–4.4	2.0	1.5	–0.6	–0.4	1.0	1.6
Japan	1.1	1.3	1.7	2.2	–1.0	–5.5	4.7	–0.6	2.0	2.0	1.2	1.1
Other Advanced Economies[2]	3.7	3.8	3.9	4.2	1.0	–2.3	4.5	2.6	1.4	2.0	2.7	3.0
Emerging Market and Developing Economies	**4.9**	**7.3**	**8.3**	**8.7**	**5.8**	**3.1**	**7.5**	**6.2**	**4.9**	**4.5**	**5.1**	**5.5**
Regional Groups												
Central and Eastern Europe	4.0	5.9	6.4	5.4	3.2	–3.6	4.6	5.4	1.4	2.3	2.7	3.7
Commonwealth of Independent States[3]	2.9	6.7	8.8	8.9	5.3	–6.4	4.9	4.8	3.4	2.1	3.4	3.7
Developing Asia	7.1	9.5	10.3	11.5	7.3	7.7	9.8	7.8	6.4	6.3	6.5	6.7
Latin America and the Caribbean	2.5	4.7	5.6	5.7	4.2	–1.2	6.0	4.6	2.9	2.7	3.1	3.7
Middle East, North Africa, Afghanistan, and Pakistan	4.6	6.0	6.7	5.9	5.0	2.8	5.2	3.9	4.6	2.3	3.6	4.4
Middle East and North Africa	4.6	5.5	6.8	5.9	5.0	3.0	5.5	3.9	4.6	2.1	3.8	4.4
Sub-Saharan Africa	4.5	6.3	6.4	7.1	5.7	2.6	5.6	5.5	4.9	5.0	6.0	5.7
Memorandum												
European Union	2.6	2.4	3.6	3.4	0.6	–4.4	2.0	1.7	–0.3	0.0	1.3	1.9
Analytical Groups												
By Source of Export Earnings												
Fuel	3.8	6.8	8.0	7.5	5.3	–1.2	5.1	4.8	4.8	2.4	4.0	4.3
Nonfuel	5.1	7.4	8.3	9.0	6.0	4.1	8.1	6.6	5.0	5.0	5.3	5.8
Of Which, Primary Products	4.2	5.5	6.2	6.6	6.0	2.0	6.8	5.5	5.4	5.5	5.5	5.4
By External Financing Source												
Net Debtor Economies	3.9	6.0	6.6	6.7	4.3	1.6	6.8	5.1	3.3	3.4	4.0	5.0
Of Which, Official Financing	4.4	6.6	5.9	5.3	4.9	2.4	4.3	5.1	4.3	4.3	4.3	5.3
Net Debtor Economies by Debt-Servicing Experience												
Economies with Arrears and/or Rescheduling during 2007–11	3.3	7.5	7.7	7.5	5.9	2.0	6.8	6.4	3.4	4.2	4.1	4.4
Memorandum												
Median Growth Rate												
Advanced Economies	3.3	3.2	3.9	3.9	0.8	–3.7	2.5	1.8	0.9	0.8	1.8	2.2
Emerging Market and Developing Economies	4.2	5.3	5.7	6.2	5.0	1.7	4.5	4.5	4.0	3.7	4.1	4.5
Output per Capita												
Advanced Economies	2.1	2.1	2.3	2.0	–0.7	–4.1	2.5	1.1	0.9	0.7	1.5	1.9
Emerging Market and Developing Economies	3.6	6.1	7.0	7.4	4.5	2.0	6.4	5.2	3.9	3.5	4.1	4.5
World Growth Rate Based on Market Exchange	**3.0**	**3.6**	**4.0**	**3.9**	**1.5**	**–2.1**	**4.1**	**2.9**	**2.6**	**2.3**	**3.0**	**3.6**
Value of World Output (billions of U.S. dollars)												
At Market Exchange Rates	33,380	46,248	50,045	56,425	61,823	58,602	63,991	70,782	72,216	73,454	76,888	96,904
At Purchasing Power Parities	41,987	57,640	62,461	67,452	70,538	70,608	75,090	79,346	83,193	86,698	91,234	115,927

[1]Real GDP.
[2]In this table, Other Advanced Economies means advanced economies excluding the United States, Euro Area countries, and Japan.
[3]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table A2. Advanced Economies: Real GDP and Total Domestic Demand[1]

(Annual percent change)

	Average									Projections			Fourth Quarter[2]	Projections	
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018	2012:Q4	2013:Q4	2014:Q4
Real GDP															
Advanced Economies	**2.8**	**2.8**	**3.0**	**2.7**	**0.1**	**–3.4**	**3.0**	**1.7**	**1.5**	**1.2**	**2.0**	**2.5**	**0.9**	**1.8**	**2.1**
United States	3.4	3.4	2.7	1.8	–0.3	–2.8	2.5	1.8	2.8	1.6	2.6	3.1	2.0	1.9	3.0
Euro Area	2.2	1.7	3.2	3.0	0.4	–4.4	2.0	1.5	–0.6	–0.4	1.0	1.6	–1.0	0.4	1.1
Germany	1.3	0.8	3.9	3.4	0.8	–5.1	3.9	3.4	0.9	0.5	1.4	1.2	0.3	1.3	1.1
France	2.2	1.8	2.5	2.3	–0.1	–3.1	1.7	2.0	0.0	0.2	1.0	1.9	–0.3	0.5	1.1
Italy	1.6	0.9	2.2	1.7	–1.2	–5.5	1.7	0.4	–2.4	–1.8	0.7	1.2	–2.8	–0.9	1.4
Spain	3.7	3.6	4.1	3.5	0.9	–3.8	–0.2	0.1	–1.6	–1.3	0.2	1.2	–2.1	–0.2	0.2
Netherlands	2.8	2.0	3.4	3.9	1.8	–3.7	1.5	0.9	–1.2	–1.3	0.3	2.2	–1.3	–0.7	1.3
Belgium	2.3	1.8	2.7	2.9	1.0	–2.8	2.4	1.8	–0.3	0.1	1.0	1.6	–0.5	0.6	1.2
Austria	2.4	2.4	3.7	3.7	1.4	–3.8	1.8	2.8	0.9	0.4	1.6	1.4	0.6	0.8	2.0
Greece	3.7	2.3	5.5	3.5	–0.2	–3.1	–4.9	–7.1	–6.4	–4.2	0.6	3.3	–5.5	–2.6	2.2
Portugal	2.7	0.8	1.4	2.4	0.0	–2.9	1.9	–1.3	–3.2	–1.8	0.8	1.8	–3.8	0.6	0.8
Finland	3.8	2.9	4.4	5.3	0.3	–8.5	3.4	2.7	–0.8	–0.6	1.1	2.0	–2.2	1.2	0.7
Ireland	7.9	6.1	5.5	5.0	–2.2	–6.4	–1.1	2.2	0.2	0.6	1.8	2.5	–1.0	1.9	1.6
Slovak Republic	4.3	6.7	8.3	10.5	5.8	–4.9	4.4	3.2	2.0	0.8	2.3	3.5	1.0	1.0	2.8
Slovenia	4.0	4.0	5.8	7.0	3.4	–7.9	1.3	0.7	–2.5	–2.6	–1.4	2.6	–3.2	–2.4	0.3
Luxembourg	4.5	5.3	4.9	6.6	–0.7	–4.1	2.9	1.7	0.3	0.5	1.3	2.2	1.6	–0.6	1.4
Estonia	6.5	8.9	10.1	7.5	–4.2	–14.1	2.6	9.6	3.9	1.5	2.5	3.7	4.0	1.0	2.9
Cyprus	4.1	3.9	4.1	5.1	3.6	–1.9	1.3	0.5	–2.4	–8.7	–3.9	2.2	–3.5	–10.7	–0.6
Malta	. . .	3.6	2.6	4.1	3.9	–2.8	3.2	1.8	1.0	1.1	1.8	1.8	1.7	0.8	1.7
Japan	1.1	1.3	1.7	2.2	–1.0	–5.5	4.7	–0.6	2.0	2.0	1.2	1.1	0.3	3.5	0.2
United Kingdom	3.4	3.2	2.8	3.4	–0.8	–5.2	1.7	1.1	0.2	1.4	1.9	2.3	0.0	2.3	1.5
Canada	3.2	3.2	2.6	2.0	1.2	–2.7	3.4	2.5	1.7	1.6	2.2	2.2	1.0	1.9	2.4
Korea	5.3	4.0	5.2	5.1	2.3	0.3	6.3	3.7	2.0	2.8	3.7	4.0	1.4	4.3	2.9
Australia	3.8	3.1	2.7	4.6	2.7	1.4	2.6	2.4	3.7	2.5	2.8	3.0	3.3	2.2	3.2
Taiwan Province of China	4.6	4.7	5.4	6.0	0.7	–1.8	10.8	4.1	1.3	2.2	3.8	4.7	3.9	1.9	3.9
Sweden	3.2	3.2	4.3	3.3	–0.6	–5.0	6.6	2.9	1.0	0.9	2.3	2.4	1.8	1.6	2.0
Hong Kong SAR	2.9	7.4	7.0	6.5	2.1	–2.5	6.8	4.9	1.5	3.0	4.4	4.5	2.7	2.6	5.3
Switzerland	1.5	2.7	3.8	3.8	2.2	–1.9	3.0	1.8	1.0	1.7	1.8	1.9	1.4	1.7	2.0
Singapore	5.3	7.4	8.6	9.0	1.7	–0.8	14.8	5.2	1.3	3.5	3.4	3.9	1.5	4.9	3.3
Czech Republic	. . .	6.8	7.0	5.7	3.1	–4.5	2.5	1.8	–1.2	–0.4	1.5	2.4	–1.6	–0.5	1.9
Norway	3.1	2.6	2.3	2.7	0.0	–1.4	0.2	1.3	3.0	1.6	2.3	2.2	1.8	3.6	0.5
Israel	4.0	4.9	5.8	6.9	4.5	1.2	5.7	4.6	3.4	3.8	3.3	3.4	3.2	4.2	2.8
Denmark	2.1	2.4	3.4	1.6	–0.8	–5.7	1.6	1.1	–0.4	0.1	1.2	1.5	–0.4	0.8	1.5
New Zealand	3.5	3.2	2.9	3.5	–0.8	–1.5	1.9	1.4	2.7	2.5	2.9	2.5	3.2	1.4	4.1
Iceland	3.9	7.2	4.7	6.0	1.2	–6.6	–4.1	2.9	1.6	1.9	2.1	2.3	1.4	0.6	2.1
San Marino	. . .	2.4	3.8	8.0	–5.1	–12.2	–7.5	–2.5	–4.0	–3.5	0.0	1.4	. . .	. . .	. . .
Memorandum															
Major Advanced Economies	2.6	2.5	2.6	2.2	–0.3	–3.8	2.8	1.6	1.7	1.2	2.0	2.4	0.9	1.8	2.1
Real Total Domestic Demand															
Advanced Economies	**2.9**	**2.7**	**2.8**	**2.3**	**–0.3**	**–3.8**	**2.9**	**1.4**	**1.2**	**0.8**	**1.7**	**2.4**	**0.7**	**1.3**	**1.9**
United States	3.8	3.5	2.6	1.1	–1.3	–3.8	2.9	1.7	2.6	1.4	2.6	3.1	1.6	1.9	3.1
Euro Area	. . .	1.8	3.1	2.8	0.3	–3.7	1.2	0.7	–2.2	–1.2	0.5	1.4	–2.3	–0.1	0.8
Germany	0.8	–0.2	2.7	1.9	1.2	–2.3	2.4	2.8	–0.3	0.5	1.3	1.2	–0.7	0.9	1.3
France	2.2	2.5	2.4	3.2	0.3	–2.6	1.8	2.0	–0.9	0.1	0.9	1.7	–0.5	0.5	1.3
Italy	1.9	0.9	2.1	1.4	–1.2	–4.4	2.1	–1.0	–5.3	–2.8	0.2	1.0	–5.3	–1.4	1.1
Spain	4.2	5.0	5.2	4.1	–0.5	–6.3	–0.6	–2.0	–4.1	–3.5	–1.3	0.4	–4.6	–2.1	–1.0
Japan	0.9	1.0	0.9	1.1	–1.3	–4.0	2.9	0.3	2.8	1.7	0.6	1.0	1.2	2.4	–0.2
United Kingdom	3.8	2.7	2.4	3.4	–1.6	–6.3	2.4	–0.1	1.1	0.6	1.5	1.9	1.6	0.9	1.4
Canada	3.1	4.5	3.9	3.4	2.8	–2.7	5.2	2.9	2.2	1.5	1.9	1.9	2.4	1.7	2.1
Other Advanced Economies[3]	3.5	3.4	4.0	4.9	1.6	–2.9	5.7	2.8	2.1	1.9	2.7	3.4	2.8	2.1	2.3
Memorandum															
Major Advanced Economies	2.8	2.5	2.3	1.7	–0.8	–3.8	2.8	1.4	1.5	1.0	1.8	2.3	0.8	1.5	2.0

[1]In this and other tables, when countries are not listed alphabetically, they are ordered on the basis of economic size.
[2]From the fourth quarter of the preceding year.
[3]In this table, Other Advanced Economies means advanced economies excluding the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Euro Area countries.

Table A3. Advanced Economies: Components of Real GDP

(Annual percent change)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Private Consumer Expenditure												
Advanced Economies	**3.0**	**1.5**	**2.8**	**2.6**	**2.4**	**0.1**	**–1.1**	**2.0**	**1.6**	**1.2**	**1.3**	**1.8**
United States	3.8	1.8	3.5	3.0	2.2	–0.4	–1.6	2.0	2.5	2.2	2.0	2.4
Euro Area	. . .	0.5	1.8	2.1	1.7	0.4	–1.0	1.0	0.3	–1.4	–0.7	0.5
Germany	1.1	0.8	0.2	1.5	–0.2	0.8	0.2	1.0	2.3	0.8	0.8	1.1
France	2.2	1.1	2.5	2.2	2.4	0.2	0.3	1.6	0.6	–0.3	0.4	0.8
Italy	1.7	–0.4	1.2	1.4	1.1	–0.8	–1.6	1.5	0.1	–4.3	–2.4	0.2
Spain	3.6	0.0	4.1	4.0	3.5	–0.6	–3.7	0.2	–1.2	–2.8	–2.8	–0.4
Japan	1.0	1.0	1.5	1.1	0.9	–0.9	–0.7	2.8	0.4	2.3	2.0	0.9
United Kingdom	4.0	0.8	2.7	1.8	2.7	–1.0	–3.6	1.0	–0.4	1.1	1.7	1.9
Canada	3.3	2.7	3.6	4.1	4.2	2.9	0.3	3.4	2.3	1.9	2.2	2.0
Other Advanced Economies[1]	3.8	2.7	3.6	3.7	4.7	1.1	0.2	3.8	2.9	1.9	2.1	2.9
Memorandum												
Major Advanced Economies	2.8	1.4	2.6	2.4	1.9	–0.2	–1.2	1.9	1.7	1.4	1.5	1.8
Public Consumption												
Advanced Economies	**2.2**	**1.0**	**1.3**	**1.7**	**1.8**	**2.3**	**3.1**	**0.9**	**–0.7**	**0.5**	**–0.4**	**–0.4**
United States	1.9	0.3	0.8	1.1	1.4	2.5	3.7	0.1	–2.7	–0.2	–2.0	–1.4
Euro Area	. . .	1.0	1.6	2.1	2.2	2.3	2.6	0.6	–0.1	–0.6	–0.1	–0.3
Germany	1.1	1.3	0.3	0.9	1.4	3.2	3.0	1.3	1.0	1.0	0.7	0.7
France	1.3	1.3	1.3	1.4	1.5	1.3	2.5	1.8	0.4	1.4	0.9	0.3
Italy	1.3	–0.1	1.9	0.5	1.0	0.6	0.8	–0.4	–1.2	–2.9	–0.4	–0.6
Spain	3.9	1.6	5.5	4.6	5.6	5.9	3.7	1.5	–0.5	–4.8	–2.0	–2.9
Japan	2.8	1.1	0.8	0.0	1.1	–0.1	2.3	1.9	1.4	2.4	1.1	0.3
United Kingdom	2.7	1.1	2.2	2.2	0.7	2.1	0.7	0.5	0.0	2.8	0.4	–0.7
Canada	1.5	2.1	1.6	3.1	2.8	4.6	3.3	2.7	0.8	1.1	0.7	1.0
Other Advanced Economies[1]	2.9	2.4	2.0	2.9	3.0	2.8	3.6	2.6	1.6	2.0	2.1	1.6
Memorandum												
Major Advanced Economies	1.9	0.7	1.0	1.1	1.3	2.1	2.9	0.7	–1.1	0.5	–0.7	–0.6
Gross Fixed Capital Formation												
Advanced Economies	**3.5**	**0.5**	**4.3**	**3.9**	**2.4**	**–2.9**	**–11.9**	**1.9**	**2.4**	**2.0**	**0.5**	**3.3**
United States	5.1	0.5	5.6	2.2	–1.2	–4.8	–13.1	1.1	3.4	5.5	2.6	5.8
Euro Area	. . .	–0.6	3.2	5.6	5.2	–1.4	–12.8	–0.4	1.6	–3.9	–3.5	1.3
Germany	0.0	1.4	0.8	8.2	4.7	1.3	–11.7	5.7	6.9	–2.1	–0.6	2.5
France	3.0	0.6	4.4	4.0	6.3	0.4	–10.6	1.5	3.0	–1.2	–2.4	1.8
Italy	3.1	–2.4	1.3	3.4	1.8	–3.7	–11.7	0.6	–1.8	–8.0	–5.7	0.9
Spain	6.3	–3.5	7.1	7.1	4.5	–4.7	–18.0	–5.5	–5.4	–7.0	–7.3	–2.8
Japan	–0.9	–0.6	0.8	1.5	0.3	–4.1	–10.6	–0.2	1.1	4.4	2.3	–0.6
United Kingdom	4.6	–0.7	3.7	5.6	7.5	–6.9	–16.7	2.8	–2.4	0.5	–1.8	3.2
Canada	4.8	3.0	9.1	6.2	3.2	1.6	–12.0	11.3	4.2	4.3	1.0	3.0
Other Advanced Economies[1]	3.7	2.7	4.9	5.5	6.3	0.3	–6.2	6.8	3.3	2.0	1.6	3.0
Memorandum												
Major Advanced Economies	3.3	0.4	4.1	3.3	1.2	–3.6	–12.5	2.0	2.7	2.9	1.0	3.7

Table A3. Advanced Economies: Components of Real GDP *(concluded)*

(Annual percent change)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Final Domestic Demand												
Advanced Economies	**2.9**	**1.2**	**2.9**	**2.7**	**2.3**	**–0.2**	**–2.7**	**1.8**	**1.4**	**1.2**	**0.9**	**1.7**
United States	3.8	1.3	3.5	2.6	1.4	–0.9	–3.0	1.5	1.8	2.4	1.5	2.5
Euro Area	. . .	0.4	2.0	2.8	2.5	0.4	–2.8	0.6	0.5	–1.7	–1.1	0.5
Germany	0.9	1.0	0.3	2.6	1.1	1.3	–1.6	1.9	2.9	0.3	0.5	1.3
France	2.1	1.0	2.5	2.4	3.0	0.5	–1.4	1.6	1.0	–0.1	0.0	0.8
Italy	1.9	–0.7	1.3	1.6	1.2	–1.2	–3.2	0.9	–0.5	–4.7	–2.6	0.2
Spain	4.3	–0.5	5.2	5.0	4.1	–0.7	–6.2	–0.9	–2.0	–4.1	–3.5	–1.4
Japan	0.8	0.7	1.2	1.0	0.8	–1.6	–2.3	2.0	0.8	2.7	1.9	0.5
United Kingdom	3.8	0.6	2.8	2.5	3.1	–1.4	–4.8	1.2	–0.6	1.4	0.9	1.5
Canada	3.2	2.7	4.4	4.4	3.7	2.9	–1.9	5.0	2.4	2.3	1.6	2.0
Other Advanced Economies[1]	3.5	2.6	3.5	3.9	4.8	1.2	–0.8	4.2	2.7	2.0	2.0	2.7
Memorandum												
Major Advanced Economies	2.8	1.1	2.7	2.3	1.6	–0.5	–2.8	1.7	1.4	1.6	1.1	1.8
Stock Building[2]												
Advanced Economies	**0.0**	**0.0**	**–0.1**	**0.1**	**0.0**	**–0.2**	**–1.1**	**1.1**	**0.0**	**–0.1**	**–0.1**	**0.1**
United States	0.0	0.0	0.0	0.0	–0.2	–0.5	–0.8	1.5	–0.2	0.2	0.0	0.1
Euro Area	. . .	0.0	–0.2	0.3	0.3	–0.1	–1.0	0.6	0.2	–0.5	–0.1	0.0
Germany	0.0	0.0	–0.4	0.1	0.8	–0.1	–0.6	0.4	–0.1	–0.5	0.0	0.0
France	0.1	–0.1	0.0	0.1	0.2	–0.2	–1.2	0.2	1.1	–0.9	0.0	0.1
Italy	0.0	–0.1	–0.4	0.5	0.2	0.0	–1.2	1.1	–0.5	–0.6	0.2	0.0
Spain	–0.1	0.0	–0.1	0.3	–0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.0
Japan	0.1	–0.1	–0.3	–0.1	0.3	0.2	–1.5	0.9	–0.4	0.0	–0.3	0.1
United Kingdom	0.0	0.0	0.0	–0.1	0.3	–0.2	–1.5	1.2	0.4	–0.3	–0.3	0.1
Canada	0.1	0.0	0.5	–0.1	–0.1	0.0	–0.8	0.2	0.5	0.0	–0.1	–0.1
Other Advanced Economies[1]	0.0	0.0	–0.1	0.1	0.1	0.3	–1.9	1.3	0.1	0.0	–0.1	0.0
Memorandum												
Major Advanced Economies	0.0	0.0	–0.1	0.0	0.1	–0.3	–1.0	1.1	0.0	–0.1	–0.1	0.1
Foreign Balance[2]												
Advanced Economies	**–0.1**	**0.3**	**0.0**	**0.2**	**0.4**	**0.5**	**0.3**	**0.2**	**0.4**	**0.3**	**0.4**	**0.3**
United States	–0.5	0.2	–0.3	–0.1	0.6	1.1	1.1	–0.5	0.1	0.1	0.1	–0.1
Euro Area	. . .	0.4	–0.1	0.2	0.2	0.1	–0.7	0.7	0.9	1.6	0.7	0.4
Germany	0.4	0.4	0.8	1.1	1.5	0.0	–3.1	1.7	0.7	1.0	0.1	0.2
France	0.0	–0.1	–0.7	0.0	–0.9	–0.3	–0.5	–0.1	–0.1	1.0	0.1	0.0
Italy	–0.2	0.5	0.0	0.1	0.3	0.0	–1.2	–0.4	1.5	2.8	1.0	0.6
Spain	–0.6	0.9	–1.7	–1.4	–0.8	1.5	2.9	0.4	2.1	2.5	2.2	1.5
Japan	0.1	0.2	0.3	0.8	1.0	0.2	–2.0	2.0	–0.8	–0.8	0.3	0.6
United Kingdom	–0.5	0.3	0.3	0.2	–0.1	0.9	0.9	–0.5	1.2	–0.6	0.7	0.2
Canada	0.1	–0.9	–1.5	–1.4	–1.5	–1.9	0.0	–2.0	–0.4	–0.5	0.1	0.2
Other Advanced Economies[1]	0.5	0.7	1.0	1.0	0.7	0.3	1.6	0.7	0.7	0.1	0.6	0.7
Memorandum												
Major Advanced Economies	–0.2	0.2	–0.1	0.2	0.5	0.5	0.0	0.0	0.2	0.2	0.2	0.1

[1]In this table, Other Advanced Economies means advanced economies excluding the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Euro Area countries.
[2]Changes expressed as percent of GDP in the preceding period.

Table A4. Emerging Market and Developing Economies: Real GDP

(Annual percent change)

	Average									Projections		
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
Central and Eastern Europe[1]	**4.0**	**5.9**	**6.4**	**5.4**	**3.2**	**–3.6**	**4.6**	**5.4**	**1.4**	**2.3**	**2.7**	**3.7**
Albania	6.0	5.8	5.4	5.9	7.5	3.3	3.8	2.8	1.6	1.7	2.1	2.5
Bosnia and Herzegovina	. . .	3.9	6.0	6.1	5.6	–2.9	0.7	1.3	–0.7	0.5	2.0	4.0
Bulgaria	1.6	6.4	6.5	6.4	6.2	–5.5	0.4	1.8	0.8	0.5	1.6	3.0
Croatia	4.2	4.3	4.9	5.1	2.1	–6.9	–2.3	0.0	–2.0	–0.6	1.5	2.5
Hungary	3.4	4.0	3.9	0.1	0.9	–6.8	1.3	1.6	–1.7	0.2	1.3	1.6
Kosovo	. . .	3.9	3.4	8.3	7.2	3.5	3.2	5.2	2.3	2.6	4.2	4.5
Latvia	5.6	10.1	11.2	9.6	–3.3	–17.7	–0.9	5.5	5.6	4.0	4.2	4.0
Lithuania	. . .	7.8	7.8	9.8	2.9	–14.8	1.5	5.9	3.6	3.4	3.4	3.7
FYR Macedonia	1.7	4.4	5.0	6.1	5.0	–0.9	2.9	2.9	–0.3	2.2	3.2	4.0
Montenegro	. . .	4.2	8.6	10.7	6.9	–5.7	2.5	3.2	–0.5	1.5	2.2	2.7
Poland	4.6	3.6	6.2	6.8	5.1	1.6	3.9	4.5	1.9	1.3	2.4	3.5
Romania	2.5	4.2	7.9	6.3	7.3	–6.6	–1.1	2.2	0.7	2.0	2.2	3.5
Serbia	. . .	5.4	3.6	5.4	3.8	–3.5	1.0	1.6	–1.7	2.0	2.0	3.0
Turkey	4.2	8.4	6.9	4.7	0.7	–4.8	9.2	8.8	2.2	3.8	3.5	4.5
Commonwealth of Independent States[1,2]	**2.9**	**6.7**	**8.8**	**8.9**	**5.3**	**–6.4**	**4.9**	**4.8**	**3.4**	**2.1**	**3.4**	**3.7**
Russia	2.8	6.4	8.2	8.5	5.2	–7.8	4.5	4.3	3.4	1.5	3.0	3.5
Excluding Russia	3.2	7.7	10.6	9.9	5.6	–3.1	6.0	6.1	3.3	3.6	4.2	4.3
Armenia	8.0	14.1	13.2	13.7	6.9	–14.1	2.2	4.7	7.2	4.6	4.8	5.5
Azerbaijan	5.5	26.4	34.5	25.0	10.8	9.3	5.0	0.1	2.2	3.5	5.6	4.0
Belarus	4.7	9.4	10.0	8.7	10.3	0.1	7.7	5.5	1.5	2.1	2.5	3.6
Georgia	5.8	9.6	9.4	12.3	2.3	–3.8	6.3	7.2	6.1	2.5	5.0	6.0
Kazakhstan	4.5	9.7	10.7	8.9	3.2	1.2	7.0	7.5	5.1	5.0	5.2	5.4
Kyrgyz Republic	4.1	–0.2	3.1	8.5	7.6	2.9	–0.5	6.0	–0.9	7.4	6.5	5.0
Moldova[3]	1.3	7.5	4.8	3.0	7.8	–6.0	7.1	6.8	–0.8	4.0	4.0	5.0
Tajikistan	4.0	6.7	7.0	7.8	7.9	3.9	6.5	7.4	7.5	6.7	5.8	5.8
Turkmenistan	7.8	13.0	11.0	11.1	14.7	6.1	9.2	14.7	11.1	12.2	10.4	7.8
Ukraine	1.2	3.0	7.4	7.6	2.3	–14.8	4.1	5.2	0.2	0.4	1.5	2.0
Uzbekistan	3.8	7.0	7.5	9.5	9.0	8.1	8.5	8.3	8.2	7.0	6.5	5.5
Developing Asia	**7.1**	**9.5**	**10.3**	**11.5**	**7.3**	**7.7**	**9.8**	**7.8**	**6.4**	**6.3**	**6.5**	**6.7**
Bangladesh	5.3	6.3	6.5	6.3	6.0	5.9	6.4	6.5	6.1	5.8	6.0	7.0
Bhutan	6.9	7.1	6.8	17.9	4.7	6.7	11.7	8.5	9.2	5.8	8.0	16.2
Brunei Darussalam	2.1	0.4	4.4	0.2	–1.9	–1.8	2.6	3.4	0.9	1.4	6.2	3.5
Cambodia	7.7	13.3	10.8	10.2	6.7	0.1	6.1	7.1	7.3	7.0	7.2	7.5
China	9.2	11.3	12.7	14.2	9.6	9.2	10.4	9.3	7.7	7.6	7.3	7.0
Fiji	2.7	2.5	1.9	–0.9	1.0	–1.3	0.1	1.9	2.2	3.0	2.2	2.4
India	6.2	9.3	9.3	9.8	3.9	8.5	10.5	6.3	3.2	3.8	5.1	6.7
Indonesia	2.9	5.7	5.5	6.3	6.0	4.6	6.2	6.5	6.2	5.3	5.5	6.0
Kiribati	2.3	–0.2	–4.5	7.5	2.8	–0.7	–0.5	2.7	2.8	2.9	2.7	2.0
Lao P.D.R.	6.0	6.8	8.6	7.8	7.8	7.5	8.1	8.0	7.9	8.3	7.8	7.9
Malaysia	5.2	5.0	5.6	6.3	4.8	–1.5	7.4	5.1	5.6	4.7	4.9	5.2
Maldives	8.4	–8.7	19.6	10.6	12.2	–3.6	7.1	6.5	0.9	3.5	3.8	4.1
Marshall Islands	. . .	2.6	1.9	3.2	–1.9	–1.5	5.6	0.8	1.9	2.3	2.6	1.0
Micronesia	. . .	2.2	–0.2	–2.1	–2.6	1.0	2.5	2.1	0.4	0.6	0.5	0.6
Mongolia	4.5	7.3	8.6	10.2	8.9	–1.3	6.4	17.5	12.3	11.8	11.7	6.2
Myanmar	. . .	13.6	13.1	12.0	3.6	5.1	5.3	5.9	6.4	6.8	6.9	7.1
Nepal	4.2	3.5	3.4	3.4	6.1	4.5	4.8	3.4	4.9	3.6	4.5	4.3
Palau	. . .	3.4	–1.4	0.9	–5.0	–10.2	–0.4	6.9	6.3	3.5	2.5	2.0
Papua New Guinea	0.7	3.9	2.3	7.2	6.6	6.1	7.7	10.7	8.1	5.4	6.3	3.5
Philippines	4.1	4.8	5.2	6.6	4.2	1.1	7.6	3.6	6.8	6.8	6.0	5.5
Samoa	4.2	7.0	2.1	1.8	4.3	–5.2	0.5	1.3	3.1	0.1	1.9	2.5
Solomon Islands	–0.1	12.9	4.0	6.4	7.1	–4.7	7.8	10.7	4.8	4.0	3.8	3.4
Sri Lanka	4.2	6.2	7.7	6.8	6.0	3.5	8.0	8.2	6.4	6.3	6.8	6.5
Thailand	3.2	4.6	5.1	5.0	2.5	–2.3	7.8	0.1	6.5	3.1	5.2	4.7
Timor-Leste[4]	. . .	6.5	–3.2	11.6	14.6	12.8	9.5	12.0	8.3	8.1	8.0	10.0
Tonga	1.7	0.2	–2.8	–1.4	2.6	3.3	3.1	1.9	0.7	1.0	1.6	1.7
Tuvalu	. . .	–3.8	2.1	6.4	8.0	–4.4	–2.7	8.5	0.2	1.1	1.3	1.1
Vanuatu	1.5	5.3	8.5	5.2	6.5	3.3	1.6	1.4	2.3	3.3	4.2	4.0
Vietnam	7.3	7.5	7.0	7.1	5.7	5.4	6.4	6.2	5.2	5.3	5.4	5.5

Table A4. Emerging Market and Developing Economies: Real GDP *(continued)*

(Annual percent change)

	Average									Projections		
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
Latin America and the Caribbean	**2.5**	**4.7**	**5.6**	**5.7**	**4.2**	**–1.2**	**6.0**	**4.6**	**2.9**	**2.7**	**3.1**	**3.7**
Antigua and Barbuda	2.7	7.2	12.7	7.1	1.5	–10.7	–8.5	–3.0	1.6	1.7	3.2	3.5
Argentina[5]	1.1	9.2	8.5	8.7	6.8	0.9	9.2	8.9	1.9	3.5	2.8	2.8
The Bahamas	4.0	3.4	2.5	1.4	–2.3	–4.2	1.0	1.7	1.8	1.9	2.1	2.5
Barbados	1.8	4.0	5.7	1.7	0.3	–4.1	0.2	0.8	0.0	–0.8	–1.1	1.0
Belize	5.5	2.6	5.1	1.2	3.8	0.0	2.7	1.9	5.3	2.5	2.5	2.5
Bolivia	3.3	4.4	4.8	4.6	6.1	3.4	4.1	5.2	5.2	5.4	5.0	5.0
Brazil	2.5	3.2	4.0	6.1	5.2	–0.3	7.5	2.7	0.9	2.5	2.5	3.5
Chile	4.7	6.3	5.8	5.2	3.1	–0.9	5.7	5.8	5.6	4.4	4.5	4.5
Colombia	2.3	4.7	6.7	6.9	3.5	1.7	4.0	6.6	4.0	3.7	4.2	4.5
Costa Rica	4.3	5.9	8.8	7.9	2.7	–1.0	5.0	4.4	5.1	3.5	3.8	4.5
Dominica	2.1	–0.3	4.6	6.0	7.8	–1.1	1.2	1.0	–1.7	1.1	1.5	2.0
Dominican Republic	4.8	9.3	10.7	8.5	5.3	3.5	7.8	4.5	3.9	2.0	3.6	5.0
Ecuador	2.7	5.3	4.4	2.2	6.4	0.6	3.0	7.8	5.1	4.0	4.0	4.0
El Salvador	3.0	3.6	3.9	3.8	1.3	–3.1	1.4	2.2	1.9	1.6	1.6	2.0
Grenada	4.8	13.3	–4.0	6.1	0.9	–6.7	–0.4	1.0	–0.8	0.8	1.0	2.5
Guatemala	3.4	3.3	5.4	6.3	3.3	0.5	2.9	4.2	3.0	3.3	3.4	3.5
Guyana	2.3	–1.9	5.1	7.0	2.0	3.3	4.4	5.4	4.8	5.3	5.8	3.4
Haiti	1.7	1.8	2.2	3.3	0.8	2.9	–5.4	5.6	2.8	3.4	4.5	5.4
Honduras	3.6	6.1	6.6	6.2	4.2	–2.4	3.7	3.8	3.9	2.8	2.8	3.0
Jamaica	0.8	0.9	2.9	1.4	–0.8	–3.4	–1.4	1.4	–0.5	0.4	1.3	2.6
Mexico	2.4	3.2	5.0	3.1	1.2	–4.5	5.1	4.0	3.6	1.2	3.0	3.8
Nicaragua	4.2	4.3	4.2	5.0	4.0	–2.2	3.6	5.4	5.2	4.2	4.0	4.0
Panama	4.4	7.2	8.5	12.1	10.1	3.9	7.5	10.8	10.7	7.5	6.9	6.2
Paraguay	1.6	2.1	4.8	5.4	6.4	–4.0	13.1	4.3	–1.2	12.0	4.6	4.7
Peru	3.5	6.8	7.7	8.9	9.8	0.9	8.8	6.9	6.3	5.4	5.7	5.8
St. Kitts and Nevis	3.4	8.4	4.7	4.8	3.9	–4.2	0.0	–1.9	–0.9	1.9	3.2	3.5
St. Lucia	2.3	–0.5	7.6	1.0	4.7	–0.1	–0.2	1.8	–0.9	0.2	1.3	2.3
St. Vincent and the Grenadines	4.3	3.0	6.0	3.0	–0.5	–2.2	–2.3	0.4	1.5	1.3	2.0	3.0
Suriname	3.0	4.9	5.8	5.1	4.1	3.0	4.1	4.7	4.8	4.7	4.0	4.7
Trinidad and Tobago	7.7	6.2	13.2	4.8	3.4	–4.4	0.2	–2.6	0.2	1.6	2.3	1.7
Uruguay	0.4	6.8	4.1	6.5	7.2	2.2	8.9	6.5	3.9	3.5	3.3	3.9
Venezuela	1.0	10.3	9.9	8.8	5.3	–3.2	–1.5	4.2	5.6	1.0	1.7	2.5
Middle East, North Africa, Afghanistan, and Pakistan	**4.6**	**6.0**	**6.7**	**5.9**	**5.0**	**2.8**	**5.2**	**3.9**	**4.6**	**2.3**	**3.6**	**4.4**
Afghanistan	. . .	11.2	5.6	13.7	3.6	21.0	8.4	6.1	12.5	3.1	3.5	4.9
Algeria	4.1	5.9	1.7	3.4	2.0	1.7	3.6	2.6	3.3	3.1	3.7	3.8
Bahrain	4.8	7.9	6.7	8.4	6.3	3.2	4.7	2.1	4.8	4.4	3.3	3.8
Djibouti	0.6	3.1	4.8	5.1	5.8	5.0	3.5	4.5	4.8	5.0	6.0	6.0
Egypt	4.8	4.5	6.8	7.1	7.2	4.7	5.1	1.8	2.2	1.8	2.8	4.0
Iran[6]	4.9	4.7	6.2	6.4	0.6	3.9	5.9	3.0	–1.9	–1.5	1.3	2.4
Iraq	. . .	4.4	10.2	1.4	6.6	5.8	5.9	8.6	8.4	3.7	6.3	9.6
Jordan	4.6	8.1	8.1	8.2	7.2	5.5	2.3	2.6	2.8	3.3	3.5	4.5
Kuwait	4.1	10.1	7.5	6.0	2.5	–7.1	–2.4	6.3	6.2	0.8	2.6	3.9
Lebanon	4.1	0.7	1.4	8.4	8.6	9.0	7.0	1.5	1.5	1.5	1.5	4.0
Libya	0.6	11.9	6.5	6.4	2.7	–0.8	5.0	–62.1	104.5	–5.1	25.5	8.4
Mauritania	3.7	5.4	11.4	1.0	3.5	–1.2	4.7	3.6	6.9	6.4	6.4	7.1
Morocco	3.4	3.0	7.8	2.7	5.6	4.8	3.6	5.0	2.7	5.1	3.8	5.4
Oman	3.2	4.0	5.5	6.7	13.2	3.3	5.6	4.5	5.0	5.1	3.4	3.6
Pakistan	4.2	9.0	5.8	5.5	5.0	0.4	2.6	3.7	4.4	3.6	2.5	5.0
Qatar	9.6	7.5	26.2	18.0	17.7	12.0	16.7	13.0	6.2	5.1	5.0	6.5
Saudi Arabia	2.7	7.3	5.6	6.0	8.4	1.8	7.4	8.6	5.1	3.6	4.4	4.3
Sudan[7]	15.8	0.4	8.9	8.5	3.0	5.2	2.5	–1.8	–3.3	3.9	2.5	3.6
Syria[8]	2.6	6.2	5.0	5.7	4.5	5.9	3.4	. . .	. . .	. . .	. . .	. . .
Tunisia	4.8	4.0	5.7	6.3	4.5	3.1	2.9	–1.9	3.6	3.0	3.7	4.5
United Arab Emirates	5.9	4.9	9.8	3.2	3.2	–4.8	1.7	3.9	4.4	4.0	3.9	3.4
Yemen	4.7	5.6	3.2	3.3	3.6	3.9	7.7	–12.7	2.4	6.0	3.4	3.7

Table A4. Emerging Market and Developing Economies: Real GDP *(concluded)*

(Annual percent change)

	Average									Projections		
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
Sub-Saharan Africa	**4.5**	**6.3**	**6.4**	**7.1**	**5.7**	**2.6**	**5.6**	**5.5**	**4.9**	**5.0**	**6.0**	**5.7**
Angola	7.7	20.6	20.7	22.6	13.8	2.4	3.4	3.9	5.2	5.6	6.3	6.7
Benin	4.8	2.9	3.8	4.6	5.0	2.7	2.6	3.5	5.4	5.0	4.8	4.5
Botswana	6.1	4.6	8.0	8.7	3.9	–7.8	8.6	6.1	4.2	3.9	4.1	4.0
Burkina Faso	6.3	8.7	6.3	4.1	5.8	3.0	8.4	5.0	9.0	6.5	6.4	6.7
Burundi	–0.3	4.4	5.4	4.8	5.0	3.5	3.8	4.2	4.0	4.5	4.7	5.4
Cameroon	4.3	2.3	3.2	2.8	3.6	1.9	3.3	4.1	4.6	4.6	4.9	5.4
Cape Verde	7.3	5.8	9.1	9.2	6.7	–1.3	1.5	4.0	2.5	1.5	4.4	5.0
Central African Republic	0.9	2.5	4.8	4.6	2.1	1.7	3.0	3.3	4.1	–14.5	0.2	5.8
Chad	7.7	7.9	0.6	3.3	3.1	4.2	13.5	0.1	8.9	3.9	10.5	2.6
Comoros	2.1	4.2	1.2	0.5	1.0	1.8	2.1	2.2	3.0	3.5	4.0	4.1
Democratic Republic of the Congo	–0.6	7.8	5.6	6.3	6.2	2.8	7.2	6.9	7.2	6.2	10.5	5.9
Republic of Congo	2.9	7.8	6.2	–1.6	5.6	7.5	8.8	3.4	3.8	5.8	4.8	4.7
Côte d'Ivoire	1.9	1.9	0.7	1.6	2.3	3.7	2.4	–4.7	9.8	8.0	8.0	6.9
Equatorial Guinea	39.3	9.7	1.3	18.7	13.8	–3.6	–2.6	4.6	5.3	–1.5	–1.9	–7.7
Eritrea	1.8	2.6	–1.0	1.4	–9.8	3.9	2.2	8.7	7.0	1.1	1.9	2.9
Ethiopia	4.8	12.6	11.5	11.8	11.2	10.0	10.6	11.4	8.5	7.0	7.5	7.0
Gabon	1.0	1.5	–1.9	5.2	1.0	–2.9	6.7	7.1	5.6	6.6	6.8	7.7
The Gambia	4.2	–0.9	1.1	3.6	5.7	6.4	6.5	–4.3	5.3	6.4	8.5	5.5
Ghana	4.7	6.0	6.1	6.5	8.4	4.0	8.0	15.0	7.9	7.9	6.1	8.0
Guinea	3.8	3.0	2.5	1.8	4.9	–0.3	1.9	3.9	3.9	2.9	5.2	18.6
Guinea-Bissau	0.2	4.3	2.1	3.2	3.2	3.0	3.5	5.3	–1.5	3.5	2.7	3.7
Kenya	2.8	5.9	6.3	7.0	1.5	2.7	5.8	4.4	4.6	5.9	6.2	6.1
Lesotho	3.3	2.9	4.1	4.9	5.1	4.8	6.3	5.7	4.5	4.1	5.0	5.3
Liberia	. . .	5.9	8.9	13.2	6.2	5.3	6.1	7.9	8.3	8.1	6.8	9.8
Madagascar	2.8	4.6	5.0	6.2	7.1	–4.1	0.4	1.8	1.9	2.6	3.8	5.1
Malawi	4.3	2.6	2.1	9.5	8.3	9.0	6.5	4.3	1.9	5.0	6.1	6.5
Mali	4.7	6.1	5.3	4.3	5.0	4.5	5.8	2.7	–1.2	4.8	7.4	4.9
Mauritius	4.4	1.5	4.5	5.9	5.5	3.0	4.1	3.8	3.3	3.4	4.4	4.5
Mozambique	8.5	8.4	8.7	7.3	6.8	6.3	7.1	7.3	7.4	7.0	8.5	8.0
Namibia	4.3	2.5	7.1	5.4	3.4	–1.1	6.3	5.7	5.0	4.4	4.0	4.4
Niger	2.8	8.4	5.8	0.6	9.6	–1.0	10.7	2.2	11.2	6.2	6.3	6.6
Nigeria	6.5	5.4	6.2	7.0	6.0	7.0	8.0	7.4	6.6	6.2	7.4	6.6
Rwanda	10.1	9.4	9.2	7.6	11.2	6.2	7.2	8.2	8.0	7.5	7.5	6.8
São Tomé and Príncipe	2.6	1.6	12.6	2.0	9.1	4.0	4.5	4.9	4.0	4.5	5.5	1.5
Senegal	4.4	5.6	2.4	5.0	3.7	2.2	4.3	2.6	3.5	4.0	4.6	5.1
Seychelles	2.0	9.0	9.4	10.1	–1.9	–0.2	5.6	5.0	2.9	3.3	3.9	3.5
Sierra Leone	–0.8	4.5	4.2	8.0	5.2	3.2	5.3	6.0	15.2	13.3	14.0	5.3
South Africa	3.1	5.3	5.6	5.5	3.6	–1.5	3.1	3.5	2.5	2.0	2.9	3.5
South Sudan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	–47.6	24.7	43.0	8.0
Swaziland	2.8	2.2	2.9	2.8	3.1	1.2	1.9	0.3	–1.5	0.0	0.3	0.3
Tanzania	5.2	7.4	6.7	7.1	7.4	6.0	7.0	6.4	6.9	7.0	7.2	6.6
Togo	2.2	1.2	4.1	2.3	2.4	3.5	4.0	4.8	5.6	5.5	5.9	3.9
Uganda	7.1	10.0	7.0	8.1	10.4	4.1	6.2	6.2	2.8	5.6	6.5	7.0
Zambia	3.0	5.3	6.2	6.2	5.7	6.4	7.6	6.8	7.2	6.0	6.5	5.0
Zimbabwe[9]	. . .	–5.6	–3.4	–3.7	–17.8	8.9	9.6	10.6	4.4	3.2	3.6	4.5

[1]Data for some countries refer to real net material product (NMP) or are estimates based on NMP. The figures should be interpreted only as indicative of broad orders of magnitude because reliable, comparable data are not generally available. In particular, the growth of output of new private enterprises of the informal economy is not fully reflected in the recent figures.
[2]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[3]Moldova projections are based on data available for the first quarter of 2013.
[4]In this table only, the data for Timor-Leste are based on non-oil GDP.
[5]The data for Argentina are officially reported data. The IMF has, however, issued a declaration of censure and called on Argentina to adopt remedial measures to address the quality of the official GDP data. Alternative data sources have shown significantly lower real growth than the official data since 2008. In this context, the IMF is also using alternative estimates of GDP growth for the surveillance of macroeconomic developments in Argentina.
[6]Iran's real GDP growth for 2012 and beyond has not been significantly updated from the April 2013 WEO in light of the pending publication of national accounts by the central bank and the new authorities' plans.
[7]Data for 2011 exclude South Sudan after July 9. Data for 2012 and onward pertain to the current Sudan.
[8]Data for Syria are excluded for 2011 onward due to the uncertain political situation.
[9]The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in U.S. dollars. IMF staff estimates of U.S. dollar values may differ from authorities' estimates. Real GDP is in constant 2009 prices.

Table A5. Summary of Inflation

(Percent)

	Average									Projections		
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
GDP Deflators												
Advanced Economies	**1.7**	**2.0**	**2.0**	**2.1**	**1.9**	**0.7**	**1.0**	**1.3**	**1.2**	**1.2**	**1.7**	**1.8**
United States	1.9	3.2	3.1	2.7	2.0	0.8	1.2	2.0	1.7	1.4	1.6	2.1
Euro Area	1.9	1.9	1.8	2.4	2.0	1.0	0.8	1.2	1.3	1.3	1.3	1.5
Japan	–0.9	–1.3	–1.1	–0.9	–1.3	–0.5	–2.2	–1.9	–0.9	–0.3	2.1	1.4
Other Advanced Economies[1]	2.2	1.9	2.1	2.6	3.0	1.1	2.4	1.9	1.3	1.6	1.9	2.0
Consumer Prices												
Advanced Economies	**2.0**	**2.3**	**2.4**	**2.2**	**3.4**	**0.1**	**1.5**	**2.7**	**2.0**	**1.4**	**1.8**	**2.1**
United States	2.5	3.4	3.2	2.9	3.8	–0.3	1.6	3.1	2.1	1.4	1.5	2.2
Euro Area[2]	1.9	2.2	2.2	2.1	3.3	0.3	1.6	2.7	2.5	1.5	1.5	1.6
Japan	–0.1	–0.3	0.2	0.1	1.4	–1.3	–0.7	–0.3	0.0	0.0	2.9	2.0
Other Advanced Economies[1]	2.2	2.1	2.1	2.1	3.8	1.4	2.4	3.4	2.1	1.7	2.1	2.3
Emerging Market and Developing Economies	**13.0**	**5.9**	**5.7**	**6.5**	**9.2**	**5.2**	**5.9**	**7.1**	**6.1**	**6.2**	**5.7**	**4.8**
Regional Groups												
Central and Eastern Europe	31.1	5.9	5.9	6.0	8.1	4.7	5.3	5.3	5.8	4.1	3.5	3.6
Commonwealth of Independent States[3]	39.0	12.1	9.5	9.7	15.6	11.2	7.2	10.1	6.5	6.5	5.9	6.0
Developing Asia	4.9	3.7	4.2	5.3	7.4	3.0	5.3	6.3	4.7	5.0	4.7	4.0
Latin America and the Caribbean	13.0	6.2	5.3	5.4	7.9	5.9	5.9	6.6	5.9	6.7	6.5	5.1
Middle East, North Africa, Afghanistan, and Pakistan	7.0	7.1	8.2	10.3	12.2	7.4	6.9	9.7	10.7	11.7	10.0	7.9
Middle East and North Africa	7.1	6.9	8.2	10.6	12.4	6.3	6.5	9.2	10.8	12.3	10.3	8.2
Sub-Saharan Africa	16.4	8.7	7.1	6.4	12.9	9.4	7.4	9.3	9.0	6.9	6.3	5.5
Memorandum												
European Union	3.8	2.3	2.3	2.4	3.7	0.9	2.0	3.1	2.6	1.7	1.7	1.8
Analytical Groups												
By Source of Export Earnings												
Fuel	23.6	10.1	9.4	10.4	14.3	9.0	7.8	9.8	9.1	11.3	9.6	7.4
Nonfuel	10.5	4.9	4.8	5.6	8.0	4.4	5.4	6.6	5.4	5.1	4.9	4.3
Of Which, Primary Products	12.3	5.1	5.6	4.6	10.1	5.3	4.6	6.9	6.7	6.0	5.7	4.3
By External Financing Source												
Net Debtor Economies	13.4	6.1	6.3	6.1	9.2	7.2	6.7	7.3	7.1	6.7	6.2	5.2
Of Which, Official Financing	12.0	7.6	7.2	8.2	12.7	9.1	7.7	11.3	10.5	7.5	7.1	5.4
Net Debtor Economies by Debt-Servicing Experience												
Economies with Arrears and/or Rescheduling during 2007–11	14.8	7.8	9.1	8.0	11.5	6.3	8.0	11.8	11.8	9.0	8.7	7.5
Memorandum												
Median Inflation Rate												
Advanced Economies	2.2	2.1	2.3	2.2	3.9	0.6	2.0	3.1	2.6	1.6	1.8	2.0
Emerging Market and Developing Economies	5.8	5.4	6.0	6.2	10.3	3.8	4.3	5.6	4.6	4.4	4.5	4.0

[1]In this table, Other Advanced Economies means advanced economies excluding the United States, Euro Area countries, and Japan.
[2]Based on Eurostat's harmonized index of consumer prices.
[3]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table A6. Advanced Economies: Consumer Prices[1]

(Annual percent change)

	Average									Projections			End of Period[2]	Projections	
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018	2012	2013	2014
Advanced Economies	**2.0**	**2.3**	**2.4**	**2.2**	**3.4**	**0.1**	**1.5**	**2.7**	**2.0**	**1.4**	**1.8**	**2.1**	**1.7**	**1.3**	**1.9**
United States	2.5	3.4	3.2	2.9	3.8	–0.3	1.6	3.1	2.1	1.4	1.5	2.2	1.8	1.2	1.7
Euro Area[3]	1.9	2.2	2.2	2.1	3.3	0.3	1.6	2.7	2.5	1.5	1.5	1.6	2.2	1.3	1.4
Germany	1.3	1.9	1.8	2.3	2.8	0.2	1.2	2.5	2.1	1.6	1.8	1.9	2.0	1.6	1.8
France	1.6	1.9	1.9	1.6	3.2	0.1	1.7	2.3	2.2	1.0	1.5	1.8	1.5	1.0	1.5
Italy	2.7	2.2	2.2	2.0	3.5	0.8	1.6	2.9	3.3	1.6	1.3	1.5	2.6	1.3	1.1
Spain	3.0	3.4	3.6	2.8	4.1	–0.2	2.0	3.1	2.4	1.8	1.5	1.2	3.0	1.3	1.0
Netherlands	2.4	1.5	1.7	1.6	2.2	1.0	0.9	2.5	2.8	2.9	1.3	0.8	2.9	2.1	1.1
Belgium	1.7	2.5	2.3	1.8	4.5	0.0	2.3	3.4	2.6	1.4	1.2	1.2	2.1	1.4	1.1
Austria	1.5	2.1	1.7	2.2	3.2	0.4	1.7	3.6	2.6	2.2	1.8	1.8	2.9	1.9	1.8
Greece	4.6	3.5	3.2	2.9	4.2	1.2	4.7	3.3	1.5	–0.8	–0.4	1.3	0.8	–1.8	0.0
Portugal	3.0	2.1	3.0	2.4	2.7	–0.9	1.4	3.6	2.8	0.7	1.0	1.5	2.1	1.0	1.0
Finland	1.5	0.8	1.3	1.6	3.9	1.6	1.7	3.3	3.2	2.4	2.4	2.0	3.5	2.4	2.4
Ireland	3.1	2.2	2.7	2.9	3.1	–1.7	–1.6	1.2	1.9	1.0	1.2	1.7	1.5	1.8	1.4
Slovak Republic	7.7	2.8	4.3	1.9	3.9	0.9	0.7	4.1	3.7	1.7	2.0	2.3	3.4	1.6	2.1
Slovenia	8.0	2.5	2.5	3.6	5.7	0.9	1.8	1.8	2.6	2.3	1.8	2.1	2.5	2.4	1.5
Luxembourg	2.0	3.8	3.0	2.7	4.1	0.0	2.8	3.7	2.9	1.8	1.9	2.3	2.5	1.2	2.2
Estonia	8.9	4.1	4.4	6.6	10.4	–0.1	2.9	5.1	4.2	3.5	2.8	2.5	3.8	3.2	2.8
Cyprus	2.7	2.0	2.3	2.2	4.4	0.2	2.6	3.5	3.1	1.0	1.2	1.8	1.5	1.0	1.2
Malta	2.9	2.5	2.6	0.7	4.7	1.8	2.0	2.5	3.2	2.0	2.0	2.2	2.8	1.7	2.0
Japan	–0.1	–0.3	0.2	0.1	1.4	–1.3	–0.7	–0.3	0.0	0.0	2.9	2.0	–0.2	0.7	3.5
United Kingdom[3]	1.6	2.0	2.3	2.3	3.6	2.1	3.3	4.5	2.8	2.7	2.3	2.0	2.6	2.7	2.3
Canada	2.0	2.2	2.0	2.1	2.4	0.3	1.8	2.9	1.5	1.1	1.6	2.0	0.9	1.5	1.7
Korea	3.8	2.8	2.2	2.5	4.7	2.8	2.9	4.0	2.2	1.4	2.3	3.0	1.4	1.8	2.7
Australia	2.7	2.7	3.6	2.3	4.4	1.8	2.9	3.3	1.8	2.2	2.5	2.5	2.2	2.2	2.6
Taiwan Province of China	1.2	2.3	0.6	1.8	3.5	–0.9	1.0	1.4	1.9	1.2	2.0	2.0	1.6	1.4	2.0
Sweden	1.2	0.5	1.4	2.2	3.4	–0.5	1.2	3.0	0.9	0.2	1.6	2.0	–0.1	0.9	1.9
Hong Kong SAR	0.8	0.9	2.0	2.0	4.3	0.6	2.3	5.3	4.1	3.5	3.5	3.5	3.8	3.5	3.5
Switzerland	0.9	1.2	1.1	0.7	2.4	–0.5	0.7	0.2	–0.7	–0.2	0.2	1.0	–0.4	0.5	1.0
Singapore	0.9	0.5	1.0	2.1	6.6	0.6	2.8	5.2	4.6	2.3	2.7	2.3	4.0	1.9	2.7
Czech Republic	. . .	1.8	2.5	2.9	6.3	1.0	1.5	1.9	3.3	1.8	1.8	2.0	2.4	1.9	2.0
Norway	2.1	1.5	2.3	0.7	3.8	2.2	2.4	1.3	0.7	1.8	1.8	2.5	1.4	1.7	2.0
Israel	4.8	1.3	2.1	0.5	4.6	3.3	2.7	3.5	1.7	1.6	2.1	2.0	1.6	2.1	2.0
Denmark	2.1	1.8	1.9	1.7	3.4	1.3	2.3	2.8	2.4	0.8	1.9	2.0	2.0	0.8	1.9
New Zealand	2.0	3.0	3.4	2.4	4.0	2.1	2.3	4.0	1.1	1.1	2.1	2.0	0.9	1.8	2.2
Iceland	3.2	4.0	6.7	5.1	12.7	12.0	5.4	4.0	5.2	3.7	3.1	2.5	4.2	3.6	2.9
San Marino	. . .	1.7	2.1	2.5	4.1	2.4	2.6	2.0	2.8	1.6	0.9	1.5	2.8	1.6	0.9
Memorandum															
Major Advanced Economies	1.8	2.4	2.4	2.2	3.2	–0.1	1.4	2.6	1.9	1.3	1.8	2.1	1.6	1.3	2.0

[1]Movements in consumer prices are shown as annual averages.
[2]Monthly year-over-year changes and for several countries, on quarterly basis.
[3]Based on Eurostat's harmonized index of consumer prices.

Table A7. Emerging Market and Developing Economies: Consumer Prices[1]

(Annual percent change)

	Average									Projections			End of Period[2]	Projections	
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018	2012	2013	2014
Central and Eastern Europe[3]	**31.1**	**5.9**	**5.9**	**6.0**	**8.1**	**4.7**	**5.3**	**5.3**	**5.8**	**4.1**	**3.5**	**3.6**	**4.7**	**4.6**	**3.9**
Albania	8.4	2.4	2.4	2.9	3.4	2.3	3.5	3.4	2.0	2.2	2.7	3.0	2.4	2.5	3.0
Bosnia and Herzegovina	. . .	3.6	6.1	1.5	7.4	–0.4	2.1	3.7	2.0	1.8	1.8	2.2	2.0	1.8	1.8
Bulgaria	52.8	6.0	7.4	7.6	12.0	2.5	3.0	3.4	2.4	1.4	1.5	2.5	2.8	1.0	2.0
Croatia	3.4	3.3	3.2	2.9	6.1	2.4	1.0	2.3	3.4	3.0	2.5	3.0	4.7	2.3	2.5
Hungary	12.7	3.6	3.9	7.9	6.1	4.2	4.8	3.9	5.7	2.3	3.0	3.0	5.0	3.0	3.0
Kosovo	. . .	–1.4	0.6	4.4	9.4	–2.4	3.5	7.3	2.5	2.1	1.8	1.5	3.7	1.5	1.7
Latvia	7.1	6.9	6.6	10.1	15.3	3.3	–1.2	4.2	2.3	0.7	2.1	2.3	1.6	1.8	1.1
Lithuania	. . .	2.7	3.8	5.8	11.1	4.2	1.2	4.1	3.2	1.3	2.1	2.4	2.9	1.7	2.2
FYR Macedonia	3.5	0.5	3.2	2.3	8.4	–0.8	1.5	3.9	3.3	2.8	2.1	2.0	4.7	2.2	2.0
Montenegro	. . .	3.4	2.1	3.5	9.0	3.6	0.7	3.1	3.6	2.8	2.9	2.3	5.1	2.8	2.3
Poland	10.1	2.2	1.2	2.5	4.4	3.5	2.6	4.3	3.7	1.4	1.9	2.5	2.4	1.9	2.0
Romania	42.1	9.0	6.6	4.8	7.8	5.6	6.1	5.8	3.3	4.5	2.8	2.5	5.0	3.3	3.0
Serbia	. . .	16.2	10.7	6.9	12.4	8.1	6.2	11.1	7.3	8.5	5.0	3.5	12.2	5.0	4.8
Turkey	57.0	8.2	9.6	8.8	10.4	6.3	8.6	6.5	8.9	7.7	6.5	6.0	6.2	8.0	6.0
Commonwealth of Independent States[3,4]	**39.0**	**12.1**	**9.5**	**9.7**	**15.6**	**11.2**	**7.2**	**10.1**	**6.5**	**6.5**	**5.9**	**6.0**	**6.3**	**6.1**	**5.7**
Russia	38.3	12.7	9.7	9.0	14.1	11.7	6.9	8.4	5.1	6.7	5.7	5.5	6.6	6.2	5.3
Excluding Russia	41.1	10.6	8.9	11.6	19.4	10.2	7.9	14.1	9.9	6.0	6.4	7.1	5.7	5.7	6.7
Armenia	16.8	0.6	3.0	4.6	9.0	3.5	7.3	7.7	2.5	7.0	3.5	4.0	3.2	7.5	3.8
Azerbaijan	22.7	9.7	8.4	16.6	20.8	1.6	5.7	7.9	1.0	3.7	6.3	6.0	–0.3	6.0	6.5
Belarus	104.7	10.3	7.0	8.4	14.8	13.0	7.7	53.2	59.2	17.5	14.8	15.8	21.8	12.0	15.5
Georgia	19.9	8.3	9.2	9.2	10.0	1.7	7.1	8.5	–0.9	–0.3	4.0	5.0	–1.4	2.0	5.0
Kazakhstan	22.8	7.5	8.6	10.8	17.1	7.3	7.1	8.3	5.1	6.3	6.3	6.0	6.0	6.0	6.2
Kyrgyz Republic	17.2	4.3	5.6	10.2	24.5	6.8	7.8	16.6	2.8	8.6	7.2	5.4	7.5	7.0	7.0
Moldova[5]	17.7	11.9	12.7	12.4	12.7	0.0	7.4	7.6	4.6	4.4	4.3	5.0	4.0	4.1	5.0
Tajikistan	78.4	7.3	10.0	13.2	20.4	6.5	6.5	12.4	5.8	7.5	7.2	6.0	6.4	7.0	7.0
Turkmenistan	85.0	10.7	8.2	6.3	14.5	–2.7	4.4	5.3	5.3	7.6	7.0	6.0	7.8	7.5	6.5
Ukraine	36.5	13.5	9.1	12.8	25.2	15.9	9.4	8.0	0.6	0.0	1.9	4.0	–0.2	0.8	2.3
Uzbekistan	45.6	10.0	14.2	12.3	12.7	14.1	9.4	12.8	12.1	12.1	10.4	11.0	10.4	11.5	11.0
Developing Asia	**4.9**	**3.7**	**4.2**	**5.3**	**7.4**	**3.0**	**5.3**	**6.3**	**4.7**	**5.0**	**4.7**	**4.0**	**4.8**	**4.8**	**4.6**
Bangladesh	5.2	7.0	6.8	9.1	8.9	5.4	8.1	10.7	8.7	7.6	6.5	5.5	7.7	7.0	6.5
Bhutan	6.3	5.3	5.0	5.2	8.3	4.4	7.0	8.9	10.9	11.1	9.3	6.9	9.0	11.0	8.9
Brunei Darussalam	1.0	1.1	0.2	1.0	2.1	1.0	0.4	2.0	0.5	1.5	1.8	1.4	0.5	1.5	1.8
Cambodia	4.5	6.3	6.1	7.7	25.0	–0.7	4.0	5.5	2.9	2.9	3.4	3.0	2.5	4.2	3.0
China	3.0	1.8	1.5	4.8	5.9	–0.7	3.3	5.4	2.6	2.7	3.0	3.0	2.5	3.0	3.0
Fiji	2.9	2.3	2.5	4.8	7.7	3.7	5.5	8.7	4.3	2.9	3.0	2.9	1.5	2.9	3.0
India	6.2	4.4	6.7	6.2	9.1	12.4	10.4	8.4	10.4	10.9	8.9	6.7	11.4	9.0	8.8
Indonesia	13.4	10.5	13.1	6.7	9.8	4.8	5.1	5.4	4.3	7.3	7.5	4.5	4.3	9.5	6.0
Kiribati	2.1	–0.4	–1.0	3.6	13.7	9.8	–3.9	1.5	–3.0	2.5	2.5	2.5	–3.9	2.5	2.5
Lao P.D.R.	30.0	7.2	6.8	4.5	7.6	0.0	6.0	7.6	4.3	7.3	9.4	5.2	4.7	7.6	10.1
Malaysia	2.5	3.0	3.6	2.0	5.4	0.6	1.7	3.2	1.7	2.0	2.6	2.2	1.7	2.0	2.6
Maldives	2.4	2.5	3.5	6.8	12.0	4.5	6.1	11.3	10.9	4.4	5.3	4.4	5.4	4.6	4.5
Marshall Islands	. . .	3.5	5.3	2.6	14.7	0.5	1.8	5.4	5.7	3.9	2.0	2.0	5.7	3.9	2.0
Micronesia	. . .	4.3	4.6	3.3	8.3	6.2	3.9	5.4	4.6	4.0	3.3	2.0	3.7	4.5	3.3
Mongolia	17.5	12.5	4.5	8.2	26.8	6.3	10.2	7.7	15.0	9.7	7.5	5.9	14.2	9.3	8.4
Myanmar	. . .	10.7	26.3	30.9	11.5	2.2	8.2	2.8	2.8	5.6	6.3	4.9	4.7	6.5	6.1
Nepal	6.0	4.5	8.0	6.2	6.7	12.6	9.5	9.6	8.3	9.9	8.3	5.5	11.5	7.7	8.2
Palau	. . .	3.2	4.8	3.0	10.0	4.7	1.1	2.6	5.4	3.0	2.5	2.0	1.7	2.5	2.0
Papua New Guinea	11.4	1.8	2.4	0.9	10.8	6.9	6.0	8.4	2.2	5.3	6.0	6.0	1.6	8.0	6.0
Philippines	5.8	6.6	5.5	2.9	8.2	4.2	3.8	4.7	3.2	2.8	3.5	3.1	3.0	3.4	3.7
Samoa	3.6	7.8	3.5	4.7	6.3	14.6	–0.2	2.9	6.2	–0.2	–1.0	4.0	5.5	–1.7	1.0
Solomon Islands	9.1	7.5	11.2	7.7	17.3	7.1	0.9	7.4	5.9	6.1	4.8	4.9	5.1	5.3	5.0
Sri Lanka	9.5	11.0	10.0	15.8	22.4	3.5	6.2	6.7	7.5	7.4	6.9	5.5	9.2	7.4	6.3
Thailand	3.4	4.5	4.6	2.2	5.5	–0.9	3.3	3.8	3.0	2.2	2.1	2.0	3.6	2.0	2.0
Timor-Leste	. . .	1.8	4.1	9.0	7.6	0.1	4.5	11.7	13.1	10.6	9.5	5.8	10.8	10.4	8.5
Tonga	5.8	8.5	6.1	7.4	7.5	3.5	3.9	4.6	3.1	3.2	3.9	5.6	2.7	3.5	4.4
Tuvalu	. . .	3.2	4.2	2.3	10.4	–0.3	–1.9	0.5	1.4	2.7	2.7	2.7	. . .	. . .	. . .
Vanuatu	2.4	1.1	2.0	3.8	4.2	5.2	2.7	0.7	1.4	1.5	2.0	3.0	0.8	2.0	2.0
Vietnam	5.0	8.4	7.5	8.3	23.1	6.7	9.2	18.7	9.1	8.8	7.4	6.8	6.8	8.2	7.9

Table A7. Emerging Market and Developing Economies: Consumer Prices[1] *(continued)*

(Annual percent change)

	Average									Projections			End of Period[2]	Projections	
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018	2012	2013	2014
Latin America and the Caribbean	**13.0**	**6.2**	**5.3**	**5.4**	**7.9**	**5.9**	**5.9**	**6.6**	**5.9**	**6.7**	**6.5**	**5.1**	**5.9**	**6.9**	**6.4**
Antigua and Barbuda	1.8	2.1	1.8	1.4	5.3	–0.6	3.4	3.5	3.4	2.0	3.1	2.5	1.8	2.3	3.1
Argentina[6]	4.3	9.6	10.9	8.8	8.6	6.3	10.5	9.8	10.0	10.5	11.4	10.8	10.8	10.8	10.8
The Bahamas	1.6	2.1	2.1	2.5	4.7	1.9	1.3	3.2	2.0	1.0	1.9	2.0	0.7	1.0	1.9
Barbados	1.9	6.1	7.3	4.0	8.1	3.7	5.8	9.4	4.5	2.5	2.6	3.4	2.4	2.6	2.5
Belize	1.8	3.7	4.2	2.3	6.4	–1.1	0.9	1.5	1.3	1.3	2.0	2.0	0.6	2.0	2.0
Bolivia	5.1	5.4	4.3	6.7	14.0	3.3	2.5	9.9	4.5	4.8	4.1	4.0	4.5	4.4	4.2
Brazil	12.9	6.9	4.2	3.6	5.7	4.9	5.0	6.6	5.4	6.3	5.8	4.5	5.8	5.9	5.8
Chile	4.4	3.1	3.4	4.4	8.7	1.5	1.4	3.3	3.0	1.7	3.0	3.0	1.5	2.6	3.0
Colombia	12.5	5.0	4.3	5.5	7.0	4.2	2.3	3.4	3.2	2.2	3.0	3.0	2.4	2.4	3.0
Costa Rica	12.8	13.8	11.5	9.4	13.4	7.8	5.7	4.9	4.5	4.7	5.0	5.0	4.6	5.0	5.0
Dominica	1.4	1.6	2.6	3.2	6.4	0.0	2.8	1.3	1.4	2.0	1.6	2.1	3.6	1.5	1.6
Dominican Republic	13.1	4.2	7.6	6.1	10.6	1.4	6.3	8.5	3.7	4.5	4.8	4.0	3.9	5.0	4.5
Ecuador	30.2	2.1	3.3	2.3	8.4	5.2	3.6	4.5	5.1	2.8	2.4	2.7	4.2	2.4	2.6
El Salvador	4.1	4.7	4.0	4.6	7.3	0.5	1.2	5.1	1.7	1.9	2.4	2.6	0.8	2.3	2.6
Grenada	1.6	3.5	4.3	3.9	8.0	–0.3	3.4	3.0	2.4	1.6	1.7	2.0	1.8	1.8	1.6
Guatemala	7.5	9.1	6.6	6.8	11.4	1.9	3.9	6.2	3.8	4.5	4.5	4.0	3.4	4.8	4.8
Guyana	5.9	6.9	6.7	12.2	8.1	3.0	3.7	5.0	2.6	4.1	5.2	4.0	3.4	4.8	5.5
Haiti	17.8	16.8	14.2	9.0	14.4	3.4	4.1	7.4	6.8	7.1	4.5	3.1	6.5	6.0	5.0
Honduras	14.1	8.8	5.6	6.9	11.4	5.5	4.7	6.8	5.2	5.4	5.0	5.5	5.4	5.5	5.0
Jamaica	11.6	13.4	8.9	9.2	22.0	9.6	12.6	7.5	6.9	9.3	9.9	7.7	8.0	10.5	9.4
Mexico	14.8	4.0	3.6	4.0	5.1	5.3	4.2	3.4	4.1	3.6	3.0	3.0	4.0	3.3	3.1
Nicaragua	8.6	9.6	9.1	11.1	19.8	3.7	5.5	8.1	7.2	7.7	7.1	7.0	6.6	7.3	7.0
Panama	0.9	2.9	2.5	4.2	8.8	2.4	3.5	5.9	5.7	4.2	4.0	3.2	4.6	4.5	3.9
Paraguay	9.3	6.8	9.6	8.1	10.2	2.6	4.7	8.3	3.7	3.2	4.6	4.0	4.0	4.2	5.0
Peru	5.3	1.6	2.0	1.8	5.8	2.9	1.5	3.4	3.7	2.8	2.5	2.0	2.6	2.8	2.2
St. Kitts and Nevis	3.1	3.4	8.5	4.5	5.3	2.1	0.6	7.1	1.4	3.0	2.5	2.5	0.3	3.4	2.5
St. Lucia	2.5	3.9	3.6	2.8	5.5	–0.2	3.3	2.8	4.2	3.1	2.8	3.3	5.9	1.7	2.2
St. Vincent and the Grenadines	1.5	3.4	3.0	7.0	10.1	0.4	0.8	3.2	2.6	2.1	2.5	2.6	1.0	2.5	2.6
Suriname	39.5	9.6	11.1	6.6	15.0	0.0	6.9	17.7	5.0	2.8	4.7	4.0	4.4	3.0	4.0
Trinidad and Tobago	4.2	6.9	8.3	7.9	12.0	7.0	10.5	5.1	9.3	5.6	4.0	4.0	7.2	4.0	4.0
Uruguay	15.3	4.7	6.4	8.1	7.9	7.1	6.7	8.1	8.1	8.5	8.6	7.0	7.5	8.9	9.1
Venezuela	35.3	16.0	13.7	18.7	30.4	27.1	28.2	26.1	21.1	37.9	38.0	20.0	20.1	46.0	35.0
Middle East, North Africa, Afghanistan, and Pakistan	**7.0**	**7.1**	**8.2**	**10.3**	**12.2**	**7.4**	**6.9**	**9.7**	**10.7**	**11.7**	**10.0**	**7.9**	**12.5**	**10.8**	**9.6**
Afghanistan	. . .	9.7	5.3	12.5	23.4	–10.0	7.1	10.4	4.5	7.1	5.5	5.0	5.8	6.0	4.5
Algeria	7.3	1.4	2.3	3.7	4.9	5.7	3.9	4.5	8.9	5.0	4.5	4.0	9.0	8.2	4.5
Bahrain	0.7	2.6	2.0	3.3	3.5	2.8	2.0	–0.4	2.8	2.7	2.3	2.0	2.6	2.5	2.0
Djibouti	2.2	3.1	3.5	5.0	12.0	1.7	4.0	5.1	3.7	2.7	2.5	2.5	2.5	1.1	2.3
Egypt	5.0	8.8	4.2	11.0	11.7	16.2	11.7	11.1	8.6	6.9	10.3	12.3	7.3	9.8	10.4
Iran	19.5	10.4	11.9	18.4	25.4	10.8	12.4	21.5	30.5	42.3	29.0	20.0	41.2	35.0	25.0
Iraq	. . .	37.0	53.2	30.8	2.7	–2.2	2.4	5.6	6.1	2.3	5.0	5.5	3.6	4.0	5.5
Jordan	2.5	3.5	6.3	4.7	13.9	–0.7	5.0	4.4	4.8	5.9	3.2	2.1	7.2	3.2	2.6
Kuwait	1.6	4.1	3.1	5.5	6.3	4.6	4.5	4.9	3.2	3.0	3.5	4.1	3.2	3.0	3.5
Lebanon	3.5	–0.7	5.6	4.1	10.8	1.2	4.5	5.0	6.6	6.3	3.1	2.5	10.1	3.5	2.4
Libya	–0.2	2.7	1.5	6.2	10.4	2.4	2.5	15.9	6.1	3.6	9.4	5.4	–3.7	10.0	9.0
Mauritania	5.5	12.1	6.2	7.3	7.5	2.1	6.3	5.7	4.9	4.2	5.2	5.5	3.4	5.1	5.3
Morocco	2.1	1.0	3.3	2.0	3.9	1.0	1.0	0.9	1.3	2.3	2.5	2.5	2.6	2.3	2.5
Oman	–0.2	1.9	3.4	5.9	12.6	3.5	3.3	4.0	2.9	2.8	3.2	3.5	2.9	2.8	3.2
Pakistan	6.7	9.3	8.0	7.8	10.8	17.6	10.1	13.7	11.0	7.4	7.9	6.0	11.3	5.9	10.0
Qatar	3.0	8.8	11.8	13.8	15.0	–4.9	–2.4	1.9	1.9	3.7	4.0	5.0	1.9	3.7	4.0
Saudi Arabia	0.1	0.5	1.9	5.0	6.1	4.1	3.8	3.7	2.9	3.8	3.6	3.5	3.7	3.8	3.5
Sudan[7]	27.3	8.5	7.2	8.0	14.3	11.3	13.0	18.1	35.5	32.1	27.4	10.0	44.4	19.8	30.2
Syria[8]	2.2	7.2	10.4	4.7	15.2	2.8	4.4	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Tunisia	3.3	2.0	4.1	3.4	4.9	3.5	4.4	3.5	5.6	6.0	4.7	4.0	5.9	5.3	5.0
United Arab Emirates	3.0	6.2	9.3	11.1	12.3	1.6	0.9	0.9	0.7	1.5	2.5	3.0	1.1	2.0	2.5
Yemen	17.4	9.9	10.8	7.9	19.0	3.7	11.2	19.5	9.9	12.0	12.0	7.5	5.8	12.0	12.0

Table A7. Emerging Market and Developing Economies: Consumer Prices[1] *(concluded)*

(Annual percent change)

	Average									Projections			End of Period[2]	Projections	
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018	2012	2013	2014
Sub-Saharan Africa	**16.4**	**8.7**	**7.1**	**6.4**	**12.9**	**9.4**	**7.4**	**9.3**	**9.0**	**6.9**	**6.3**	**5.5**	**7.9**	**6.8**	**5.8**
Angola	320.9	23.0	13.3	12.2	12.5	13.7	14.5	13.5	10.3	9.2	8.5	7.0	9.0	8.9	8.0
Benin	4.2	5.4	3.8	1.3	7.4	0.9	2.2	2.7	6.7	2.8	2.8	2.8	6.8	3.0	2.8
Botswana	8.3	8.6	11.6	7.1	12.6	8.1	6.9	8.5	7.5	6.8	5.8	5.2	7.4	6.1	5.5
Burkina Faso	2.9	6.4	2.4	–0.2	10.7	2.6	–0.6	2.8	3.8	2.0	2.0	2.0	1.6	2.0	2.0
Burundi	14.3	1.2	9.1	14.4	26.0	4.6	4.1	14.9	11.8	10.0	5.7	4.2	11.8	10.0	5.7
Cameroon	4.7	2.0	4.9	1.1	5.3	3.0	1.3	2.9	2.4	2.5	2.5	2.5	2.5	2.5	2.5
Cape Verde	3.4	0.4	4.8	4.4	6.8	1.0	2.1	4.5	2.5	3.3	2.7	2.5	4.1	2.2	3.1
Central African Republic	3.1	2.9	6.7	0.9	9.3	3.5	1.5	1.2	5.2	6.8	6.9	2.0	1.7	12.0	2.3
Chad	3.1	3.7	7.7	–7.4	8.3	10.1	–2.1	1.9	7.7	2.6	3.9	3.0	2.1	5.0	3.0
Comoros	3.2	3.0	3.4	4.5	4.8	4.8	3.9	6.8	6.3	4.1	3.2	3.2	1.0	3.2	3.2
Democratic Republic of the Congo	180.3	21.4	13.2	16.7	18.0	46.2	23.5	15.5	2.1	4.4	6.0	5.5	2.7	6.0	6.0
Republic of Congo	4.1	2.5	4.7	2.6	6.0	4.3	5.0	1.8	5.0	5.3	2.8	2.6	7.5	4.6	2.7
Côte d'Ivoire	4.0	3.9	2.5	1.9	6.3	1.0	1.4	4.9	1.3	2.9	2.5	2.5	3.4	2.0	2.5
Equatorial Guinea	6.7	5.6	4.5	2.8	4.7	5.7	5.3	4.8	3.4	5.0	5.4	4.6	2.5	5.2	5.1
Eritrea	14.1	12.5	15.1	9.3	19.9	33.0	12.7	13.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
Ethiopia	3.4	11.7	13.6	17.2	44.4	8.5	8.1	33.2	24.1	7.2	8.2	8.0	14.9	8.1	8.0
Gabon	1.9	1.2	–1.4	5.0	5.3	1.9	1.4	1.3	2.7	–1.5	2.5	2.5	2.2	–2.2	2.5
The Gambia	6.0	5.0	2.1	5.4	4.5	4.6	5.0	4.8	4.6	6.0	6.0	5.0	4.9	7.0	5.0
Ghana	26.5	15.1	10.2	10.7	16.5	19.3	10.7	8.7	9.2	11.0	9.8	7.0	8.8	8.1	8.1
Guinea	6.3	31.4	34.7	22.9	18.4	4.7	15.5	21.4	15.2	12.7	8.6	6.0	12.8	11.8	7.0
Guinea-Bissau	14.6	3.2	0.7	4.6	10.4	–1.6	1.1	5.1	2.1	2.6	2.5	2.0	1.6	1.7	2.8
Kenya	6.7	7.8	6.0	4.3	15.1	10.6	4.3	14.0	9.4	5.4	5.0	5.0	7.0	7.0	5.0
Lesotho	8.1	3.6	6.3	9.2	10.7	5.9	3.4	6.0	5.6	6.5	6.2	5.9	5.0	5.2	5.1
Liberia	. . .	6.9	9.5	11.4	17.5	7.4	7.3	8.5	6.8	7.7	6.6	5.0	7.7	8.0	6.0
Madagascar	12.7	18.4	10.8	10.4	9.2	9.0	9.3	10.0	5.8	6.9	7.3	5.0	5.8	8.9	6.5
Malawi	27.7	15.4	13.9	8.0	8.7	8.4	7.4	7.6	21.3	26.0	8.4	4.1	34.6	14.2	7.0
Mali	2.4	6.4	1.5	1.5	9.1	2.2	1.3	3.1	5.3	0.1	0.5	2.0	2.4	1.8	3.3
Mauritius	5.7	4.8	8.7	8.6	9.7	2.5	2.9	6.5	3.9	4.7	4.7	5.0	3.2	5.5	5.1
Mozambique	16.3	6.4	13.2	8.2	10.3	3.3	12.7	10.4	2.1	5.5	5.6	5.6	2.2	6.1	5.4
Namibia	8.3	2.3	5.1	6.7	10.4	8.8	4.5	5.0	6.5	6.4	6.2	5.5	6.4	6.4	6.1
Niger	2.9	7.8	0.1	0.1	10.5	1.1	0.9	2.9	0.5	2.1	2.7	1.9	0.7	3.2	1.1
Nigeria	18.3	17.9	8.2	5.4	11.6	12.5	13.7	10.8	12.2	9.9	8.2	7.0	12.0	9.7	7.0
Rwanda	9.9	9.1	8.8	9.1	15.4	10.3	2.3	5.7	6.3	5.7	6.7	5.0	3.9	7.5	6.0
São Tomé and Príncipe	24.0	17.2	23.1	18.6	32.0	17.0	13.3	14.3	10.6	8.6	7.5	3.0	10.4	8.0	6.0
Senegal	2.1	1.7	2.1	5.9	5.8	–1.7	1.2	3.4	1.4	1.2	1.6	1.7	1.1	1.6	1.6
Seychelles	2.8	0.6	–1.9	5.3	37.0	31.7	–2.4	2.6	7.1	4.9	3.4	3.0	5.8	4.7	3.1
Sierra Leone	14.6	12.0	9.5	11.6	14.8	9.2	17.8	18.5	13.8	10.3	7.7	5.4	12.0	9.0	7.5
South Africa	6.4	3.4	4.7	7.1	11.5	7.1	4.3	5.0	5.7	5.9	5.5	5.0	5.6	5.7	5.4
South Sudan	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	45.1	2.8	7.2	5.0	25.2	10.4	5.0
Swaziland	7.6	1.8	5.2	8.1	12.7	7.4	4.5	6.1	8.9	7.2	6.5	5.0	8.3	9.5	1.7
Tanzania	10.3	4.4	7.3	7.0	10.3	12.1	7.2	12.7	16.0	8.5	5.8	4.9	12.1	7.0	5.0
Togo	3.4	6.8	2.2	0.9	8.7	3.8	1.4	3.6	2.6	3.2	3.1	2.5	2.9	3.4	3.0
Uganda	4.9	8.6	7.2	6.1	12.0	13.1	4.0	18.7	14.0	5.0	4.9	5.0	5.3	4.6	5.1
Zambia	26.1	18.3	9.0	10.7	12.4	13.4	8.5	8.7	6.6	7.1	7.3	5.5	7.3	7.5	7.0
Zimbabwe[9]	. . .	–31.5	33.0	–72.7	157.0	6.2	3.0	3.5	3.7	2.6	3.3	4.0	2.9	3.1	4.0

[1]Movements in consumer prices are shown as annual averages.
[2]Monthly year-over-year changes and for several countries, on quarterly basis.
[3]For many countries, inflation for the earlier years is measured on the basis of a retail price index. Consumer price index (CPI) inflation data with broader and more up-to-date coverage are typically used for more recent years.
[4]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[5]Moldova projections are based on data available for the first quarter of 2013.
[6]The data for Argentina are officially reported data. The IMF has, however, issued a declaration of censure and called on Argentina to adopt remedial measures to address the quality of the official CPI-GBA data. Alternative data sources have shown considerably higher inflation rates than the official data since 2007. In this context, the IMF is also using alternative estimates of CPI inflation for the surveillance of macroeconomic developments in Argentina.
[7]Data for 2011 exclude South Sudan after July 9. Data for 2012 and onward pertain to the current Sudan.
[8]Data for Syria are excluded for 2011 onward due to the uncertain political situation.
[9]The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in U.S. dollars. IMF staff estimates of U.S. dollar values may differ from authorities' estimates.

Table A8. Major Advanced Economies: General Government Fiscal Balances and Debt[1]

(Percent of GDP unless noted otherwise)

	Average							Projections		
	1997–2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
Major Advanced Economies										
Net Lending/Borrowing	–2.7	–2.0	–4.5	–10.0	–8.8	–7.6	–6.9	–5.4	–4.2	–2.9
Output Gap[2]	0.5	1.5	–0.5	–5.3	–3.8	–3.5	–3.0	–3.2	–2.8	–0.2
Structural Balance[2]	–3.0	–2.8	–4.1	–6.6	–6.8	–6.1	–5.4	–3.9	–3.0	–2.8
United States										
Net Lending/Borrowing	–1.6	–2.7	–6.5	–12.9	–10.8	–9.7	–8.3	–5.8	–4.6	–3.8
Output Gap[2]	0.7	0.8	–1.8	–6.4	–5.5	–5.2	–4.2	–4.5	–4.0	–0.2
Structural Balance[2]	–1.9	–2.9	–5.0	–7.8	–8.0	–7.3	–6.3	–3.9	–3.2	–3.7
Net Debt	41.6	46.5	52.4	64.6	72.8	79.9	84.1	87.4	88.3	86.4
Gross Debt	60.1	64.4	73.3	86.3	95.2	99.4	102.7	106.0	107.3	105.7
Euro Area										
Net Lending/Borrowing	–2.1	–0.7	–2.1	–6.4	–6.2	–4.2	–3.7	–3.1	–2.5	–0.8
Output Gap[2]	0.5	3.1	2.2	–2.9	–1.7	–0.8	–1.8	–2.7	–2.5	–0.4
Structural Balance[2]	–2.6	–2.6	–3.3	–4.7	–4.6	–3.7	–2.3	–1.4	–1.1	–0.4
Net Debt	55.1	52.1	54.1	62.4	65.6	68.2	72.2	74.9	75.6	72.0
Gross Debt	70.1	66.5	70.3	80.1	85.7	88.2	93.0	95.7	96.1	89.9
Germany[3]										
Net Lending/Borrowing	–2.5	0.2	–0.1	–3.1	–4.2	–0.8	0.1	–0.4	–0.1	0.3
Output Gap[2]	–0.3	2.7	2.3	–3.7	–1.4	0.7	0.3	–0.4	–0.2	0.1
Structural Balance[2,4]	–2.5	–1.1	–0.9	–1.1	–2.2	–1.0	0.1	–0.1	0.0	0.2
Net Debt	46.4	50.6	50.1	56.7	56.2	55.3	57.4	56.3	54.6	50.4
Gross Debt	62.9	65.4	66.8	74.5	82.4	80.4	81.9	80.4	78.1	67.7
France										
Net Lending/Borrowing	–2.7	–2.8	–3.3	–7.6	–7.1	–5.3	–4.9	–4.0	–3.5	–0.4
Output Gap[2]	1.1	2.5	1.1	–3.0	–2.2	–1.0	–1.8	–2.5	–2.5	–0.6
Structural Balance[2,4]	–3.4	–4.2	–4.1	–5.7	–5.7	–4.6	–3.5	–2.1	–1.6	0.0
Net Debt	54.8	59.6	62.3	72.0	76.1	78.6	84.0	87.2	88.5	82.5
Gross Debt	61.1	64.2	68.2	79.2	82.4	85.8	90.2	93.5	94.8	88.8
Italy										
Net Lending/Borrowing	–3.0	–1.6	–2.7	–5.4	–4.3	–3.7	–2.9	–3.2	–2.1	–0.2
Output Gap[2]	1.1	3.1	1.6	–3.7	–1.9	–1.8	–3.4	–4.8	–4.0	–0.4
Structural Balance[2,5]	–4.3	–3.5	–3.8	–4.1	–3.6	–3.5	–1.3	–0.2	0.0	0.0
Net Debt	93.2	87.1	89.3	97.9	100.0	102.6	106.1	110.5	111.2	102.8
Gross Debt	108.7	103.3	106.1	116.4	119.3	120.8	127.0	132.3	133.1	123.0
Japan										
Net Lending/Borrowing	–6.2	–2.1	–4.1	–10.4	–9.3	–9.9	–10.1	–9.5	–6.8	–5.6
Output Gap[2]	–0.9	0.7	–1.0	–6.7	–2.7	–3.6	–2.2	–0.9	–0.5	0.0
Structural Balance[2]	–6.0	–2.2	–3.6	–7.5	–7.9	–8.5	–9.2	–9.2	–6.7	–5.6
Net Debt	65.6	80.5	95.3	106.2	113.1	127.4	133.5	139.9	141.8	147.8
Gross Debt[6]	153.6	183.0	191.8	210.2	216.0	230.3	238.0	243.5	242.3	241.1
United Kingdom										
Net Lending/Borrowing	–1.2	–2.8	–5.0	–11.3	–10.0	–7.8	–7.9	–6.1	–5.8	–2.0
Output Gap[2]	1.5	3.6	1.7	–2.1	–1.8	–2.5	–2.9	–2.7	–2.4	–1.0
Structural Balance[2]	–2.2	–5.3	–6.6	–10.3	–8.4	–6.0	–5.8	–4.0	–3.9	–1.2
Net Debt	37.1	38.4	48.0	62.4	72.2	76.8	81.6	84.8	88.0	89.4
Gross Debt	41.6	43.7	51.9	67.1	78.5	84.3	88.8	92.1	95.3	96.7
Canada										
Net Lending/Borrowing	1.1	1.5	–0.3	–4.5	–4.9	–3.7	–3.4	–3.4	–2.9	–1.4
Output Gap[2]	1.2	1.7	0.9	–3.1	–1.5	–0.8	–0.9	–1.3	–1.3	–0.1
Structural Balance[2]	0.5	0.5	–0.9	–2.7	–4.0	–3.2	–2.8	–2.6	–2.2	–1.3
Net Debt	44.6	22.9	22.4	27.6	29.7	32.4	34.7	36.5	38.0	38.4
Gross Debt	81.9	66.5	71.3	81.3	83.1	83.5	85.3	87.1	85.6	81.7

Note: The methodology and specific assumptions for each country are discussed in Box A1. The country group composites for fiscal data are calculated as the sum of the U.S. dollar values for the relevant individual countries.

[1]Debt data refer to the end of the year. Debt data are not always comparable across countries.

[2]Percent of potential GDP.

[3]Beginning in 1995, the debt and debt-services obligations of the Treuhandanstalt (and of various other agencies) were taken over by the general government. This debt is equivalent to 8 percent of GDP, and the associated debt service to 0.5 to 1 percent of GDP.

[4]Excludes sizable one-time receipts from the sale of assets, including licenses.

[5]Excludes one-time measures based on the authorities' data and, in the absence of the latter, receipts from the sale of assets.

[6]Includes equity shares.

Table A9. Summary of World Trade Volumes and Prices

(Annual percent change)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Trade in Goods and Services												
World Trade[1]												
Volume	7.0	4.5	7.6	9.2	7.9	2.8	–10.6	12.8	6.1	2.7	2.9	4.9
Price Deflator												
In U.S. Dollars	0.9	3.2	5.6	5.1	7.7	11.4	–10.4	5.6	11.1	–1.8	–0.1	0.2
In SDRs	0.6	2.9	5.8	5.6	3.5	7.9	–8.1	6.8	7.4	1.2	1.0	–0.7
Volume of Trade												
Exports												
Advanced Economies	6.3	3.8	6.1	8.9	6.9	2.1	–11.6	12.4	5.7	2.0	2.7	4.7
Emerging Market and Developing Economies	8.7	6.0	11.1	10.9	9.6	4.2	–8.0	14.0	6.8	4.2	3.5	5.8
Imports												
Advanced Economies	6.8	2.9	6.3	7.8	5.4	0.5	–12.1	11.7	4.7	1.0	1.5	4.0
Emerging Market and Developing Economies	8.0	7.7	11.7	12.1	15.0	8.3	–8.3	14.7	8.8	5.5	5.0	5.9
Terms of Trade												
Advanced Economies	0.0	–0.6	–1.3	–1.2	0.3	–2.1	2.5	–1.1	–1.6	–0.7	0.0	–0.2
Emerging Market and Developing Economies	0.9	1.3	5.3	3.1	1.6	3.3	–5.0	2.2	3.2	0.5	–0.5	–0.4
Trade in Goods												
World Trade[1]												
Volume	7.2	4.3	7.5	9.2	7.1	2.2	–11.7	14.1	6.5	2.5	2.7	5.0
Price Deflator												
In U.S. Dollars	0.8	3.5	6.0	5.7	8.0	12.4	–11.7	6.7	12.2	–1.9	–0.3	0.0
In SDRs	0.5	3.2	6.2	6.2	3.8	8.8	–9.5	7.8	8.5	1.1	0.9	–0.8
World Trade Prices in U.S. Dollars[2]												
Manufactures	0.3	1.9	3.0	2.8	5.7	6.8	–6.7	2.7	6.6	–1.0	0.2	–0.1
Oil	9.0	10.4	41.3	20.5	10.7	36.4	–36.3	27.9	31.6	1.0	–0.5	–3.0
Nonfuel Primary Commodities	0.1	5.6	6.3	23.1	13.9	7.9	–15.8	26.5	17.9	–9.9	–1.5	–4.2
Food	0.2	5.1	–0.6	10.2	14.8	24.5	–14.8	11.9	19.9	–2.2	0.6	–6.4
Beverages	–3.8	5.0	18.1	8.4	13.8	23.3	1.6	14.1	16.6	–18.6	–14.7	–3.2
Agricultural Raw Materials	–1.6	3.4	0.7	8.7	5.0	–0.7	–17.1	33.2	22.7	–12.7	1.3	2.6
Metal	2.7	7.9	22.4	56.2	17.4	–7.8	–19.2	48.2	13.5	–16.8	–3.9	–4.6
World Trade Prices in SDRs[2]												
Manufactures	–0.1	1.6	3.2	3.2	1.6	3.5	–4.4	3.8	3.0	2.1	1.3	–0.9
Oil	8.6	10.0	41.6	21.0	6.4	32.1	–34.8	29.3	27.2	4.1	0.7	–3.8
Nonfuel Primary Commodities	–0.3	5.2	6.5	23.6	9.5	4.5	–13.7	27.9	13.9	–7.2	–0.3	–5.0
Food	–0.2	4.8	–0.4	10.7	10.3	20.5	–12.7	13.1	15.8	0.8	1.8	–7.2
Beverages	–4.1	4.7	18.3	8.8	9.4	19.4	4.1	15.4	12.7	–16.1	–13.7	–4.0
Agricultural Raw Materials	–1.9	3.1	0.9	9.2	0.9	–3.8	–15.1	34.6	18.6	–10.0	2.4	1.8
Metal	2.4	7.6	22.7	56.9	12.8	–10.7	–17.2	49.8	9.7	–14.3	–2.8	–5.4
World Trade Prices in Euros[2]												
Manufactures	–0.2	1.1	2.8	2.0	–3.2	–0.5	–1.4	7.8	1.7	7.2	–2.8	–1.8
Oil	8.5	9.5	41.0	19.5	1.4	27.1	–32.7	34.3	25.5	9.2	–3.5	–4.7
Nonfuel Primary Commodities	–0.4	4.7	6.1	22.1	4.3	0.5	–11.0	32.8	12.4	–2.6	–4.4	–5.8
Food	–0.3	4.3	–0.8	9.3	5.1	15.9	–9.9	17.4	14.3	5.8	–2.4	–8.0
Beverages	–4.2	4.2	17.8	7.5	4.2	14.8	7.3	19.8	11.2	–11.9	–17.3	–4.9
Agricultural Raw Materials	–2.0	2.6	0.5	7.9	–3.8	–7.5	–12.5	39.8	17.0	–5.5	–1.8	0.9
Metal	2.2	7.0	22.2	55.0	7.5	–14.1	–14.6	55.5	8.3	–10.0	–6.8	–6.3

Table A9. Summary of World Trade Volumes and Prices *(concluded)*

(Annual percent change)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Trade in Goods												
Volume of Trade												
Exports												
Advanced Economies	6.4	3.5	5.7	8.8	5.8	1.5	–13.4	14.3	5.9	1.7	2.4	4.7
Emerging Market and Developing Economies	8.8	5.8	11.0	10.3	8.6	3.3	–8.1	13.8	6.7	4.7	3.3	5.7
Fuel Exporters	4.7	2.8	6.7	4.1	4.2	2.8	–7.1	3.5	4.8	6.0	0.0	4.1
Nonfuel Exporters	10.2	6.9	12.6	13.0	10.5	3.5	–8.6	17.8	7.4	4.1	4.7	6.4
Imports												
Advanced Economies	7.1	2.8	6.6	8.1	4.8	–0.1	–13.1	13.4	5.2	0.5	1.0	4.1
Emerging Market and Developing Economies	8.2	7.4	11.1	11.5	14.4	7.7	–9.7	15.2	9.9	5.1	5.3	6.0
Fuel Exporters	7.3	8.9	15.6	12.8	24.0	13.9	–12.9	6.8	10.0	10.4	5.4	6.7
Nonfuel Exporters	8.4	7.1	10.3	11.3	12.3	6.2	–9.0	17.2	9.8	4.0	5.3	5.8
Price Deflators in SDRs												
Exports												
Advanced Economies	0.0	2.0	3.8	4.0	3.4	5.6	–6.9	4.5	6.0	–0.3	0.9	–0.5
Emerging Market and Developing Economies	2.8	5.6	13.5	11.4	5.8	14.5	–13.5	14.1	13.1	2.6	0.3	–1.8
Fuel Exporters	6.6	9.0	30.9	18.6	8.1	26.1	–26.2	24.4	24.0	3.3	–1.1	–3.6
Nonfuel Exporters	1.5	4.2	7.1	8.3	4.8	9.7	–7.4	10.0	8.9	2.2	1.0	–1.1
Imports												
Advanced Economies	0.0	2.6	5.3	5.4	3.0	8.3	–10.3	5.9	7.9	0.9	1.2	–0.5
Emerging Market and Developing Economies	1.7	4.2	7.3	7.5	4.1	10.4	–8.1	11.1	8.7	2.3	1.0	–0.9
Fuel Exporters	0.9	4.0	7.4	8.5	4.0	8.9	–4.8	8.8	6.4	2.3	0.9	–1.3
Nonfuel Exporters	1.9	4.2	7.2	7.3	4.1	10.7	–8.9	11.7	9.2	2.3	1.0	–0.8
Terms of Trade												
Advanced Economies	–0.1	–0.6	–1.5	–1.3	0.4	–2.5	3.8	–1.3	–1.8	–1.2	–0.3	–0.1
Emerging Market and Developing Economies	1.0	1.4	5.8	3.6	1.6	3.8	–5.9	2.6	4.1	0.3	–0.6	–0.9
Regional Groups												
Central and Eastern Europe	0.4	–0.7	–2.3	–1.1	1.7	–2.7	3.3	–3.8	–1.9	–0.5	0.6	0.3
Commonwealth of Independent States[3]	3.5	4.0	14.4	8.0	1.9	16.1	–17.7	13.2	10.8	1.9	–2.3	–1.6
Developing Asia	–1.3	–0.6	–0.9	–0.6	0.2	–1.7	3.3	–6.0	–2.4	1.4	0.4	0.1
Latin America and the Caribbean	1.2	2.0	4.8	7.0	2.4	3.0	–8.9	11.2	9.1	–3.2	–1.4	–2.0
Middle East, North Africa, Afghanistan, and Pakistan	5.4	4.4	21.2	7.3	3.3	12.8	–18.6	12.4	14.7	–0.2	–1.3	–2.2
Middle East and North Africa	5.7	4.5	22.2	7.5	3.3	13.4	–18.9	12.4	14.9	0.3	–1.5	–2.2
Sub-Saharan Africa	. . .	3.0	9.6	7.2	4.7	9.1	–12.4	10.5	8.5	–1.7	–1.2	–1.6
Analytical Groups												
By Source of Export Earnings												
Fuel Exporters	5.6	4.8	21.9	9.3	3.9	15.8	–22.5	14.4	16.6	1.0	–2.0	–2.3
Nonfuel Exporters	–0.4	0.0	–0.1	0.9	0.7	–0.9	1.6	–1.5	–0.3	–0.1	0.0	–0.3
Memorandum												
World Exports in Billions of U.S. Dollars												
Goods and Services	7,840	19,242	12,978	14,935	17,387	19,874	15,903	18,944	22,333	22,537	23,164	24,367
Goods	6,330	15,507	10,454	12,083	13,980	16,039	12,500	15,208	18,166	18,302	18,709	19,632
Average Oil Price[4]	9.0	10.4	41.3	20.5	10.7	36.4	–36.3	27.9	31.6	1.0	–0.5	–3.0
In U.S. Dollars a Barrel	23.21	84.15	53.35	64.27	71.13	97.04	61.78	79.03	104.01	105.01	104.49	101.35
Export Unit Value of Manufactures[5]	0.3	1.9	3.0	2.8	5.7	6.8	–6.7	2.7	6.6	–1.0	0.2	–0.1

[1]Average of annual percent change for world exports and imports.
[2]As represented, respectively, by the export unit value index for manufactures of the advanced economies and accounting for 83 percent of the advanced economies' trade (export of goods) weights; the average of U.K. Brent, Dubai Fateh, and West Texas Intermediate crude oil prices; and the average of world market prices for nonfuel primary commodities weighted by their 2002–04 shares in world commodity exports.
[3]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[4]Percent change of average of U.K. Brent, Dubai Fateh, and West Texas Intermediate crude oil prices.
[5]Percent change for manufactures exported by the advanced economies.

Table A10. Summary of Balances on Current Account

(Billions of U.S. dollars)

									Projections		
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
Advanced Economies	**–372.9**	**–421.0**	**–316.5**	**–480.4**	**–58.2**	**–12.9**	**–54.7**	**–36.9**	**61.8**	**89.3**	**82.7**
United States	–739.8	–798.5	–713.4	–681.3	–381.6	–449.5	–457.7	–440.4	–451.5	–489.2	–638.9
Euro Area[1,2]	50.3	53.9	46.4	–96.5	30.5	71.8	92.7	227.0	295.1	326.0	420.1
Japan	166.1	170.9	212.1	159.9	146.6	204.0	119.3	60.4	61.1	91.0	98.2
Other Advanced Economies[3]	150.4	152.6	138.4	137.5	146.4	160.7	191.0	116.0	157.2	161.6	203.3
Emerging Market and Developing Economies	**407.0**	**627.2**	**596.9**	**669.2**	**253.8**	**323.3**	**410.5**	**380.6**	**235.8**	**240.7**	**154.6**
Regional Groups											
Central and Eastern Europe	–60.5	–88.5	–136.1	–159.0	–48.1	–82.6	–119.3	–79.4	–84.8	–90.1	–157.9
Commonwealth of Independent States[4]	87.5	94.0	65.6	108.7	42.9	69.0	109.4	76.7	59.0	47.6	–7.0
Developing Asia	142.7	271.0	394.9	429.4	276.8	238.8	97.6	108.7	138.5	182.9	466.8
Latin America and the Caribbean	32.8	46.6	6.7	–39.0	–30.3	–62.8	–77.9	–104.5	–140.6	–142.0	–198.3
Middle East, North Africa, Afghanistan, and Pakistan	206.2	276.4	256.5	333.2	40.0	176.2	418.1	417.2	315.9	299.6	146.8
Sub-Saharan Africa	–1.7	27.7	9.3	–4.0	–27.6	–15.4	–17.3	–38.3	–52.0	–57.3	–95.9
Memorandum											
European Union	8.9	–28.2	–62.9	–172.1	2.2	19.6	68.7	154.3	253.1	290.5	414.5
Analytical Groups											
By Source of Export Earnings											
Fuel	348.7	472.8	416.4	582.6	138.8	316.9	629.5	615.1	474.4	433.2	193.5
Nonfuel	58.3	154.4	180.5	86.7	115.0	6.4	–222.4	–231.7	–236.8	–193.7	–39.1
Of Which, Primary Products	–3.8	6.7	5.5	–18.5	–7.5	–9.3	–20.6	–48.1	–55.4	–56.1	–53.6
By External Financing Source											
Net Debtor Economies	–100.5	–114.4	–223.2	–374.4	–178.5	–273.9	–391.6	–447.4	–473.6	–469.2	–619.7
Of Which, Official Financing	–17.0	–18.3	–21.3	–36.2	–20.0	–13.8	–12.5	–23.3	–19.9	–20.7	–40.7
Net Debtor Economies by Debt-Servicing Experience											
Economies with Arrears and/or Rescheduling during 2007–11	–6.1	–4.3	–13.7	–27.0	–20.8	–33.7	–41.2	–52.2	–56.1	–58.0	–60.7
World[1]	**34.1**	**206.1**	**280.4**	**188.8**	**195.6**	**310.4**	**355.8**	**343.6**	**297.7**	**330.1**	**237.3**

Table A10. Summary of Balances on Current Account *(concluded)*

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	2014	2018
Advanced Economies	**–1.1**	**–1.1**	**–0.8**	**–1.1**	**–0.1**	**0.0**	**–0.1**	**–0.1**	**0.1**	**0.2**	**0.1**
United States	–5.6	–5.8	–4.9	–4.6	–2.6	–3.0	–2.9	–2.7	–2.7	–2.8	–3.0
Euro Area[1,2]	0.5	0.5	0.4	–0.7	0.2	0.6	0.7	1.9	2.3	2.5	2.7
Japan	3.6	3.9	4.9	3.3	2.9	3.7	2.0	1.0	1.2	1.7	1.7
Other Advanced Economies[3]	2.0	1.9	1.5	1.5	1.8	1.7	1.8	1.1	1.5	1.4	1.5
Emerging Market and Developing Economies	**3.7**	**4.8**	**3.7**	**3.5**	**1.4**	**1.5**	**1.6**	**1.4**	**0.8**	**0.8**	**0.4**
Regional Groups											
Central and Eastern Europe	–5.2	–6.8	–8.3	–8.3	–3.0	–4.7	–6.3	–4.3	–4.4	–4.5	–5.7
Commonwealth of Independent States[4]	8.7	7.2	3.8	5.0	2.6	3.4	4.4	2.9	2.1	1.6	–0.2
Developing Asia	3.6	5.7	6.6	5.9	3.5	2.5	0.9	0.9	1.1	1.3	2.4
Latin America and the Caribbean	1.2	1.5	0.2	–0.9	–0.7	–1.3	–1.4	–1.9	–2.4	–2.4	–2.7
Middle East, North Africa, Afghanistan, and Pakistan	13.8	15.6	12.3	12.9	1.7	6.5	13.3	12.1	9.4	8.6	3.4
Middle East and North Africa	15.1	17.3	13.6	14.4	2.3	7.2	14.3	13.2	10.3	9.3	3.9
Sub-Saharan Africa	–0.3	3.8	1.1	–0.4	–3.1	–1.4	–1.4	–3.0	–4.0	–4.0	–5.1
Memorandum											
European Union	0.1	–0.2	–0.4	–0.9	0.0	0.1	0.4	0.9	1.5	1.6	1.9
Analytical Groups											
By Source of Export Earnings											
Fuel	14.9	16.3	11.6	12.7	3.7	7.1	11.6	10.3	7.9	6.9	2.4
Nonfuel	0.7	1.5	1.5	0.6	0.8	0.0	–1.1	–1.1	–1.1	–0.8	–0.1
Of Which, Primary Products	–1.1	1.5	1.1	–3.2	–1.3	–1.3	–2.6	–5.6	–6.1	–5.8	–4.1
By External Financing Source											
Net Debtor Economies	–1.6	–1.6	–2.6	–3.8	–1.9	–2.4	–3.1	–3.5	–3.6	–3.5	–3.5
Of Which, Official Financing	–3.5	–3.4	–3.4	–4.9	–2.8	–1.8	–1.5	–2.7	–2.2	–2.2	–3.2
Net Debtor Economies by Debt-Servicing Experience											
Economies with Arrears and/or Rescheduling during 2007–11	–1.2	–0.8	–2.0	–3.2	–2.6	–3.6	–3.8	–4.6	–4.7	–4.6	–3.8
World[1]	**0.1**	**0.4**	**0.5**	**0.3**	**0.3**	**0.5**	**0.5**	**0.5**	**0.4**	**0.4**	**0.2**
Memorandum											
In Percent of Total World Current Account Transactions	0.1	0.7	0.8	0.5	0.6	0.8	0.8	0.8	0.6	0.7	0.4
In Percent of World GDP	0.1	0.4	0.5	0.3	0.3	0.5	0.5	0.5	0.4	0.4	0.2

[1]Reflects errors, omissions, and asymmetries in balance of payments statistics on current account, as well as the exclusion of data for international organizations and a limited number of countries. See "Classification of Countries" in the introduction to this Statistical Appendix.
[2]Calculated as the sum of the balances of individual Euro Area countries.
[3]In this table, Other Advanced Economies means advanced economies excluding the United States, Euro Area countries, and Japan.
[4]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table A11. Advanced Economies: Balance on Current Account

(Percent of GDP)

									Projections		
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
Advanced Economies	**–1.1**	**–1.1**	**–0.8**	**–1.1**	**–0.1**	**0.0**	**–0.1**	**–0.1**	**0.1**	**0.2**	**0.1**
United States	–5.6	–5.8	–4.9	–4.6	–2.6	–3.0	–2.9	–2.7	–2.7	–2.8	–3.0
Euro Area[1]	0.5	0.5	0.4	–0.7	0.2	0.6	0.7	1.9	2.3	2.5	2.7
Germany	5.1	6.3	7.4	6.2	6.0	6.3	6.2	7.0	6.0	5.7	4.6
France	–0.5	–0.6	–1.0	–1.7	–1.3	–1.3	–1.8	–2.2	–1.6	–1.6	0.0
Italy	–0.9	–1.5	–1.3	–2.9	–2.0	–3.5	–3.1	–0.7	0.0	0.2	–1.1
Spain	–7.4	–9.0	–10.0	–9.6	–4.8	–4.5	–3.8	–1.1	1.4	2.6	6.0
Netherlands	7.4	9.3	6.7	4.3	5.2	7.8	10.2	10.1	10.9	11.0	10.8
Belgium	2.0	1.9	1.9	–1.3	–1.4	1.9	–1.1	–1.6	–0.7	–0.3	0.8
Austria	2.2	2.8	3.5	4.9	2.7	3.4	1.4	1.8	2.8	2.4	2.4
Greece	–7.6	–11.4	–14.6	–14.9	–11.2	–10.1	–9.9	–3.4	–1.0	–0.5	1.1
Portugal	–10.3	–10.7	–10.1	–12.6	–10.9	–10.6	–7.0	–1.5	0.9	0.9	2.3
Finland	3.4	4.2	4.3	2.6	1.8	1.5	–1.5	–1.8	–1.6	–1.8	–1.4
Ireland	–3.5	–3.6	–5.3	–5.6	–2.3	1.1	1.2	4.4	2.3	3.0	3.5
Slovak Republic	–8.5	–7.8	–5.3	–6.6	–2.6	–3.7	–2.1	2.3	3.5	4.2	4.7
Slovenia	–1.7	–1.8	–4.2	–5.4	–0.5	–0.1	0.4	3.3	5.4	7.0	6.3
Luxembourg	11.5	10.4	10.1	5.4	7.2	8.2	7.1	5.7	6.0	6.6	6.4
Estonia	–10.0	–15.3	–15.9	–9.2	2.7	2.8	1.8	–1.8	–0.7	–0.2	0.8
Cyprus	–5.9	–7.0	–11.8	–15.6	–10.7	–9.8	–3.3	–6.5	–2.0	–0.6	–1.5
Malta	–8.5	–9.7	–4.0	–4.8	–8.9	–5.4	–1.0	1.1	1.1	0.8	0.5
Japan	3.6	3.9	4.9	3.3	2.9	3.7	2.0	1.0	1.2	1.7	1.7
United Kingdom	–1.8	–2.8	–2.2	–0.9	–1.4	–2.7	–1.5	–3.8	–2.8	–2.3	–0.6
Canada	1.9	1.4	0.8	0.1	–2.9	–3.5	–2.8	–3.4	–3.1	–3.1	–2.5
Korea	2.2	1.5	2.1	0.3	3.9	2.9	2.3	3.8	4.6	3.9	2.6
Australia	–5.7	–5.3	–6.2	–4.5	–4.3	–3.0	–2.3	–3.7	–3.4	–3.5	–4.0
Taiwan Province of China	4.8	7.0	8.9	6.9	11.4	9.3	8.9	10.5	10.0	9.6	8.1
Sweden	6.8	8.7	9.3	9.0	6.3	6.3	6.4	6.0	5.7	5.5	5.1
Hong Kong SAR	11.1	11.9	12.1	13.4	8.4	5.4	5.2	2.7	2.3	2.5	5.1
Switzerland	13.6	14.4	8.6	2.1	10.5	14.7	9.0	11.2	10.5	10.1	9.3
Singapore	21.4	24.8	26.1	15.1	17.7	26.8	24.6	18.6	18.5	17.6	15.2
Czech Republic	–0.9	–2.1	–4.4	–2.1	–2.5	–3.8	–2.8	–2.4	–1.8	–1.5	–1.4
Norway	16.5	16.4	12.5	16.0	11.7	11.9	12.8	14.2	11.8	11.3	8.7
Israel	3.0	4.7	3.2	1.4	3.8	3.1	1.3	0.3	2.3	3.0	2.1
Denmark	4.3	3.0	1.4	2.9	3.4	5.9	5.6	5.6	4.7	4.8	4.9
New Zealand	–7.9	–8.3	–8.1	–8.7	–2.5	–3.2	–4.1	–5.0	–4.2	–4.2	–6.1
Iceland	–16.1	–25.6	–15.7	–28.4	–11.6	–8.4	–5.6	–4.9	–1.2	–1.9	1.7
San Marino	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Memorandum											
Major Advanced Economies	–1.7	–1.9	–1.1	–1.3	–0.6	–0.8	–0.9	–1.1	–1.0	–1.0	–1.0
Euro Area[2]	0.1	–0.1	0.1	–1.5	–0.1	0.0	0.2	1.3	1.8	1.9	2.2

[1]Calculated as the sum of the balances of individual Euro Area countries.
[2]Corrected for reporting discrepancies in intra-area transactions.

Table A12. Emerging Market and Developing Economies: Balance on Current Account

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	2014	2018
Central and Eastern Europe	**–5.2**	**–6.8**	**–8.3**	**–8.3**	**–3.0**	**–4.7**	**–6.3**	**–4.3**	**–4.4**	**–4.5**	**–5.7**
Albania	–6.1	–5.6	–10.4	–15.2	–14.1	–11.5	–12.2	–10.5	–9.3	–10.5	–7.4
Bosnia and Herzegovina	–17.1	–7.9	–9.1	–14.2	–6.6	–5.6	–9.5	–9.7	–8.7	–7.9	–5.0
Bulgaria	–11.6	–17.6	–25.2	–23.0	–8.9	–1.5	0.1	–1.3	1.2	0.3	–3.2
Croatia	–5.3	–6.7	–7.3	–9.0	–5.1	–1.1	–1.0	0.1	0.4	–0.7	–2.5
Hungary	–7.5	–7.4	–7.3	–7.4	–0.2	1.1	0.8	1.7	2.2	2.0	–1.4
Kosovo	–8.2	–7.2	–10.2	–16.0	–9.4	–12.0	–13.8	–7.6	–10.5	–8.7	–8.1
Latvia	–12.6	–22.6	–22.4	–13.2	8.7	2.9	–2.1	–1.7	–1.1	–1.3	–1.9
Lithuania	–7.0	–10.6	–14.5	–13.3	3.9	0.0	–3.7	–0.5	–0.3	–1.2	–1.4
FYR Macedonia	–2.5	–0.5	–7.1	–12.8	–6.8	–2.0	–3.0	–3.9	–5.8	–6.2	–4.8
Montenegro	–16.6	–31.3	–39.5	–49.8	–27.9	–22.9	–17.7	–17.9	–16.7	–16.2	–16.1
Poland	–2.4	–3.8	–6.2	–6.6	–4.0	–5.1	–4.9	–3.5	–3.0	–3.2	–3.5
Romania	–8.6	–10.4	–13.4	–11.6	–4.2	–4.4	–4.5	–3.9	–2.0	–2.5	–3.5
Serbia	–8.8	–10.1	–17.8	–21.7	–6.6	–6.8	–9.1	–10.5	–7.5	–6.5	–8.8
Turkey	–4.4	–6.0	–5.8	–5.5	–2.0	–6.2	–9.7	–6.1	–7.4	–7.2	–8.3
Commonwealth of Independent States[1]	**8.7**	**7.2**	**3.8**	**5.0**	**2.6**	**3.4**	**4.4**	**2.9**	**2.1**	**1.6**	**–0.2**
Russia	11.0	9.3	5.5	6.3	4.1	4.4	5.1	3.7	2.9	2.3	0.2
Excluding Russia	1.3	0.6	–1.4	0.9	–1.8	0.3	2.0	0.3	–0.3	–0.6	–1.2
Armenia	–1.0	–1.8	–6.4	–11.8	–15.8	–14.8	–10.9	–11.3	–10.0	–8.6	–6.5
Azerbaijan	1.3	17.6	27.3	35.5	23.0	28.0	26.5	21.7	13.3	9.2	2.1
Belarus	1.4	–3.9	–6.7	–8.2	–12.6	–15.0	–9.7	–2.9	–8.3	–6.7	–5.3
Georgia	–11.1	–15.2	–19.8	–22.0	–10.5	–10.2	–12.7	–11.5	–6.5	–7.8	–4.9
Kazakhstan	–1.8	–2.5	–8.1	4.7	–3.6	0.9	6.5	3.8	4.3	3.1	1.8
Kyrgyz Republic	2.8	–3.1	–6.2	–15.5	–2.5	–6.4	–6.5	–15.3	–9.6	–8.3	–5.2
Moldova[2]	–7.6	–11.3	–15.2	–16.1	–8.2	–7.7	–11.3	–7.0	–7.6	–8.8	–8.8
Tajikistan	–1.6	–2.8	–8.6	–7.6	–5.9	–1.2	–4.7	–1.3	–1.7	–2.2	–2.0
Turkmenistan	5.1	15.7	15.5	16.5	–14.7	–10.6	2.0	0.0	0.2	3.8	4.8
Ukraine	2.9	–1.5	–3.7	–7.1	–1.5	–2.2	–6.3	–8.4	–7.3	–7.4	–7.4
Uzbekistan	7.7	9.2	7.3	8.7	2.2	6.2	5.8	0.7	0.2	1.1	0.3
Developing Asia	**3.6**	**5.7**	**6.6**	**5.9**	**3.5**	**2.5**	**0.9**	**0.9**	**1.1**	**1.3**	**2.4**
Bangladesh	0.0	1.2	0.8	1.4	2.8	0.5	–1.4	0.7	1.3	0.4	–0.6
Bhutan	–29.5	–4.1	13.3	–2.1	–1.9	–9.5	–21.9	–16.1	–21.8	–22.5	–7.9
Brunei Darussalam	47.3	50.1	47.8	48.9	40.2	45.5	31.7	46.5	43.1	42.0	40.3
Cambodia	–3.8	–0.6	–1.9	–5.7	–4.5	–3.9	–8.1	–11.0	–10.6	–8.7	–5.6
China	5.9	8.5	10.1	9.3	4.9	4.0	1.9	2.3	2.5	2.7	4.1
Fiji	–7.4	–14.9	–10.1	–15.5	–4.1	–4.4	–5.5	–1.4	–17.4	–5.5	–8.7
India	–1.2	–1.0	–1.3	–2.3	–2.8	–2.7	–4.2	–4.8	–4.4	–3.8	–2.8
Indonesia	0.6	2.6	1.6	0.0	2.0	0.7	0.2	–2.7	–3.4	–3.1	–2.5
Kiribati	–37.8	–23.6	–19.4	–20.4	–23.3	–16.9	–32.6	–29.4	–43.0	–36.1	–32.5
Lao P.D.R.	–18.1	–9.9	–15.7	–18.5	–21.0	–18.2	–15.5	–28.4	–30.8	–29.0	–18.6
Malaysia	14.4	16.1	15.4	17.1	15.5	10.9	11.6	6.1	3.5	3.6	3.1
Maldives	–27.5	–23.2	–14.7	–32.4	–11.1	–9.2	–21.3	–23.0	–25.8	–26.1	–24.6
Marshall Islands	–1.4	–3.5	–4.2	–1.8	–16.9	–28.1	–6.2	–6.3	–2.5	–1.3	–5.1
Micronesia	–7.9	–13.7	–9.2	–16.2	–18.3	–14.9	–17.4	–12.0	–10.2	–10.4	–9.6
Mongolia	1.2	6.5	6.3	–12.9	–9.0	–14.9	–31.7	–32.8	–26.6	–21.3	–16.2
Myanmar	6.1	6.8	–0.7	–4.2	–1.3	–1.9	–2.4	–4.4	–4.3	–4.5	–4.5
Nepal	2.0	2.1	–0.1	2.7	4.2	–2.4	–0.9	4.8	3.3	0.1	–1.7
Palau	–27.4	–32.6	–21.9	–22.9	–10.3	–10.8	–9.1	–7.6	–4.9	–4.5	–3.0
Papua New Guinea	14.0	–1.7	5.6	8.9	–10.1	–18.1	–17.7	–29.5	–12.4	–7.6	9.1
Philippines	1.9	4.4	4.8	2.1	5.6	4.5	3.2	2.9	2.5	2.2	0.9
Samoa	–9.6	–10.2	–15.5	–6.4	–6.2	–7.6	–4.5	–9.9	–13.4	–15.6	–10.8
Solomon Islands	–6.7	–9.1	–15.7	–20.5	–21.4	–30.8	–6.7	–0.1	–2.0	–6.5	–13.1
Sri Lanka	–2.5	–5.3	–4.3	–9.5	–0.5	–2.2	–7.8	–6.6	–4.7	–4.4	–3.6
Thailand	–4.3	1.1	6.3	0.8	8.3	3.1	1.7	0.0	0.1	–0.2	0.2
Timor-Leste	14.6	19.2	39.7	45.6	39.0	39.8	40.4	43.5	34.3	32.1	25.1
Tonga	–5.1	–5.6	–5.6	–8.1	–6.7	–3.7	–4.8	–6.2	–5.3	–4.2	–2.7
Tuvalu	24.7	27.1	10.9	9.7	22.6	–6.6	–35.9	1.4	–3.0	–9.6	–14.3
Vanuatu	–8.7	–6.2	–7.3	–7.9	–6.1	–5.4	–8.1	–6.3	–6.2	–6.8	–6.9
Vietnam	–1.0	–0.2	–9.0	–11.0	–6.0	–3.8	0.2	5.8	5.6	3.3	–1.2

Table A12. Emerging Market and Developing Economies: Balance on Current Account *(continued)*

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	2014	2018
Latin America and the Caribbean	**1.2**	**1.5**	**0.2**	**–0.9**	**–0.7**	**–1.3**	**–1.4**	**–1.9**	**–2.4**	**–2.4**	**–2.7**
Antigua and Barbuda	–17.2	–26.3	–29.9	–25.9	–19.4	–14.7	–10.8	–12.1	–12.1	–12.8	–14.0
Argentina[3]	2.6	3.4	2.6	1.8	2.5	0.3	–0.6	0.0	–0.8	–0.8	–0.8
The Bahamas	–8.4	–17.7	–11.5	–10.6	–10.3	–10.3	–13.8	–17.5	–14.9	–13.1	–9.0
Barbados	–10.7	–8.2	–5.4	–10.7	–6.8	–5.8	–11.4	–4.8	–5.2	–5.1	–4.0
Belize	–13.6	–2.1	–4.1	–10.6	–4.9	–2.8	–1.1	–1.7	–1.9	–2.8	–5.8
Bolivia	5.9	11.2	11.4	11.9	4.3	3.9	0.3	7.8	4.2	3.1	1.4
Brazil	1.6	1.3	0.1	–1.7	–1.5	–2.2	–2.1	–2.4	–3.4	–3.2	–3.4
Chile	1.5	4.6	4.1	–3.2	2.0	1.5	–1.3	–3.5	–4.6	–4.0	–3.0
Colombia	–1.3	–1.9	–2.8	–2.9	–2.1	–3.1	–2.9	–3.2	–3.2	–3.2	–2.7
Costa Rica	–4.9	–4.5	–6.3	–9.3	–2.0	–3.5	–5.4	–5.3	–5.5	–5.5	–5.8
Dominica	–21.4	–13.0	–21.1	–28.7	–22.7	–17.1	–15.0	–11.5	–10.7	–11.3	–13.2
Dominican Republic	–1.6	–3.6	–5.3	–9.9	–5.0	–8.4	–7.9	–6.8	–4.8	–4.5	–3.9
Ecuador	1.1	3.7	3.7	2.8	0.5	–2.4	–0.3	–0.2	–1.1	–1.4	–3.8
El Salvador	–3.6	–4.1	–6.1	–7.1	–1.5	–2.7	–4.9	–5.3	–5.2	–5.0	–4.6
Grenada	–24.6	–29.6	–27.7	–25.3	–23.6	–24.0	–22.5	–24.8	–25.4	–24.7	–21.4
Guatemala	–4.6	–5.0	–5.2	–4.3	0.0	–1.5	–3.4	–2.9	–2.9	–2.9	–2.5
Guyana	–9.1	–13.4	–9.5	–13.7	–9.1	–9.6	–13.1	–15.6	–19.6	–17.8	–11.6
Haiti	0.7	–1.5	–1.5	–4.4	–3.5	–12.5	–4.6	–4.5	–5.8	–5.7	–4.2
Honduras	–3.0	–3.7	–9.1	–15.4	–3.8	–4.3	–8.0	–8.6	–9.0	–9.2	–8.1
Jamaica	–9.6	–10.1	–15.4	–17.7	–11.0	–8.6	–13.3	–12.9	–11.4	–9.7	–4.9
Mexico	–1.0	–0.8	–1.4	–1.8	–0.9	–0.3	–1.0	–1.2	–1.3	–1.5	–1.7
Nicaragua	–11.0	–10.4	–13.5	–18.4	–9.3	–11.0	–13.7	–12.9	–13.4	–13.0	–10.9
Panama	–4.9	–3.1	–7.9	–10.9	–0.7	–10.2	–12.2	–9.0	–8.9	–8.5	–5.9
Paraguay	–0.8	1.6	5.6	1.0	3.2	–0.3	1.2	0.4	0.5	–0.2	0.4
Peru	1.5	3.2	1.4	–4.2	–0.6	–2.5	–1.9	–3.6	–4.9	–5.1	–3.5
St. Kitts and Nevis	–14.9	–14.1	–18.2	–27.6	–27.4	–22.4	–15.6	–13.5	–15.9	–17.2	–15.0
St. Lucia	–13.8	–29.3	–30.1	–28.7	–11.6	–16.2	–18.8	–14.5	–14.5	–14.1	–15.2
St. Vincent and the Grenadines	–18.6	–19.5	–28.0	–33.1	–29.3	–30.6	–28.8	–30.3	–29.9	–28.3	–23.2
Suriname	–10.8	8.4	11.1	9.2	0.3	6.4	5.8	4.2	–3.6	–6.2	2.0
Trinidad and Tobago	22.5	39.6	23.9	30.5	8.5	20.3	12.3	10.4	8.6	7.9	6.0
Uruguay	0.2	–2.0	–0.9	–5.7	–1.3	–1.9	–2.9	–5.4	–4.9	–4.1	–3.5
Venezuela	17.5	14.4	6.9	10.2	0.7	3.0	7.7	2.9	2.8	2.2	–2.4
Middle East, North Africa, Afghanistan, and Pakistan	**13.8**	**15.6**	**12.3**	**12.9**	**1.7**	**6.5**	**13.3**	**12.1**	**9.4**	**8.6**	**3.4**
Afghanistan	3.1	–1.1	5.8	5.1	1.6	2.8	2.4	3.9	2.5	1.8	–2.6
Algeria	20.5	24.7	22.6	20.1	0.3	7.5	8.9	5.9	1.8	1.2	–1.6
Bahrain	11.0	13.8	15.7	10.2	2.9	3.6	12.6	8.2	13.5	11.9	8.5
Djibouti	–3.2	–11.5	–21.4	–24.3	–9.3	–5.4	–14.1	–12.3	–13.1	–15.1	–12.2
Egypt	3.2	1.6	2.1	0.5	–2.3	–2.0	–2.6	–3.1	–2.6	–0.9	–4.0
Iran	7.6	8.5	10.6	6.5	2.6	6.5	12.0	5.0	3.1	0.3	–1.1
Iraq	3.9	12.9	7.7	12.8	–8.3	3.0	12.5	7.0	0.7	0.8	3.1
Jordan	–18.0	–11.5	–16.8	–9.3	–3.3	–5.3	–12.0	–18.1	–9.9	–9.1	–4.7
Kuwait	37.2	44.6	36.8	40.9	26.7	30.8	41.8	43.2	38.7	37.7	28.4
Lebanon	–13.6	–2.8	–4.1	–7.7	–9.3	–9.9	–12.4	–16.2	–16.7	–16.7	–10.6
Libya	36.8	51.1	44.1	42.5	14.9	19.5	9.1	29.2	–4.7	–4.7	–20.1
Mauritania	–47.2	–1.3	–17.1	–14.9	–11.6	–9.3	–7.6	–32.7	–34.3	–22.6	–4.4
Morocco	1.8	2.2	–0.1	–5.2	–5.4	–4.1	–8.1	–10.0	–7.2	–6.1	–4.5
Oman	16.8	15.4	5.9	8.3	–1.3	10.0	15.3	11.6	10.1	7.3	–4.1
Pakistan	–1.3	–3.6	–4.5	–8.1	–5.5	–2.2	0.1	–2.1	–1.0	–0.6	–1.9
Qatar	16.8	15.5	14.4	23.1	6.5	19.0	30.3	32.4	29.6	25.6	7.5
Saudi Arabia	27.4	26.3	22.5	25.5	4.9	12.7	23.7	23.2	19.3	17.7	12.4
Sudan[4]	–10.0	–8.8	–5.9	–1.5	–9.6	–2.1	–0.4	–10.8	–11.9	–7.0	–7.3
Syria[5]	–2.2	1.4	–0.2	–1.3	–2.9	–2.8	. . .	. . .	. . .	. . .	. . .
Tunisia	–0.9	–1.8	–2.4	–3.8	–2.8	–4.8	–7.3	–8.1	–8.0	–6.6	–3.6
United Arab Emirates	12.4	16.3	6.9	7.1	3.1	2.5	14.6	17.3	15.2	15.6	7.6
Yemen	3.8	1.1	–7.0	–4.6	–10.2	–3.7	–4.1	–0.9	–2.7	–3.4	–3.5

Table A12. Emerging Market and Developing Economies: Balance on Current Account *(concluded)*

(Percent of GDP)

									Projections		
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
Sub-Saharan Africa	**–0.3**	**3.8**	**1.1**	**–0.4**	**–3.1**	**–1.4**	**–1.4**	**–3.0**	**–4.0**	**–4.0**	**–5.1**
Angola	18.2	25.6	19.9	10.3	–9.9	8.1	12.6	9.2	7.1	4.6	–4.4
Benin	–6.5	–4.9	–10.2	–8.1	–8.9	–8.7	–7.8	–8.5	–8.1	–8.2	–6.7
Botswana	16.3	19.2	15.1	0.4	–10.2	–5.4	–0.2	–4.9	–1.8	–1.2	2.4
Burkina Faso	–11.6	–9.5	–8.3	–11.5	–4.7	–2.2	–1.3	–2.1	–5.2	–8.2	–8.5
Burundi	–4.9	–21.5	–5.4	–1.0	1.8	–12.2	–13.7	–17.5	–15.8	–16.8	–13.9
Cameroon	–3.4	1.6	1.4	–1.2	–3.3	–3.0	–2.9	–3.7	–4.1	–3.7	–3.9
Cape Verde	–3.1	–4.8	–12.9	–13.7	–14.6	–12.4	–16.3	–11.5	–9.9	–9.5	–4.1
Central African Republic	–6.6	–3.0	–6.2	–10.0	–9.2	–10.2	–7.6	–6.2	–5.6	–5.8	–3.4
Chad	1.0	5.1	9.4	7.2	–3.1	–4.0	–0.8	–1.4	–5.4	–2.3	–4.5
Comoros	–7.4	–6.0	–5.8	–12.1	–7.8	–5.7	–9.4	–7.3	–10.0	–11.1	–6.4
Democratic Republic of the Congo	–13.3	–2.7	–1.1	–17.5	–10.6	–8.1	–10.9	–9.6	–12.9	–17.0	–15.1
Republic of Congo	3.7	3.6	–6.5	–0.5	–6.0	3.8	5.8	–1.3	7.5	5.1	–1.6
Côte d'Ivoire	0.2	2.8	–0.2	2.3	7.6	2.5	12.9	–1.3	–2.9	–2.5	–3.7
Equatorial Guinea	–7.7	–1.1	–3.0	–1.2	–17.8	–24.0	–10.5	–12.6	–15.1	–16.9	–16.7
Eritrea	0.3	–3.6	–6.1	–5.5	–7.6	–5.6	0.6	2.3	0.3	–0.3	–4.7
Ethiopia	–6.3	–9.2	–4.5	–5.7	–5.1	–4.1	–0.7	–6.6	–6.4	–6.1	–5.7
Gabon	20.4	14.1	14.9	23.4	7.5	8.9	14.1	13.2	9.7	6.3	–1.7
The Gambia	–10.3	–6.9	–8.3	–12.3	–12.3	–16.0	–15.5	–17.0	–16.2	–15.6	–15.3
Ghana	–7.0	–8.2	–8.7	–11.9	–5.4	–8.6	–9.1	–12.2	–12.9	–10.7	–8.4
Guinea	–1.0	–4.6	–11.6	–10.6	–8.6	–11.5	–20.5	–34.1	–15.9	–46.3	0.3
Guinea-Bissau	–2.1	–5.6	–3.5	–4.9	–6.7	–8.6	–1.2	–6.5	–6.1	–4.8	–2.3
Kenya	–1.5	–2.3	–4.0	–6.6	–5.8	–6.5	–9.6	–9.3	–7.8	–7.3	–4.6
Lesotho	1.4	11.5	8.2	10.0	0.2	–11.9	–22.0	–13.6	–13.6	–13.4	–6.1
Liberia	–2.8	–18.1	–22.3	–53.5	–27.0	–37.1	–32.7	–33.6	–47.4	–50.0	–17.8
Madagascar	–11.6	–9.9	–12.7	–20.6	–21.1	–9.7	–6.9	–8.3	–5.8	–3.9	1.3
Malawi	–11.9	–11.3	1.0	–9.7	–4.8	–1.3	–5.9	–4.4	–3.1	–5.1	–3.6
Mali	–8.1	–3.7	–6.3	–12.2	–7.3	–12.6	–6.1	–3.4	–7.5	–10.2	–8.9
Mauritius	–5.0	–9.1	–5.4	–10.1	–7.4	–10.3	–13.2	–10.2	–9.9	–9.1	–7.0
Mozambique	–17.2	–8.6	–10.9	–12.9	–12.2	–11.7	–24.3	–36.5	–40.1	–41.7	–39.3
Namibia	4.7	13.8	9.1	2.8	–1.1	–1.8	–3.5	–2.6	–3.4	–5.2	–1.8
Niger	–8.9	–8.6	–8.3	–13.0	–24.7	–19.9	–24.7	–15.8	–18.4	–19.9	–9.4
Nigeria	8.8	25.3	16.8	14.1	8.3	5.9	3.6	7.6	3.2	3.6	–0.9
Rwanda	1.0	–4.4	–2.3	–5.0	–7.3	–5.4	–7.2	–11.4	–11.6	–11.5	–5.5
São Tomé and Príncipe	–23.9	–34.5	–31.9	–35.0	–23.7	–22.6	–27.5	–21.4	–17.7	–18.6	13.2
Senegal	–8.9	–9.2	–11.6	–14.1	–6.7	–4.4	–7.9	–10.3	–9.5	–8.5	–7.0
Seychelles	–22.7	–16.1	–15.5	–16.6	–9.8	–23.0	–22.7	–21.7	–24.1	–20.2	–17.9
Sierra Leone	–5.2	–4.2	–4.2	–8.9	–6.3	–19.7	–44.9	–36.7	–16.6	–8.9	–5.3
South Africa	–3.5	–5.3	–7.0	–7.2	–4.0	–2.8	–3.4	–6.3	–6.1	–6.1	–5.7
South Sudan	. . .	. . .	. . .	. . .	. . .	. . .	18.4	–27.7	–14.9	8.7	1.0
Swaziland	–4.1	–7.4	–2.2	–8.2	–14.0	–10.5	–9.0	3.8	–1.2	–3.3	–5.8
Tanzania	–6.6	–9.6	–11.0	–10.2	–9.8	–9.3	–13.6	–15.3	–14.9	–14.1	–10.4
Togo	–9.9	–8.4	–8.7	–6.8	–6.6	–6.7	–11.1	–12.3	–10.9	–10.2	–6.7
Uganda	–2.5	–4.2	–5.5	–8.7	–7.3	–11.1	–12.5	–10.5	–12.0	–13.9	–13.2
Zambia	–8.5	–0.4	–6.5	–7.2	4.2	7.1	3.7	0.0	–3.7	–3.8	–3.0
Zimbabwe[6]	–10.2	–8.3	–7.0	–21.8	–21.8	–25.7	–36.9	–26.2	–21.7	–16.8	–6.4

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[2]Moldova projections are based on data available for the first quarter of 2013.
[3]Calculations are based on Argentina's official GDP data. See footnote to Table A4.
[4]Data for 2011 exclude South Sudan after July 9. Data for 2012 and onward pertain to the current Sudan.
[5]Data for Syria are excluded for 2011 onward due to the uncertain political situation.
[6]The Zimbabwe dollar ceased circulating in early 2009. Data are based on IMF staff estimates of price and exchange rate developments in U.S. dollars. IMF staff estimates of U.S. dollar values may differ from authorities' estimates.

Table A13. Emerging Market and Developing Economies: Net Financial Flows[1]

(Billions of U.S. dollars)

	Average									Projections	
	2002–04	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Emerging Market and Developing Economies											
Private Financial Flows, Net	169.0	316.2	310.7	698.1	201.1	281.9	572.0	499.3	237.1	398.4	366.6
Private Direct Investment, Net	167.0	275.1	302.9	444.6	471.8	329.8	409.1	526.7	465.5	423.0	435.5
Private Portfolio Flows, Net	20.4	38.1	–41.5	98.3	–78.4	57.3	184.5	79.0	229.9	154.3	130.4
Other Private Financial Flows, Net	–18.3	2.9	49.3	155.2	–192.3	–105.3	–21.6	–106.4	–458.3	–179.0	–199.3
Official Financial Flows, Net[2]	–35.7	–87.1	–178.9	–59.2	–78.0	171.8	100.5	–12.4	0.2	–65.6	–39.4
Change in Reserves[3]	–258.5	–556.6	–722.3	–1,195.5	–661.4	–496.5	–824.6	–715.1	–408.4	–544.5	–527.0
Memorandum											
Current Account[4]	145.8	407.0	627.2	596.9	669.2	253.8	323.3	410.5	380.6	235.8	240.7
Central and Eastern Europe											
Private Financial Flows, Net	35.0	103.6	116.0	184.4	157.2	31.1	83.0	94.2	62.2	83.2	65.5
Private Direct Investment, Net	19.0	37.3	64.0	74.7	67.8	31.0	24.8	39.5	23.2	24.2	32.2
Private Portfolio Flows, Net	7.0	20.8	0.8	–4.1	–10.4	8.6	26.9	33.8	48.2	47.9	23.3
Other Private Financial Flows, Net	9.0	45.5	51.1	113.7	99.7	–8.6	31.3	21.0	–9.2	11.1	10.0
Official Flows, Net[2]	9.9	1.4	5.2	–6.7	20.1	49.5	35.3	22.4	16.6	–0.6	1.4
Change in Reserves[3]	–11.0	–43.6	–30.7	–37.4	–7.0	–33.8	–37.1	–12.5	–23.7	–11.9	2.2
Commonwealth of Independent States[5]											
Private Financial Flows, Net	8.7	29.3	51.5	130.2	–97.6	–63.4	–25.4	–63.9	–41.1	–67.9	–32.4
Private Direct Investment, Net	7.8	11.4	21.1	27.9	49.7	15.7	9.7	14.2	17.8	18.9	22.8
Private Portfolio Flows, Net	2.6	3.9	4.9	19.4	–31.1	–9.2	8.5	–27.7	–5.2	–4.4	3.9
Other Private Financial Flows, Net	–1.7	14.0	25.6	82.8	–116.2	–69.9	–43.6	–50.3	–53.7	–82.4	–59.1
Official Flows, Net[2]	–5.4	–18.6	–25.4	–6.5	–19.3	42.4	1.4	–17.5	0.7	1.0	0.7
Change in Reserves[3]	–34.2	–77.0	–127.5	–167.7	26.7	–7.2	–52.1	–23.8	–33.6	10.4	–13.6
Developing Asia											
Private Financial Flows, Net	97.5	124.8	90.1	204.4	35.9	207.9	390.5	366.5	110.4	265.5	200.7
Private Direct Investment, Net	64.5	113.4	127.2	174.2	153.7	115.9	222.6	283.0	235.7	181.4	180.2
Private Portfolio Flows, Net	17.7	16.7	–53.4	52.2	–0.4	48.5	82.0	56.3	107.3	38.5	60.1
Other Private Financial Flows, Net	15.3	–5.2	16.3	–22.0	–117.4	43.5	86.0	27.2	–232.6	45.6	–39.5
Official Flows, Net[2]	–13.3	–4.1	7.1	7.2	–4.1	31.7	31.4	10.7	19.4	14.4	17.0
Change in Reserves[3]	–170.7	–281.6	–368.3	–621.2	–479.6	–461.9	–571.2	–439.9	–134.2	–414.6	–400.0
Latin America and the Caribbean											
Private Financial Flows, Net	13.7	41.1	29.8	90.5	80.5	61.3	130.5	200.4	136.2	117.4	110.6
Private Direct Investment, Net	47.4	57.4	33.4	94.3	100.3	69.5	79.6	133.7	129.8	133.1	129.9
Private Portfolio Flows, Net	–12.9	0.7	3.7	36.1	–10.6	29.2	57.3	48.2	31.4	38.8	8.2
Other Private Financial Flows, Net	–20.8	–16.9	–7.3	–39.9	–9.1	–37.4	–6.4	18.5	–25.0	–54.4	–27.6
Official Flows, Net[2]	10.1	–36.6	–44.6	–0.1	3.7	44.7	48.3	24.7	62.0	53.6	46.3
Change in Reserves[3]	3.1	0.0	–10.9	–106.3	–0.2	–24.9	–66.2	–85.9	–31.4	1.6	6.6
Middle East, North Africa, Afghanistan, and Pakistan											
Private Financial Flows, Net	9.4	0.1	15.5	72.5	4.2	30.6	9.5	–95.5	–45.5	–30.1	–25.5
Private Direct Investment, Net	16.6	37.1	48.5	51.1	61.5	66.1	49.9	20.2	28.2	25.2	28.7
Private Portfolio Flows, Net	7.3	–3.9	–3.5	–5.5	1.9	–16.8	10.6	–22.4	38.5	33.7	27.0
Other Private Financial Flows, Net	–14.5	–33.0	–29.5	26.9	–59.3	–18.7	–51.0	–93.3	–112.2	–89.0	–81.2
Official Flows, Net[2]	–37.9	–25.6	–84.9	–61.6	–89.7	–16.1	–49.1	–83.6	–132.1	–166.4	–134.5
Change in Reserves[3]	–40.0	–131.7	–153.7	–234.3	–186.6	23.3	–96.4	–132.0	–166.5	–113.2	–101.4
Sub-Saharan Africa											
Private Financial Flows, Net	4.6	17.2	7.9	16.1	21.0	14.4	–16.3	–2.5	14.9	30.2	47.7
Private Direct Investment, Net	11.6	18.5	8.7	22.3	38.9	31.6	22.5	36.1	30.8	40.2	41.7
Private Portfolio Flows, Net	–1.3	0.0	6.1	0.2	–27.9	–3.1	–0.9	–9.1	9.7	–0.1	8.0
Other Private Financial Flows, Net	–5.7	–1.3	–7.0	–6.3	9.9	–14.2	–37.9	–29.4	–25.6	–9.9	–1.9
Official Flows, Net[2]	0.9	–3.7	–36.2	8.6	11.3	19.6	33.2	30.8	33.6	32.3	29.8
Change in Reserves[3]	–5.7	–22.7	–31.2	–28.6	–14.8	8.1	–1.7	–21.0	–19.1	–16.8	–20.8
Memorandum											
Fuel Exporting Countries											
Private Financial Flows, Net	6.5	1.0	21.8	122.5	–183.1	–97.6	–93.1	–222.8	–154.4	–178.5	–117.6
Other Countries											
Private Financial Flows, Net	162.5	315.2	288.9	575.6	384.2	379.4	665.1	722.1	391.7	575.9	485.4

[1]Net financial flows comprise net direct investment, net portfolio investment, other net official and private financial flows, and changes in reserves.
[2]Excludes grants and includes transactions in external assets and liabilities of official agencies.
[3]A minus sign indicates an increase.
[4]The sum of the current account balance, net private financial flows, net official flows, and the change in reserves equals, with the opposite sign, the sum of the capital account and errors and omissions.
[5]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table A14. Emerging Market and Developing Economies: Private Financial Flows[1]

(Billions of U.S. dollars)

	Average									Projections	
	2002–04	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Emerging Market and Developing Economies											
Private Financial Flows, Net	169.0	316.2	310.7	698.1	201.1	281.9	572.0	499.3	237.1	398.4	366.6
Assets	–161.9	–346.9	–640.2	–830.1	–578.3	–302.9	–646.0	–720.1	–812.7	–603.2	–667.3
Liabilities	331.1	658.0	948.7	1,523.8	783.2	582.7	1,212.0	1,216.2	1,044.6	995.6	1,031.0
Central and Eastern Europe											
Private Financial Flows, Net	35.0	103.6	116.0	184.4	157.2	31.1	83.0	94.2	62.2	83.2	65.5
Assets	–14.4	–17.8	–57.0	–44.5	–29.3	–9.9	–8.2	9.9	–2.9	–9.1	–0.7
Liabilities	49.4	121.3	172.6	227.8	185.4	41.5	91.3	84.4	65.2	92.3	66.6
Commonwealth of Independent States[2]											
Private Financial Flows, Net	8.7	29.3	51.5	130.2	–97.6	–63.4	–25.4	–63.9	–41.1	–67.9	–32.4
Assets	–33.8	–80.3	–100.1	–160.6	–264.5	–75.0	–104.9	–164.4	–160.8	–158.5	–160.1
Liabilities	42.5	109.4	151.6	290.7	167.0	11.8	79.4	100.5	119.7	90.6	127.6
Developing Asia											
Private Financial Flows, Net	97.5	124.8	90.1	204.4	35.9	207.9	390.5	366.5	110.4	265.5	200.7
Assets	–36.2	–120.2	–235.2	–259.5	–168.8	–93.0	–253.4	–297.5	–401.2	–247.3	–310.6
Liabilities	133.4	240.2	320.7	458.7	209.4	297.1	638.9	659.8	506.4	507.5	508.0
Latin America and the Caribbean											
Private Financial Flows, Net	13.7	41.1	29.8	90.5	80.5	61.3	130.5	200.4	136.2	117.4	110.6
Assets	–34.7	–50.2	–96.9	–115.8	–84.2	–101.3	–171.0	–121.1	–151.2	–109.4	–103.9
Liabilities	48.7	91.5	129.3	208.2	165.2	163.4	300.8	323.2	286.9	227.5	214.4
Middle East, North Africa, Afghanistan, and Pakistan											
Private Financial Flows, Net	9.4	0.1	15.5	72.5	4.2	30.6	9.5	–95.5	–45.5	–30.1	–25.5
Assets	–32.5	–62.5	–118.3	–216.3	–14.4	–9.6	–81.7	–116.7	–75.0	–60.4	–78.0
Liabilities	41.9	62.7	133.7	288.7	18.6	40.4	91.3	21.4	30.2	31.1	53.0
Sub-Saharan Africa											
Private Financial Flows, Net	4.6	17.2	7.9	16.1	21.0	14.4	–16.3	–2.5	14.9	30.2	47.7
Assets	–10.3	–15.8	–32.7	–33.5	–17.1	–14.0	–26.8	–30.3	–21.6	–18.6	–14.1
Liabilities	15.2	33.0	40.8	49.8	37.6	28.5	10.4	26.9	36.2	46.5	61.5

[1]Private financial flows comprise direct investment, portfolio investment, and other long- and short-term investment flows.
[2]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table A15. Summary of Sources and Uses of World Savings

(Percent of GDP)

	Averages								Projections		
											Average
	1991–98	1999–2006	2007	2008	2009	2010	2011	2012	2013	2014	2015–18
World											
Savings	22.7	22.8	25.0	24.7	22.7	24.0	24.6	24.8	25.1	25.5	26.3
Investment	23.4	22.9	24.6	24.5	22.5	23.6	24.1	24.5	24.7	25.1	26.0
Advanced Economies											
Savings	22.5	21.4	21.7	20.6	18.3	19.2	19.6	19.5	19.7	20.1	21.2
Investment	22.9	22.1	22.6	22.0	18.7	19.5	19.8	19.8	19.7	20.1	21.1
Net Lending	–0.4	–0.7	–0.9	–1.4	–0.5	–0.3	–0.1	–0.3	0.0	0.1	0.1
Current Transfers	–0.4	–0.6	–0.8	–0.8	–0.8	–0.9	–0.8	–0.8	–0.8	–0.8	–0.8
Factor Income	–0.4	0.5	0.5	0.3	0.4	0.6	1.1	0.9	0.7	0.6	0.5
Resource Balance	0.5	–0.5	–0.5	–0.8	0.1	0.0	–0.2	–0.2	0.2	0.4	0.5
United States											
Savings	18.9	18.8	17.3	15.5	14.4	15.1	15.8	16.3	16.7	17.4	19.3
Investment	21.2	22.7	22.3	20.8	17.5	18.4	18.4	19.0	19.4	20.2	22.2
Net Lending	–2.3	–3.8	–5.0	–5.3	–3.1	–3.3	–2.6	–2.7	–2.7	–2.8	–2.9
Current Transfers	–0.5	–0.6	–0.8	–0.9	–0.8	–0.9	–0.9	–0.8	–0.8	–0.8	–0.7
Factor Income	–0.7	1.0	0.6	0.3	0.4	0.9	1.8	1.4	1.1	1.0	0.8
Resource Balance	–1.1	–4.2	–4.8	–4.8	–2.7	–3.3	–3.6	–3.3	–3.0	–3.0	–3.0
Euro Area											
Savings	21.4	21.6	23.0	21.5	19.1	19.8	20.3	20.3	20.4	20.8	21.7
Investment	21.7	21.1	22.7	22.2	18.8	19.2	19.6	18.4	17.9	18.1	18.8
Net Lending	–0.3	0.5	0.4	–0.7	0.3	0.6	0.7	1.9	2.5	2.7	2.9
Current Transfers[1]	–0.6	–0.8	–1.1	–1.1	–1.2	–1.2	–1.2	–1.2	–1.2	–1.2	–1.2
Factor Income[1]	–0.5	–0.3	–0.2	–0.6	–0.1	0.3	0.3	0.2	0.1	–0.1	–0.3
Resource Balance[1]	1.3	1.6	1.6	1.0	1.5	1.6	1.6	2.8	3.4	3.8	4.2
Germany											
Savings	21.4	21.3	26.7	25.5	22.4	23.6	24.4	24.2	23.5	23.8	23.8
Investment	22.4	19.2	19.3	19.3	16.4	17.3	18.3	17.3	17.6	18.1	18.9
Net Lending	–1.0	2.1	7.4	6.2	6.0	6.3	6.2	7.0	6.0	5.7	5.0
Current Transfers	–1.6	–1.3	–1.3	–1.3	–1.4	–1.5	–1.3	–1.4	–1.4	–1.4	–1.4
Factor Income	0.2	0.1	1.8	1.3	2.5	2.2	2.3	2.4	1.6	1.5	1.2
Resource Balance	0.4	3.3	7.0	6.2	4.9	5.6	5.2	5.9	5.7	5.5	5.1
France											
Savings	19.1	20.4	21.0	20.2	17.6	18.0	19.0	17.6	18.2	18.7	20.1
Investment	18.1	19.4	22.0	21.9	18.9	19.3	20.8	19.8	19.6	20.0	20.3
Net Lending	1.0	1.0	–1.0	–1.7	–1.3	–1.3	–1.8	–2.2	–1.4	–1.3	–0.2
Current Transfers	–0.7	–1.1	–1.2	–1.3	–1.8	–1.6	–1.8	–1.8	–1.4	–1.4	–1.4
Factor Income	–0.2	1.3	1.7	1.7	1.7	2.0	2.3	1.5	1.9	2.0	2.0
Resource Balance	1.9	0.8	–1.4	–2.2	–1.3	–1.7	–2.3	–1.9	–1.8	–1.8	–0.7
Italy											
Savings	21.0	20.6	20.8	18.8	16.9	16.5	16.4	16.9	17.4	17.9	18.3
Investment	20.2	21.0	22.1	21.6	18.9	20.1	19.5	17.6	17.4	17.7	18.9
Net Lending	0.7	–0.4	–1.3	–2.9	–2.0	–3.5	–3.1	–0.7	0.0	0.2	–0.6
Current Transfers	–0.5	–0.6	–1.0	–0.9	–0.8	–1.0	–1.0	–1.0	–1.3	–1.3	–1.4
Factor Income	–1.6	–0.5	–0.1	–1.2	–0.7	–0.5	–0.6	–0.8	–0.9	–1.0	–1.4
Resource Balance	2.9	0.7	–0.3	–0.7	–0.5	–1.9	–1.5	1.1	2.2	2.5	2.3
Japan											
Savings	31.2	26.4	27.8	26.3	22.6	23.5	22.0	21.6	21.9	22.2	22.5
Investment	28.9	23.3	22.9	23.0	19.7	19.8	20.0	20.6	20.7	20.4	20.8
Net Lending	2.3	3.1	4.9	3.3	2.9	3.7	2.0	1.0	1.2	1.7	1.7
Current Transfers	–0.2	–0.2	–0.3	–0.3	–0.2	–0.2	–0.2	–0.2	–0.3	–0.2	–0.2
Factor Income	0.9	1.8	3.2	3.2	2.7	2.6	3.0	3.0	3.3	3.0	3.0
Resource Balance	1.6	1.5	1.9	0.4	0.5	1.4	–0.7	–1.8	–1.8	–1.0	–1.0
United Kingdom											
Savings	16.2	15.3	16.0	16.1	12.7	12.3	13.5	10.9	11.3	12.2	13.6
Investment	17.0	17.5	18.2	17.1	14.1	15.0	14.9	14.7	14.0	14.5	14.8
Net Lending	–0.8	–2.3	–2.2	–0.9	–1.4	–2.7	–1.5	–3.8	–2.8	–2.3	–1.3
Current Transfers	–0.7	–0.8	–0.9	–0.9	–1.1	–1.4	–1.4	–1.5	–1.5	–1.4	–1.4
Factor Income	–0.2	0.9	1.3	2.2	1.3	0.9	1.5	–0.1	0.1	0.3	0.8
Resource Balance	0.0	–2.3	–2.6	–2.2	–1.6	–2.2	–1.5	–2.2	–1.4	–1.2	–0.6

Table A15. Summary of Sources and Uses of World Savings *(continued)*

(Percent of GDP)

	Averages								Projections		
	1991–98	1999–2006	2007	2008	2009	2010	2011	2012	2013	2014	Average 2015–18
Canada											
Savings	17.0	22.9	24.7	24.1	18.9	19.8	21.1	21.2	21.2	21.2	21.9
Investment	19.7	21.3	24.0	24.0	21.8	23.3	23.8	24.7	24.3	24.3	24.6
Net Lending	–2.7	1.6	0.8	0.1	–2.9	–3.5	–2.8	–3.4	–3.1	–3.1	–2.6
Current Transfers	–0.1	0.0	–0.1	0.0	–0.2	–0.2	–0.2	–0.2	–0.2	–0.2	–0.2
Factor Income	–4.0	–2.6	–1.2	–1.6	–1.3	–1.4	–1.3	–1.2	–1.2	–1.3	–2.2
Resource Balance	1.4	4.3	2.1	1.7	–1.5	–1.9	–1.2	–2.0	–1.8	–1.6	–0.2
Emerging Market and Developing Economies											
Savings	23.5	27.6	33.1	33.8	32.2	33.0	33.2	33.5	33.5	33.8	33.7
Investment	25.8	25.6	29.5	30.3	30.8	31.6	31.7	32.3	32.8	33.1	33.3
Net Lending	–2.0	2.0	3.7	3.4	1.5	1.5	1.5	1.3	0.8	0.8	0.4
Current Transfers	0.7	1.4	1.6	1.4	1.4	1.2	1.1	0.9	1.0	1.0	0.9
Factor Income	–1.6	–2.0	–1.6	–1.6	–1.6	–1.8	–2.1	–1.8	–1.8	–1.7	–1.4
Resource Balance	–1.1	2.6	3.8	3.6	1.6	2.1	2.6	2.3	1.6	1.5	0.9
Memorandum											
Acquisition of Foreign Assets	1.7	5.8	12.4	6.5	4.8	7.0	6.1	5.0	4.0	3.9	3.5
Change in Reserves	1.0	2.8	7.5	3.4	2.7	3.8	2.8	1.5	1.9	1.8	1.8
Regional Groups											
Central and Eastern Europe											
Savings	19.7	16.8	16.3	16.8	15.9	15.9	16.6	16.5	16.2	16.3	16.5
Investment	21.7	21.1	24.7	25.0	18.9	20.6	22.9	20.9	20.5	20.7	21.6
Net Lending	–2.0	–4.3	–8.4	–8.2	–3.0	–4.7	–6.3	–4.3	–4.4	–4.4	–5.2
Current Transfers	1.8	2.0	1.6	1.5	1.7	1.5	1.6	1.5	1.4	1.2	1.1
Factor Income	–1.2	–1.7	–2.9	–2.4	–2.4	–2.4	–2.7	–2.5	–2.7	–2.8	–2.9
Resource Balance	–2.6	–4.7	–7.2	–7.4	–2.5	–4.0	–5.3	–3.4	–3.2	–3.0	–3.5
Memorandum											
Acquisition of Foreign Assets	0.9	3.3	4.9	1.9	2.2	2.8	–0.4	0.7	0.9	–0.7	0.8
Change in Reserves	0.8	1.6	2.3	0.4	2.1	2.1	0.7	1.3	0.6	–0.1	0.5
Commonwealth of Independent States[2]											
Savings	. . .	28.9	30.3	30.0	22.0	26.1	28.8	27.5	27.1	26.7	25.6
Investment	. . .	20.7	26.7	25.2	19.2	22.5	24.4	24.6	25.0	25.1	25.5
Net Lending	. . .	8.1	3.7	4.9	2.8	3.6	4.4	2.9	2.1	1.6	0.1
Current Transfers	. . .	0.5	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.3
Factor Income	. . .	–2.9	–2.8	–3.3	–3.6	–3.6	–3.9	–3.8	–3.5	–2.9	–1.9
Resource Balance	. . .	10.4	6.5	8.1	6.0	6.9	8.2	6.6	5.6	4.4	1.9
Memorandum											
Acquisition of Foreign Assets	. . .	11.1	17.1	9.9	1.6	5.8	5.9	5.2	3.2	3.5	2.7
Change in Reserves	. . .	5.7	9.8	–1.2	0.4	2.6	1.0	1.3	–0.4	0.5	0.2
Developing Asia											
Savings	32.7	36.2	44.0	44.6	45.3	44.8	43.2	44.2	44.5	44.8	45.1
Investment	33.9	33.4	37.4	38.6	41.8	42.2	42.2	43.3	43.5	43.5	43.2
Net Lending	–1.2	2.8	6.5	5.9	3.5	2.5	0.9	0.8	1.0	1.3	1.9
Current Transfers	1.0	1.7	2.0	1.8	1.7	1.5	1.3	1.1	1.2	1.2	1.2
Factor Income	–1.5	–1.4	–0.5	–0.2	–0.6	–0.9	–1.1	–1.0	–1.0	–1.1	–1.2
Resource Balance	–0.6	2.5	5.1	4.3	2.5	2.0	0.8	0.8	0.9	1.2	1.9
Memorandum											
Acquisition of Foreign Assets	3.7	6.4	13.5	7.5	6.9	8.7	6.1	4.4	4.3	4.3	4.3
Change in Reserves	1.9	4.5	10.3	6.6	5.9	6.0	3.9	1.1	3.2	2.9	3.3

Table A15. Summary of Sources and Uses of World Savings *(continued)*

(Percent of GDP)

	Averages								Projections		
											Average
	1991–98	1999–2006	2007	2008	2009	2010	2011	2012	2013	2014	2015–18
Latin America and the Caribbean											
Savings	18.4	19.7	22.7	22.7	19.9	20.3	20.6	19.6	19.5	19.8	19.9
Investment	21.1	20.2	22.5	23.7	20.6	21.7	22.2	21.6	22.1	22.2	22.4
Net Lending	–2.7	–0.5	0.2	–1.0	–0.7	–1.4	–1.6	–2.0	–2.6	–2.4	–2.5
Current Transfers	0.8	1.6	1.8	1.6	1.4	1.2	1.1	1.1	1.1	1.1	1.1
Factor Income	–2.5	–3.0	–2.7	–2.7	–2.2	–2.6	–2.9	–2.4	–2.5	–2.2	–2.0
Resource Balance	–1.1	0.8	1.1	0.1	0.0	–0.1	0.1	–0.7	–1.3	–1.4	–1.6
Memorandum											
Acquisition of Foreign Assets	1.2	2.6	5.8	2.4	4.2	5.3	4.8	3.7	1.8	1.4	1.3
Change in Reserves	0.5	–0.4	2.9	0.0	0.6	1.3	1.5	0.6	0.0	–0.1	0.0
Middle East, North Africa, Afghanistan, and Pakistan											
Savings	21.7	31.3	39.6	41.8	32.4	36.0	38.6	36.7	35.5	35.1	31.5
Investment	23.7	23.1	28.0	29.1	31.0	29.8	25.6	25.1	26.5	26.9	27.0
Net Lending	–2.0	8.4	12.5	12.8	2.2	6.9	13.4	12.4	10.0	9.1	5.0
Current Transfers	–1.6	0.0	0.1	0.0	–0.4	–0.5	–0.6	–0.5	–0.7	–0.6	–0.9
Factor Income	1.5	–0.2	0.5	0.0	–0.5	–0.7	–0.7	–0.7	–0.7	–0.4	0.8
Resource Balance	–1.9	8.5	11.9	12.9	2.6	7.8	14.6	13.3	10.8	9.5	4.9
Memorandum											
Acquisition of Foreign Assets	–0.5	10.7	24.5	11.6	3.6	9.1	13.4	12.4	9.8	9.8	6.8
Change in Reserves	0.8	4.3	11.2	7.2	–1.0	3.6	4.2	4.8	3.4	2.9	1.7
Sub-Saharan Africa											
Savings	15.0	18.2	23.8	22.3	20.2	20.8	19.9	19.7	19.4	19.4	18.8
Investment	17.0	19.3	22.3	22.4	23.2	22.2	21.5	22.6	23.2	23.3	23.5
Net Lending	–2.0	–1.1	1.4	0.0	–2.9	–1.4	–1.6	–3.0	–3.8	–3.9	–4.7
Current Transfers	1.9	2.6	4.6	4.6	4.7	4.2	3.9	3.8	3.8	3.6	3.3
Factor Income	–3.2	–4.9	–5.2	–5.8	–4.3	–4.9	–5.5	–5.3	–4.7	–4.3	–3.8
Resource Balance	–0.7	1.2	2.0	1.1	–3.4	–0.8	0.3	–1.5	–3.0	–3.1	–4.2
Memorandum											
Acquisition of Foreign Assets	1.1	3.3	7.7	4.6	2.5	2.9	2.9	2.0	1.6	2.7	2.2
Change in Reserves	0.7	1.8	3.4	1.6	–0.9	0.2	1.7	1.5	1.3	1.5	0.7
Analytical Groups											
By Source of Export Earnings											
Fuel Exporters											
Savings	22.8	33.0	38.6	39.2	30.3	33.8	36.7	35.5	34.1	33.1	30.0
Investment	25.4	23.0	27.5	26.7	26.7	26.8	25.2	25.5	26.4	26.5	26.6
Net Lending	–1.6	10.1	11.5	12.5	4.0	7.3	11.6	10.4	8.1	7.0	3.5
Current Transfers	–3.1	–1.4	–0.7	–0.7	–1.1	–1.1	–1.1	–1.2	–1.3	–1.3	–1.2
Factor Income	0.1	–1.9	–1.7	–2.3	–2.0	–2.7	–2.9	–2.7	–2.5	–2.0	–0.7
Resource Balance	1.5	13.3	14.0	15.6	6.7	10.8	15.6	14.0	11.6	10.0	5.5
Memorandum											
Acquisition of Foreign Assets	–0.3	12.2	22.4	12.6	3.0	7.9	11.5	10.7	8.0	7.8	5.2
Change in Reserves	–0.4	3.4	9.9	2.4	–2.1	2.0	2.8	3.6	1.6	1.6	0.6
Nonfuel Exporters											
Savings	23.6	26.3	31.6	32.1	32.7	32.8	32.3	33.0	33.4	33.9	34.6
Investment	25.7	26.2	30.0	31.4	31.9	32.8	33.4	34.1	34.5	34.8	35.0
Net Lending	–2.1	0.1	1.5	0.7	0.8	0.1	–1.1	–1.1	–1.1	–0.8	–0.4
Current Transfers	1.4	2.1	2.3	2.1	2.0	1.8	1.6	1.5	1.6	1.6	1.5
Factor Income	–1.9	–2.0	–1.6	–1.3	–1.4	–1.6	–1.8	–1.6	–1.6	–1.6	–1.6
Resource Balance	–1.6	0.1	0.8	–0.2	0.3	–0.1	–0.9	–1.0	–1.0	–0.8	–0.3
Memorandum											
Acquisition of Foreign Assets	2.1	4.3	9.4	4.5	5.2	6.7	4.6	3.4	2.9	2.8	3.1
Change in Reserves	1.3	2.7	6.8	3.8	3.9	4.2	2.8	0.9	2.0	1.8	2.2

Table A15. Summary of Sources and Uses of World Savings *(concluded)*

(Percent of GDP)

	Averages								Projections		
	1991–98	1999–2006	2007	2008	2009	2010	2011	2012	2013	2014	Average 2015–18
By External Financing Source											
Net Debtor Economies											
Savings	19.9	20.5	23.3	22.2	21.9	22.6	22.0	21.3	21.1	21.4	22.0
Investment	22.5	21.8	25.7	25.9	23.7	25.0	25.1	24.8	24.8	24.9	25.4
Net Lending	–2.6	–1.3	–2.5	–3.7	–1.8	–2.4	–3.1	–3.5	–3.7	–3.5	–3.4
Current Transfers	1.7	2.5	2.7	2.6	2.6	2.4	2.3	2.4	2.5	2.5	2.4
Factor Income	–2.0	–2.5	–2.6	–2.6	–2.3	–2.5	–2.7	–2.6	–2.7	–2.6	–2.6
Resource Balance	–2.3	–1.4	–2.6	–3.8	–2.2	–2.3	–2.8	–3.4	–3.5	–3.4	–3.3
Memorandum											
Acquisition of Foreign Assets	1.2	2.8	6.0	1.4	3.1	4.2	2.4	2.2	0.9	0.9	1.3
Change in Reserves	0.9	1.4	4.0	0.7	1.7	2.2	1.0	0.7	0.2	0.4	0.5
Official Financing											
Savings	15.8	19.0	20.0	19.3	19.5	20.7	20.7	19.7	20.3	20.3	20.0
Investment	19.4	20.8	22.6	23.6	21.7	21.8	21.4	22.1	22.5	22.5	23.4
Net Lending	–3.7	–1.9	–2.7	–4.3	–2.3	–1.1	–0.7	–2.5	–2.1	–2.3	–3.4
Current Transfers	3.9	5.7	6.8	6.6	7.1	7.4	7.7	8.1	8.1	7.9	7.4
Factor Income	–2.9	–3.0	–3.3	–3.0	–2.8	–2.6	–2.2	–2.7	–2.9	–3.2	–3.7
Resource Balance	–4.8	–4.7	–6.2	–7.8	–6.7	–6.0	–6.3	–7.9	–7.4	–7.1	–7.1
Memorandum											
Acquisition of Foreign Assets	1.1	1.9	3.2	2.5	1.4	1.9	1.3	–2.4	–2.2	0.0	0.1
Change in Reserves	1.2	1.5	1.6	2.3	2.8	2.0	0.9	–0.9	–0.9	1.1	1.1
Net Debtor Economies by Debt-Servicing Experience											
Economies with Arrears and/or Rescheduling during 2007–11											
Savings	14.7	17.9	22.1	21.3	19.7	19.9	20.3	18.9	19.4	19.9	20.7
Investment	19.1	19.2	24.1	24.8	22.0	23.9	24.9	24.3	25.1	25.3	25.2
Net Lending	–4.4	–1.4	–2.0	–3.5	–2.3	–4.0	–4.6	–5.5	–5.7	–5.4	–4.5
Current Transfers	1.7	4.4	5.0	4.6	4.7	4.3	3.7	3.5	3.6	3.5	3.2
Factor Income	–3.2	–4.4	–3.3	–3.3	–3.0	–3.8	–3.9	–3.8	–3.9	–3.7	–3.3
Resource Balance	–2.9	–1.4	–3.8	–4.9	–4.1	–4.5	–4.5	–5.2	–5.4	–5.3	–4.5
Memorandum											
Acquisition of Foreign Assets	3.1	3.1	6.3	1.8	1.3	2.7	2.5	0.7	–0.3	0.1	0.5
Change in Reserves	0.7	0.8	3.7	0.5	1.8	1.4	0.4	–0.1	–0.3	0.2	0.6

Note: The estimates in this table are based on individual countries' national accounts and balance of payments statistics. Country group composites are calculated as the sum of the U.S. dollar values for the relevant individual countries. This differs from the calculations in the April 2005 and earlier issues of the World Economic Outlook, where the composites were weighted by GDP valued at purchasing power parities as a share of total world GDP. For many countries, the estimates of national savings are built up from national accounts data on gross domestic investment and from balance-of-payments-based data on net foreign investment. The latter, which is equivalent to the current account balance, comprises three components: current transfers, net factor income, and the resource balance. The mixing of data sources, which is dictated by availability, implies that the estimates for national savings that are derived incorporate the statistical discrepancies. Furthermore, errors, omissions, and asymmetries in balance of payments statistics affect the estimates for net lending; at the global level, net lending, which in theory would be zero, equals the world current account discrepancy. Despite these statistical shortcomings, flow of funds estimates, such as those presented in these tables, provide a useful framework for analyzing development in savings and investment, both over time and across regions and countries.

[1]Calculated from the data of individual Euro Area countries.

[2]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table A16. Summary of World Medium-Term Baseline Scenario

	Averages				Projections		Averages	
	1995–2002	2003–10	2011	2012	2013	2014	2011–14	2015–18
				Annual Percent Change				
World Real GDP	**3.4**	**3.9**	**3.9**	**3.2**	**2.9**	**3.6**	**3.4**	**4.1**
Advanced Economies	2.9	1.7	1.7	1.5	1.2	2.0	1.6	2.5
Emerging Market and Developing Economies	4.3	6.8	6.2	4.9	4.5	5.1	5.2	5.4
Memorandum								
Potential Output								
Major Advanced Economies	2.5	1.8	1.2	1.2	1.4	1.5	1.4	1.8
World Trade, Volume[1]	**6.6**	**5.6**	**6.1**	**2.7**	**2.9**	**4.9**	**4.2**	**5.7**
Imports								
Advanced Economies	6.7	4.0	4.7	1.0	1.5	4.0	2.8	5.1
Emerging Market and Developing Economies	6.8	9.7	8.8	5.5	5.0	5.9	6.3	6.6
Exports								
Advanced Economies	6.1	4.6	5.7	2.0	2.7	4.7	3.8	5.2
Emerging Market and Developing Economies	7.9	8.0	6.8	4.2	3.5	5.8	5.1	6.5
Terms of Trade								
Advanced Economies	0.0	–0.3	–1.6	–0.7	0.0	–0.2	–0.6	0.0
Emerging Market and Developing Economies	0.6	1.8	3.2	0.5	–0.5	–0.4	0.7	–0.5
World Prices in U.S. Dollars								
Manufactures	–1.2	3.2	6.6	–1.0	0.2	–0.1	1.4	0.6
Oil	5.8	15.5	31.6	1.0	–0.5	–3.0	6.4	–3.8
Nonfuel Primary Commodities	–2.4	9.7	17.9	–9.9	–1.5	–4.2	0.0	–0.9
Consumer Prices								
Advanced Economies	2.0	2.0	2.7	2.0	1.4	1.8	2.0	2.0
Emerging Market and Developing Economies	14.8	6.4	7.1	6.1	6.2	5.7	6.3	5.0
				Percent				
Interest Rates								
Real Six-Month LIBOR[2]	3.3	0.4	–1.6	–1.1	–1.0	–0.9	–1.2	0.1
World Real Long-Term Interest Rate[3]	3.3	1.7	0.2	0.1	0.9	0.9	0.5	1.9
				Percent of GDP				
Balances on Current Account								
Advanced Economies	–0.3	–0.7	–0.1	–0.1	0.1	0.2	0.0	0.2
Emerging Market and Developing Economies	–0.3	2.8	1.6	1.4	0.8	0.8	1.2	0.4
Total External Debt								
Emerging Market and Developing Economies	36.6	28.4	23.3	24.0	24.7	24.7	24.2	23.7
Debt Service								
Emerging Market and Developing Economies	9.3	9.4	8.0	8.4	8.5	8.6	8.4	8.3

[1]Data refer to trade in goods and services.
[2]London interbank offered rate on U.S. dollar deposits minus percent change in U.S. GDP deflator.
[3]GDP-weighted average of 10-year (or nearest maturity) government bond rates for Canada, France, Germany, Italy, Japan, United Kingdom, and United States.

WORLD ECONOMIC OUTLOOK
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XI. Country-Specific Analyses

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Table B1. Advanced Economies: Unemployment, Employment, and Real GDP per Capita

(Percent)

	Averages[1]										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Unemployment Rate[2]												
Advanced Economies	**6.6**	**7.2**	**6.3**	**5.8**	**5.5**	**5.8**	**8.0**	**8.3**	**7.9**	**8.0**	**8.1**	**8.0**
United States	5.1	7.1	5.1	4.6	4.6	5.8	9.3	9.6	8.9	8.1	7.6	7.4
Euro Area	9.6	9.9	9.2	8.5	7.6	7.6	9.6	10.1	10.2	11.4	12.3	12.2
Germany	9.0	7.5	11.2	10.2	8.8	7.6	7.7	7.1	6.0	5.5	5.6	5.5
France	9.7	9.6	9.3	9.2	8.4	7.8	9.5	9.7	9.6	10.3	11.0	11.1
Italy	10.0	8.8	7.7	6.8	6.1	6.8	7.8	8.4	8.4	10.7	12.5	12.4
Spain	15.8	17.6	9.2	8.5	8.3	11.3	18.0	20.1	21.7	25.0	26.9	26.7
Netherlands	4.5	4.9	5.3	4.4	3.6	3.1	3.7	4.5	4.4	5.3	7.1	7.4
Belgium	8.4	7.9	8.4	8.2	7.5	7.1	7.8	8.2	7.2	7.6	8.7	8.6
Austria	4.2	4.6	5.2	4.8	4.4	3.8	4.8	4.4	4.2	4.3	4.8	4.8
Greece	10.5	15.2	9.9	8.9	8.3	7.7	9.5	12.5	17.7	24.2	27.0	26.0
Portugal	5.7	11.5	7.6	7.7	8.0	7.6	9.5	10.8	12.7	15.7	17.4	17.7
Finland	11.0	7.7	8.4	7.7	6.9	6.4	8.2	8.4	7.8	7.8	8.0	7.9
Ireland	7.1	10.2	4.4	4.5	4.7	6.4	12.0	13.9	14.6	14.7	13.7	13.3
Slovak Republic	16.1	13.4	16.4	13.5	11.2	9.6	12.1	14.5	13.7	14.0	14.4	14.4
Slovenia	6.8	7.3	6.5	6.0	4.9	4.4	5.9	7.3	8.2	8.9	10.3	10.9
Luxembourg	3.0	5.3	4.1	4.2	4.2	4.2	5.4	5.8	5.7	6.1	6.6	7.0
Estonia	10.7	9.3	7.9	5.9	4.7	5.5	13.8	16.9	12.5	10.2	8.3	7.0
Cyprus	3.7	8.5	5.3	4.5	3.9	3.6	5.4	6.3	7.9	11.9	17.0	19.5
Malta	6.7	6.6	7.3	6.9	6.5	6.1	6.9	6.9	6.5	6.3	6.4	6.3
Japan	4.4	4.4	4.4	4.1	3.8	4.0	5.1	5.1	4.6	4.4	4.2	4.3
United Kingdom	6.2	6.8	4.8	5.4	5.4	5.6	7.5	7.9	8.0	8.0	7.7	7.5
Canada	8.1	7.1	6.8	6.3	6.1	6.2	8.3	8.0	7.5	7.3	7.1	7.1
Korea	3.9	3.4	3.7	3.5	3.3	3.2	3.7	3.7	3.4	3.2	3.2	3.2
Australia	7.1	5.1	5.1	4.8	4.4	4.3	5.6	5.2	5.1	5.2	5.6	6.0
Taiwan Province of China	3.5	4.4	4.1	3.9	3.9	4.1	5.9	5.2	4.4	4.2	4.2	4.2
Sweden	7.5	7.5	7.6	7.0	6.1	6.2	8.3	8.6	7.8	8.0	8.0	7.7
Hong Kong SAR	5.1	4.0	5.6	4.8	4.0	3.5	5.2	4.3	3.4	3.3	3.2	3.1
Switzerland	3.4	3.2	3.8	3.3	2.8	2.6	3.7	3.5	2.8	2.9	3.2	3.2
Singapore	2.6	2.4	3.1	2.7	2.1	2.2	3.0	2.2	2.0	2.0	2.1	2.3
Czech Republic	6.8	6.7	7.9	7.1	5.3	4.4	6.7	7.3	6.7	7.0	7.4	7.5
Norway	4.0	3.3	4.6	3.4	2.5	2.6	3.2	3.6	3.3	3.2	3.3	3.3
Israel	10.8	8.4	11.2	10.5	9.2	7.7	9.4	8.3	7.1	6.9	6.8	6.8
Denmark	5.3	5.9	4.8	3.9	3.8	3.5	6.1	7.5	7.6	7.5	7.1	7.1
New Zealand	6.0	5.3	3.8	3.8	3.7	4.2	6.2	6.5	6.5	6.9	6.0	5.3
Iceland	3.0	4.5	2.1	1.3	1.0	1.6	8.0	8.1	7.4	5.8	5.1	4.6
San Marino	. . .	4.6	3.6	3.3	3.0	3.1	4.5	4.9	5.5	6.6	6.1	5.5
Memorandum												
Major Advanced Economies	6.3	6.9	6.3	5.8	5.5	5.9	8.0	8.2	7.7	7.4	7.3	7.3
Growth in Employment												
Advanced Economies	**1.0**	**0.5**	**1.4**	**1.6**	**1.4**	**0.5**	**–2.1**	**–0.1**	**0.6**	**0.7**	**0.4**	**0.7**
United States	1.2	0.5	1.8	1.9	1.1	–0.5	–3.8	–0.6	0.6	1.8	1.1	1.4
Euro Area	1.6	0.2	1.1	1.6	1.8	0.8	–1.8	–0.5	0.3	–0.7	–0.8	0.1
Germany	0.3	0.7	–0.1	0.6	1.7	1.3	0.1	0.5	1.4	1.1	0.3	0.1
France	1.1	0.3	0.6	1.0	1.4	0.6	–1.2	0.1	0.3	0.1	0.1	0.3
Italy	1.0	0.2	0.7	1.8	1.0	0.8	–1.6	–0.6	0.4	–0.3	–1.1	0.6
Spain	3.7	–0.8	5.6	4.1	3.1	–0.5	–6.8	–2.3	–1.9	–4.5	–3.9	–0.7
Japan	–0.2	–0.1	0.4	0.5	0.6	–0.3	–1.5	–0.3	–0.1	–0.3	0.6	–0.4
United Kingdom	1.1	0.6	1.0	0.9	0.7	0.7	–1.6	0.2	0.5	1.2	1.0	1.0
Canada	2.0	1.2	1.3	1.8	2.4	1.7	–1.6	1.4	1.5	1.2	1.3	1.0
Other Advanced Economies[3]	1.3	1.4	1.9	1.9	2.1	1.7	–0.3	1.2	1.8	1.5	1.0	1.1
Memorandum												
Major Advanced Economies	0.8	0.4	1.0	1.3	1.1	0.1	–2.3	–0.2	0.5	1.0	0.7	0.7

Table B1. Advanced Economies: Unemployment, Employment, and Real GDP per Capita *(concluded)*

(Percent)

	Averages[1]										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Growth in Real GDP per Capita												
Advanced Economies	**2.1**	**0.8**	**2.1**	**2.3**	**2.0**	**–0.7**	**–4.1**	**2.5**	**1.1**	**0.9**	**0.7**	**1.5**
United States	2.3	0.7	2.4	1.7	0.8	–1.2	–3.6	1.7	1.1	2.0	0.8	1.7
Euro Area	1.8	0.4	1.1	2.7	2.4	–0.2	–4.7	1.7	1.3	–0.9	–0.6	0.8
Germany	1.2	1.5	0.9	4.0	3.5	1.0	–4.8	4.0	3.4	0.7	0.7	1.6
France	1.7	0.3	1.1	1.7	1.6	–0.6	–3.7	1.2	1.5	–0.5	–0.3	0.5
Italy	1.5	–0.9	–0.1	1.7	1.0	–2.0	–6.2	1.2	–0.1	–2.7	–2.1	0.5
Spain	2.9	–0.2	1.9	2.5	1.6	–0.7	–4.5	–0.5	–0.1	–1.7	–1.1	0.4
Japan	0.9	0.8	1.3	1.6	2.1	–1.1	–5.5	4.7	–0.5	2.2	2.2	1.5
United Kingdom	3.0	0.3	2.6	2.2	2.7	–1.4	–5.8	0.9	0.4	–0.6	0.6	1.1
Canada	2.3	0.7	2.2	1.6	0.9	0.0	–3.9	2.2	1.4	0.6	0.6	1.2
Other Advanced Economies[3]	3.1	2.2	3.5	3.8	4.0	0.5	–2.1	5.0	2.3	0.9	1.4	2.3
Memorandum												
Major Advanced Economies	1.9	0.7	1.8	1.9	1.5	–0.9	–4.4	2.3	1.0	1.2	0.7	1.4

[1]Compound annual rate of change for employment and per capita GDP; arithmetic average for unemployment rate.
[2]National definitions of unemployment may vary.
[3]In this table, Other Advanced Economies means advanced economies excluding the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Euro Area countries.

Table B2. Emerging Market and Developing Economies: Real GDP

(Annual percent change)

	Average									Projections		
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
Emerging Market and Developing Economies	**4.9**	**7.3**	**8.3**	**8.7**	**5.8**	**3.1**	**7.5**	**6.2**	**4.9**	**4.5**	**5.1**	**5.5**
Regional Groups												
Central and Eastern Europe	4.0	5.9	6.4	5.4	3.2	–3.6	4.6	5.4	1.4	2.3	2.7	3.7
Commonwealth of Independent States[1]	2.9	6.7	8.8	8.9	5.3	–6.4	4.9	4.8	3.4	2.1	3.4	3.7
Russia	2.8	6.4	8.2	8.5	5.2	–7.8	4.5	4.3	3.4	1.5	3.0	3.5
Excluding Russia	3.2	7.7	10.6	9.9	5.6	–3.1	6.0	6.1	3.3	3.6	4.2	4.3
Developing Asia	7.1	9.5	10.3	11.5	7.3	7.7	9.8	7.8	6.4	6.3	6.5	6.7
China	9.2	11.3	12.7	14.2	9.6	9.2	10.4	9.3	7.7	7.6	7.3	7.0
India	6.2	9.3	9.3	9.8	3.9	8.5	10.5	6.3	3.2	3.8	5.1	6.7
Excluding China and India	4.1	5.7	5.9	6.4	4.9	2.3	6.9	5.0	6.2	5.2	5.6	5.7
Latin America and the Caribbean	2.5	4.7	5.6	5.7	4.2	–1.2	6.0	4.6	2.9	2.7	3.1	3.7
Brazil	2.5	3.2	4.0	6.1	5.2	–0.3	7.5	2.7	0.9	2.5	2.5	3.5
Mexico	2.4	3.2	5.0	3.1	1.2	–4.5	5.1	4.0	3.6	1.2	3.0	3.8
Middle East, North Africa, Afghanistan, and Pakistan	4.6	6.0	6.7	5.9	5.0	2.8	5.2	3.9	4.6	2.3	3.6	4.4
Middle East and North Africa	4.6	5.5	6.8	5.9	5.0	3.0	5.5	3.9	4.6	2.1	3.8	4.4
Sub-Saharan Africa	4.5	6.3	6.4	7.1	5.7	2.6	5.6	5.5	4.9	5.0	6.0	5.7
Excluding Nigeria and South Africa	4.6	7.2	6.9	8.2	6.9	3.3	6.1	5.9	5.4	6.0	7.0	6.3
Analytical groups												
By Source of Export Earnings												
Fuel	3.8	6.8	8.0	7.5	5.3	–1.2	5.1	4.8	4.8	2.4	4.0	4.3
Nonfuel	5.1	7.4	8.3	9.0	6.0	4.1	8.1	6.6	5.0	5.0	5.3	5.8
Of Which, Primary Products	4.2	5.5	6.2	6.6	6.0	2.0	6.8	5.5	5.4	5.5	5.5	5.4
By External Financing Source												
Net Debtor	3.9	6.0	6.6	6.7	4.3	1.6	6.8	5.1	3.3	3.4	4.0	5.0
Of Which, Official Financing	4.4	6.6	5.9	5.3	4.9	2.4	4.3	5.1	4.3	4.3	4.3	5.3
Net Debtor Economies by Debt-Servicing Experience												
Economies with Arrears and/or Rescheduling during 2007–11	3.3	7.5	7.7	7.5	5.9	2.0	6.8	6.4	3.4	4.2	4.1	4.4
Other Groups												
Heavily Indebted Poor Countries	5.1	5.7	5.9	6.2	5.9	4.6	5.9	5.4	5.6	5.6	6.0	6.0
Memorandum												
Real GDP per Capita												
Emerging Market and Developing Economies	3.6	6.1	7.0	7.4	4.5	2.0	6.4	5.2	3.9	3.5	4.1	4.5
Central and Eastern Europe	3.5	5.5	6.1	5.1	2.8	–4.0	4.2	5.0	1.0	1.5	2.3	3.4
Commonwealth of Independent States[1]	3.2	7.0	9.1	9.1	5.3	–6.6	4.6	4.9	3.5	2.1	3.4	3.8
Developing Asia	5.8	8.5	9.4	10.5	6.4	6.8	8.9	6.9	5.5	5.5	5.6	5.8
Latin America and the Caribbean	1.1	3.4	4.3	4.4	2.9	–2.4	4.3	3.4	1.8	1.6	2.0	2.7
Middle East, North Africa, Afghanistan, and Pakistan	2.3	2.9	3.0	2.2	0.9	0.2	3.6	1.7	2.3	0.2	1.5	2.3
Middle East and North Africa	2.3	2.3	2.9	1.9	1.0	0.3	4.0	1.7	2.2	0.1	1.7	2.2
Sub-Saharan Africa	2.2	4.1	4.1	4.3	3.5	0.5	3.5	3.4	2.6	2.7	3.7	3.4

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table B3. Advanced Economies: Hourly Earnings, Productivity, and Unit Labor Costs in Manufacturing

(Annual percent change)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Hourly Earnings[1]												
Advanced Economies	**3.5**	**2.6**	**3.4**	**2.9**	**3.4**	**3.1**	**2.3**	**2.0**	**2.3**	**2.1**	**1.9**	**2.7**
United States	4.1	2.7	3.8	2.4	3.9	2.7	3.4	2.4	1.3	1.9	2.0	2.9
Euro area	3.2	2.2	2.9	2.7	3.3	3.6	2.8	0.8	2.1	2.1	0.8	1.1
Germany	2.8	2.3	2.1	2.6	2.6	2.7	3.3	–0.7	2.9	4.1	1.5	1.6
France	2.8	2.0	3.6	3.5	3.8	3.0	1.1	1.0	1.0	1.0	1.0	1.0
Italy	2.9	2.6	2.8	3.1	3.0	5.0	2.0	3.4	2.8	2.0	0.9	1.2
Spain	4.0	2.9	4.3	4.0	3.8	4.8	5.1	1.4	3.0	1.8	0.7	0.4
Japan	0.8	0.8	1.2	0.4	0.0	1.4	–1.2	–0.6	2.3	0.3	0.6	3.4
United Kingdom	4.1	2.9	3.7	5.1	3.5	3.0	1.8	3.8	1.1	2.3	2.3	2.3
Canada	2.9	2.8	4.7	5.1	2.8	2.8	2.6	–0.5	5.0	2.4	1.3	2.4
Other Advanced Economies[2]	5.5	4.3	4.6	5.1	5.4	4.7	1.2	5.0	4.8	3.7	4.0	4.2
Memorandum												
Major Advanced Economies	3.2	2.3	3.2	2.6	3.1	2.7	2.3	1.6	1.8	1.9	1.6	2.6
Productivity[1,3]												
Advanced Economies	**3.7**	**1.9**	**3.9**	**2.9**	**3.3**	**–0.9**	**–3.7**	**7.9**	**1.8**	**1.1**	**1.2**	**1.6**
United States	4.6	2.1	4.8	0.9	3.9	–0.7	0.2	6.3	1.0	1.8	2.1	1.2
Euro area	3.0	1.3	3.4	3.9	3.1	–1.9	–7.0	8.1	3.2	–0.1	0.0	0.7
Germany	3.1	2.0	5.8	8.5	5.5	–3.6	–15.0	15.5	5.4	–0.4	0.0	1.5
France	4.0	0.9	5.0	3.0	2.7	–0.8	–6.5	2.7	2.4	–0.1	0.1	0.7
Italy	0.6	0.3	1.6	2.4	0.4	–1.9	–6.2	6.8	1.0	–1.3	0.3	0.5
Spain	3.3	3.2	1.5	1.6	–0.1	–1.1	5.0	12.0	5.9	5.4	1.9	0.3
Japan	2.9	–0.1	1.9	2.8	2.2	–4.0	–15.3	12.4	–1.5	1.1	–1.0	3.2
United Kingdom	3.0	2.2	4.9	5.0	3.2	–0.1	–4.9	6.8	1.6	1.9	1.9	1.9
Canada	1.8	1.2	3.6	2.6	0.5	1.5	–3.3	4.3	2.2	0.4	–1.0	1.0
Other Advanced Economies[2]	4.2	3.5	3.8	6.2	3.8	2.3	0.5	8.9	3.6	0.7	2.1	2.9
Memorandum												
Major Advanced Economies	3.6	1.6	4.2	2.5	3.3	–1.4	–4.9	7.8	1.3	1.1	1.1	1.5
Unit Labor Costs												
Advanced Economies	**–0.1**	**0.8**	**–0.5**	**0.0**	**0.1**	**4.1**	**6.7**	**–5.3**	**0.5**	**1.0**	**0.7**	**1.1**
United States	–0.5	0.6	–1.0	1.6	0.1	3.4	3.3	–3.7	0.4	0.1	–0.1	1.8
Euro area	0.2	0.9	–0.5	–1.1	0.2	5.6	10.5	–6.7	–1.0	2.2	0.8	0.4
Germany	–0.2	0.2	–3.5	–5.5	–2.8	6.6	21.5	–14.0	–2.4	4.5	1.5	0.1
France	–1.2	1.1	–1.3	0.5	1.1	3.8	8.1	–1.6	–1.4	1.1	0.9	0.3
Italy	2.3	2.3	1.2	0.7	2.6	7.0	8.8	–3.2	1.9	3.3	0.6	0.7
Spain	0.7	–0.2	2.8	2.4	3.9	6.0	0.1	–9.4	–2.7	–3.4	–1.2	0.1
Japan	–2.1	0.8	–0.7	–2.4	–2.2	5.7	16.7	–11.6	3.9	–0.8	1.5	0.2
United Kingdom[4]	1.1	0.7	–1.2	0.2	0.2	3.0	7.0	–2.8	–0.5	0.4	0.4	0.4
Canada	1.1	1.7	1.1	2.4	2.3	1.2	6.1	–4.6	2.7	1.9	2.3	1.4
Other Advanced Economies[2]	1.3	0.9	0.6	–0.9	1.5	2.4	0.8	–3.1	1.4	3.0	1.8	1.3
Memorandum												
Major Advanced Economies	–0.4	0.8	–1.0	0.1	–0.2	4.2	8.1	–5.7	0.6	0.8	0.6	1.1

[1]The group composites are computed if at least 85 percent of the share of group weights is represented.

[2]In this table, Other Advanced Economies means advanced economies excluding the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Euro Area countries.

[3]Refers to labor productivity, measured as the ratio of hourly compensation to unit labor costs.

[4]Data refer to unit wage cost.

Table B4. Emerging Market and Developing Economies: Consumer Prices

(Annual percent change)

	Average									Projections		
	1995–2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2018
Emerging Market and Developing Economies	**13.0**	**5.9**	**5.7**	**6.5**	**9.2**	**5.2**	**5.9**	**7.1**	**6.1**	**6.2**	**5.7**	**4.8**
Regional Groups												
Central and Eastern Europe	31.1	5.9	5.9	6.0	8.1	4.7	5.3	5.3	5.8	4.1	3.5	3.6
Commonwealth of Independent States[1]	39.0	12.1	9.5	9.7	15.6	11.2	7.2	10.1	6.5	6.5	5.9	6.0
Russia	38.3	12.7	9.7	9.0	14.1	11.7	6.9	8.4	5.1	6.7	5.7	5.5
Excluding Russia	41.1	10.6	8.9	11.6	19.4	10.2	7.9	14.1	9.9	6.0	6.4	7.1
Developing Asia	4.9	3.7	4.2	5.3	7.4	3.0	5.3	6.3	4.7	5.0	4.7	4.0
China	3.0	1.8	1.5	4.8	5.9	–0.7	3.3	5.4	2.6	2.7	3.0	3.0
India	6.2	4.4	6.7	6.2	9.1	12.4	10.4	8.4	10.4	10.9	8.9	6.7
Excluding China and India	7.5	7.2	8.2	5.9	9.7	3.3	4.9	6.3	4.5	5.3	5.3	4.0
Latin America and the Caribbean	13.0	6.2	5.3	5.4	7.9	5.9	5.9	6.6	5.9	6.7	6.5	5.1
Brazil	12.9	6.9	4.2	3.6	5.7	4.9	5.0	6.6	5.4	6.3	5.8	4.5
Mexico	14.8	4.0	3.6	4.0	5.1	5.3	4.2	3.4	4.1	3.6	3.0	3.0
Middle East, North Africa, Afghanistan, and Pakistan	7.0	7.1	8.2	10.3	12.2	7.4	6.9	9.7	10.7	11.7	10.0	7.9
Middle East and North Africa	7.1	6.9	8.2	10.6	12.4	6.3	6.5	9.2	10.8	12.3	10.3	8.2
Sub-Saharan Africa	16.4	8.7	7.1	6.4	12.9	9.4	7.4	9.3	9.0	6.9	6.3	5.5
Excluding Nigeria and South Africa	23.3	8.8	8.3	6.3	14.2	9.4	6.7	11.2	9.6	6.2	5.9	5.1
Analytical Groups												
By Source of Export Earnings												
Fuel	23.6	10.1	9.4	10.4	14.3	9.0	7.8	9.8	9.1	11.3	9.6	7.4
Nonfuel	10.5	4.9	4.8	5.6	8.0	4.4	5.4	6.6	5.4	5.1	4.9	4.3
Of Which, Primary Products	12.3	5.1	5.6	4.6	10.1	5.3	4.6	6.9	6.7	6.0	5.7	4.3
By External Financing Source												
Net Debtor Economies	13.4	6.1	6.3	6.1	9.2	7.2	6.7	7.3	7.1	6.7	6.2	5.2
Of Which, Official Financing	12.0	7.6	7.2	8.2	12.7	9.1	7.7	11.3	10.5	7.5	7.1	5.4
Net Debtor Economies by Debt-Servicing Experience												
Economies with Arrears and/or Rescheduling during 2007–11	14.8	7.8	9.1	8.0	11.5	6.3	8.0	11.8	11.8	9.0	8.7	7.5
Other Groups												
Heavily Indebted Poor Countries	13.5	8.8	7.7	7.6	14.6	8.0	6.6	11.7	11.0	8.2	7.2	5.3
Memorandum												
Median												
Emerging Market and Developing Economies	5.8	5.4	6.0	6.2	10.3	3.8	4.3	5.6	4.6	4.4	4.5	4.0
Central and Eastern Europe	11.0	3.5	3.8	4.6	8.7	3.4	2.8	4.0	3.3	2.3	2.3	2.5
Commonwealth of Independent States[1]	29.2	9.9	8.8	10.5	14.7	6.7	7.2	8.4	4.8	6.9	6.3	5.7
Developing Asia	4.9	4.5	4.8	4.8	8.9	4.4	4.0	5.4	4.3	4.0	3.9	4.4
Latin America and the Caribbean	5.9	4.9	4.9	5.8	8.5	2.9	3.8	5.5	4.1	3.4	4.0	3.3
Middle East, North Africa, Afghanistan, and Pakistan	3.3	5.2	5.4	6.1	11.2	2.8	4.4	5.0	4.9	4.2	4.5	4.1
Middle East and North Africa	3.1	3.8	4.9	5.7	11.2	2.8	4.2	4.9	4.9	3.8	4.0	4.0
Sub-Saharan Africa	6.4	6.0	6.9	6.4	10.6	6.7	4.3	6.0	6.3	5.5	5.7	5.0

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table B5. Summary of Fiscal and Financial Indicators

(Percent)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Advanced Economies										
Central Government Net Lending/Borrowing[1]	**–2.2**	**–1.4**	**–1.1**	**–3.2**	**–7.5**	**–6.6**	**–5.6**	**–5.0**	**–3.8**	**–3.0**
United States	–2.7	–1.8	–2.2	–5.6	–11.7	–10.0	–9.0	–7.5	–5.1	–4.4
Euro Area	–2.3	–1.6	–1.1	–2.2	–5.1	–5.2	–3.5	–3.3	–2.5	–2.0
Japan	–4.3	–4.0	–2.0	–5.1	–8.0	–7.2	–8.0	–8.6	–7.8	–5.0
Other Advanced Economies[2]	0.2	0.8	1.2	0.1	–3.4	–2.7	–1.7	–1.1	–1.2	–0.9
General Government Net Lending/Borrowing[1]	**–2.4**	**–1.4**	**–1.1**	**–3.5**	**–8.8**	**–7.7**	**–6.4**	**–5.9**	**–4.5**	**–3.5**
United States	–3.1	–2.0	–2.7	–6.5	–12.9	–10.8	–9.7	–8.3	–5.8	–4.6
Euro Area	–2.5	–1.3	–0.7	–2.1	–6.4	–6.2	–4.2	–3.7	–3.1	–2.5
Japan	–4.8	–3.7	–2.1	–4.1	–10.4	–9.3	–9.9	–10.1	–9.5	–6.8
Other Advanced Economies[2]	0.3	1.0	1.2	–0.3	–4.5	–3.6	–2.4	–2.4	–1.9	–1.6
General Government Structural Balance[3]	**–3.0**	**–2.3**	**–2.3**	**–3.7**	**–6.1**	**–6.1**	**–5.4**	**–4.7**	**–3.4**	**–2.7**
Long-Term Interest Rate[4]	**3.6**	**4.0**	**4.2**	**3.7**	**3.3**	**3.1**	**3.1**	**2.4**	**2.5**	**2.9**
United States	4.3	4.8	4.6	3.7	3.3	3.2	2.8	1.8	2.4	3.1
Euro Area	3.5	3.9	4.3	4.4	3.9	3.5	4.3	3.7	3.2	3.3
Japan	1.4	1.7	1.7	1.5	1.4	1.2	1.1	0.9	0.7	0.8
Emerging Market and Developing Economies										
Central Government Net Lending/Borrowing[1]										
Weighted Average	1.4	1.9	2.0	1.5	–2.5	–1.3	–0.1	0.7	0.5	0.5
Median	–1.9	–1.1	–1.2	–1.0	–3.7	–3.1	–2.7	–2.7	–2.8	–3.0
General Government Net Lending/Borrowing[1]										
Weighted Average	0.7	1.4	1.2	0.7	–4.2	–2.6	–1.2	–1.7	–2.3	–2.2
Median	–1.7	–0.7	–1.0	–1.0	–3.9	–3.1	–2.5	–2.6	–2.7	–2.8
Growth of Broad Money										
Weighted Average	19.5	21.3	20.7	18.1	16.0	16.3	16.9	14.1	13.4	12.0
Median	16.2	18.7	19.3	15.8	12.5	13.6	14.1	11.5	11.0	10.2

Note: The country group composites for fiscal data are calculated as the sum of the U.S. dollar values for the relevant individual countries.
[1]Percent of GDP.
[2]In this table, Other Advanced Economies means advanced economies excluding the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Euro Area countries.
[3]Percent of potential GDP.
[4]Annual data are period averages: for the United States, 10-year Treasury bond yield at constant maturity; for Japan, 10-year government bond yield; for the Euro Area, a weighted average of national 10-year government bond yields.

Table B6. Advanced Economies: General and Central Government Net Lending/Borrowing and Excluding Social Security Schemes[1]

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
General Government Net Lending/Borrowing										
Advanced Economies	**–2.4**	**–1.4**	**–1.1**	**–3.5**	**–8.8**	**–7.7**	**–6.4**	**–5.9**	**–4.5**	**–3.5**
United States	–3.1	–2.0	–2.7	–6.5	–12.9	–10.8	–9.7	–8.3	–5.8	–4.6
Euro Area	–2.5	–1.3	–0.7	–2.1	–6.4	–6.2	–4.2	–3.7	–3.1	–2.5
Germany	–3.3	–1.7	0.2	–0.1	–3.1	–4.2	–0.8	0.1	–0.4	–0.1
France[2]	–3.0	–2.4	–2.8	–3.3	–7.6	–7.1	–5.3	–4.9	–4.0	–3.5
Italy	–4.5	–3.4	–1.6	–2.7	–5.4	–4.3	–3.7	–2.9	–3.2	–2.1
Spain	0.9	2.4	1.9	–4.5	–11.2	–9.7	–9.6	–10.8	–6.7	–5.8
Netherlands	–0.3	0.5	0.2	0.5	–5.6	–5.1	–4.4	–4.1	–3.0	–3.2
Belgium	–2.6	0.3	–0.1	–1.1	–5.6	–3.9	–3.9	–4.0	–2.8	–2.5
Austria[3]	–1.8	–1.7	–1.0	–1.0	–4.1	–4.5	–2.5	–2.5	–2.6	–2.4
Greece	–5.6	–6.0	–6.8	–9.9	–15.6	–10.8	–9.6	–6.3	–4.1	–3.3
Portugal	–6.5	–3.8	–3.2	–3.7	–10.2	–9.9	–4.4	–6.4	–5.5	–4.0
Finland	2.7	4.1	5.3	4.3	–2.7	–2.8	–1.1	–2.3	–2.8	–2.1
Ireland[4]	1.7	2.9	0.1	–7.3	–13.8	–30.5	–13.1	–7.6	–7.6	–5.0
Slovak Republic	–2.2	–2.6	–1.6	–2.0	–8.0	–7.7	–5.1	–4.3	–3.0	–3.8
Slovenia[5]	–1.0	–0.8	0.3	–0.3	–5.5	–5.4	–5.6	–3.2	–7.0	–3.8
Luxembourg	0.0	1.4	3.7	3.2	–0.8	–0.9	–0.2	–0.8	–0.7	–0.9
Estonia	1.6	3.2	2.8	–2.3	–2.0	0.4	1.7	–0.2	0.3	0.2
Cyprus	–2.5	–1.2	3.5	0.9	–6.1	–5.3	–6.3	–6.3	–6.7	–7.5
Malta	–2.9	–2.7	–2.3	–4.6	–3.7	–3.6	–2.8	–3.3	–3.5	–3.6
Japan	–4.8	–3.7	–2.1	–4.1	–10.4	–9.3	–9.9	–10.1	–9.5	–6.8
United Kingdom	–3.4	–2.8	–2.8	–5.0	–11.3	–10.0	–7.8	–7.9	–6.1	–5.8
Canada	1.7	1.8	1.5	–0.3	–4.5	–4.9	–3.7	–3.4	–3.4	–2.9
Korea[6]	0.9	1.1	2.3	1.6	0.0	1.7	1.8	1.9	1.4	1.7
Australia	1.8	1.8	1.5	–1.1	–4.6	–5.1	–4.5	–3.7	–3.1	–2.3
Taiwan Province of China	–2.3	–2.0	–2.1	–2.6	–6.2	–5.0	–4.0	–4.3	–3.2	–3.0
Sweden	1.9	2.2	3.5	2.2	–1.0	0.0	0.0	–0.7	–1.4	–1.5
Hong Kong SAR	1.0	4.1	7.8	0.1	1.5	4.2	3.9	3.2	2.6	3.3
Switzerland	–0.6	0.9	1.3	1.8	0.5	0.2	0.3	0.3	0.2	0.5
Singapore	7.9	7.1	12.0	6.5	–0.5	7.4	9.6	7.4	5.3	4.8
Czech Republic	–3.2	–2.4	–0.7	–2.2	–5.8	–4.8	–3.3	–4.4	–2.9	–2.9
Norway	15.0	18.3	17.3	18.8	10.5	11.1	13.4	13.8	12.4	11.6
Israel	–4.9	–2.6	–1.5	–3.7	–6.3	–4.6	–4.2	–4.9	–5.1	–3.3
Denmark	5.0	5.0	4.8	3.3	–2.8	–2.7	–2.0	–4.2	–1.7	–2.0
New Zealand	4.8	4.1	3.2	1.5	–1.5	–5.1	–4.9	–2.0	–1.3	–0.4
Iceland	4.9	6.3	5.4	–0.5	–8.6	–6.4	–5.0	–3.8	–2.7	–1.8
San Marino	3.0	1.3	1.6	0.0	–2.3	–2.2	–3.6	–2.5	–2.6	–2.8
Memorandum										
Major Advanced Economies	–3.3	–2.2	–2.0	–4.5	–10.0	–8.8	–7.6	–6.9	–5.4	–4.2
Net Lending/Borrowing Excluding Social Security Schemes										
United States	–2.7	–1.2	–1.8	–5.3	–10.3	–8.0	–6.5	–4.8	–2.0	–1.0
Japan	0.7	1.9	3.5	1.8	–2.7	–1.5	–1.8	–1.9	–1.2	1.5
Germany	–0.5	0.9	2.7	2.4	0.4	–0.9	1.8	0.6	0.1	0.3
France	2.3	2.8	2.5	2.1	–0.9	–0.1	1.5	1.6	2.6	3.2
Italy[7]	2.6	3.6	5.0	3.9	2.7	4.1	4.7	6.1	6.4	7.7
Canada	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .

Table B6. Advanced Economies: General and Central Government Net Lending/Borrowing and Excluding Social Security Schemes[1] *(concluded)*

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Central Government Net Lending/Borrowing										
Advanced Economies	**–2.2**	**–1.4**	**–1.1**	**–3.2**	**–7.5**	**–6.6**	**–5.6**	**–5.0**	**–3.8**	**–3.0**
United States[8]	–2.7	–1.8	–2.2	–5.6	–11.7	–10.0	–9.0	–7.5	–5.1	–4.4
Euro Area	–2.3	–1.6	–1.1	–2.2	–5.1	–5.2	–3.5	–3.3	–2.5	–2.0
Germany[9]	–2.1	–1.5	–0.8	–0.7	–1.6	–3.3	–1.0	–0.5	–0.4	–0.3
France	–3.0	–2.7	–2.1	–3.3	–6.2	–6.3	–4.4	–3.9	–3.1	–2.7
Italy	–3.9	–2.8	–2.0	–2.6	–4.7	–4.4	–3.7	–2.9	–3.2	–2.1
Spain	0.2	0.7	1.1	–2.8	–9.4	–5.4	–5.1	–7.8	–4.5	–3.8
Japan[10]	–4.3	–4.0	–2.0	–5.1	–8.0	–7.2	–8.0	–8.6	–7.8	–5.0
United Kingdom	–3.0	–2.8	–2.8	–4.7	–10.8	–9.9	–7.8	–5.8	–6.6	–5.8
Canada	0.1	0.9	0.9	–0.1	–1.9	–2.4	–1.7	–1.0	–0.8	–0.4
Other Advanced Economies[11]	2.2	2.9	3.6	2.6	–0.4	0.2	0.7	0.7	0.7	0.9
Memorandum										
Major Advanced Economies	–2.9	–2.2	–1.9	–4.2	–8.6	–7.8	–6.8	–6.0	–4.6	–3.7

Note: The country group composites for fiscal data are calculated as the sum of the U.S. dollar values for the relevant individual countries.
[1]On a national income accounts basis except as indicated in footnotes. See Box A1 for a summary of the policy assumptions underlying the projections.
[2]Adjusted for valuation changes of the foreign exchange stabilization fund.
[3]Based on ESA95 methodology, according to which swap income is not included.
[4]The general government balances between 2009 and 2014 reflect the impact of banking support. The fiscal balance estimates excluding these measures are –11.3 percent of GDP for 2009, –10.6 percent of GDP for 2010, –8.9 percent of GDP for 2011, –7.6 percent of GDP for 2012, –7.5 percent of GDP for 2013 (including exchequer outlays for guarantees paid out under the ELG scheme in the context of the liquidation of IBRC), and –4.9 percent of GDP for 2014.
[5]Data cover the central government and social security funds and are on a cash basis. The 2011 fiscal balance includes 0.7 percent of GDP in recapitalization costs of the largest state bank, which were treated as state aid.
[6]Data cover the consolidated central government, including social security funds but excluding privatization.
[7]Data exclude total social contributions and payments, not only social security.
[8]Data are on a budget basis.
[9]Data are on an administrative basis and exclude social security transactions.
[10]Data are on a national income basis and exclude social security transactions.
[11]In this table, Other Advanced Economies means advanced economies excluding the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Euro Area countries.

Table B7. Advanced Economies: General Government Structural Balances[1]

(Percent of potential GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Advanced Economies	**–3.0**	**–2.3**	**–2.3**	**–3.7**	**–6.1**	**–6.1**	**–5.4**	**–4.7**	**–3.4**	**–2.7**
United States	–3.5	–2.5	–2.9	–5.0	–7.8	–8.0	–7.3	–6.3	–3.9	–3.2
Euro Area[2]	–3.0	–2.7	–2.6	–3.3	–4.7	–4.6	–3.7	–2.3	–1.4	–1.1
Germany[2]	–2.6	–2.3	–1.1	–0.9	–1.1	–2.2	–1.0	0.1	–0.1	0.0
France[2]	–3.9	–3.4	–4.2	–4.1	–5.7	–5.7	–4.6	–3.5	–2.1	–1.6
Italy[3]	–5.4	–4.2	–3.5	–3.8	–4.1	–3.6	–3.5	–1.3	–0.2	0.0
Spain[2]	–1.6	–1.3	–1.1	–5.3	–9.3	–8.1	–8.1	–6.3	–4.9	–4.3
Netherlands[2]	0.2	–0.1	–1.4	–1.1	–4.8	–4.4	–3.7	–2.3	0.1	0.1
Belgium[2]	–0.3	–0.7	–0.9	–1.8	–3.8	–3.7	–4.0	–3.4	–2.7	–2.3
Austria[2]	–1.7	–2.5	–2.6	–2.5	–2.9	–3.0	–2.1	–1.3	–1.8	–1.8
Greece	–6.7	–8.7	–10.8	–14.3	–19.1	–12.3	–8.3	–2.6	0.6	1.1
Portugal[2]	–6.1	–3.8	–4.2	–5.4	–9.2	–9.0	–6.6	–4.0	–3.4	–1.9
Finland	1.8	2.3	2.1	1.8	–0.1	–1.7	–1.2	–1.4	–1.1	–0.6
Ireland[2]	–2.6	–4.2	–8.7	–11.9	–9.9	–8.3	–7.0	–5.9	–5.1	–3.6
Slovak Republic	–1.0	–2.2	–3.2	–2.8	–6.3	–7.2	–4.8	–4.4	–3.7	–3.5
Slovenia	–1.5	–2.4	–2.8	–3.6	–4.7	–4.9	–4.0	–1.6	–0.5	–0.7
Luxembourg	0.3	1.1	2.1	2.4	0.5	–0.6	–0.4	–0.8	–0.6	–0.8
Estonia	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .	. . .
Cyprus	–2.6	–2.6	–1.4	–1.9	–5.1	–4.5	–4.0	–2.1	–2.0	–1.6
Malta	–3.4	–2.8	–3.5	–6.2	–3.7	–4.8	–3.6	–4.3	–3.4	–3.3
Japan	–4.7	–3.6	–2.2	–3.6	–7.5	–7.9	–8.5	–9.2	–9.2	–6.7
United Kingdom	–5.2	–4.6	–5.3	–6.6	–10.3	–8.4	–6.0	–5.8	–4.0	–3.9
Canada	0.8	0.8	0.5	–0.9	–2.7	–4.0	–3.2	–2.8	–2.6	–2.2
Other Advanced Economies[4]	0.4	0.6	1.0	–0.2	–2.2	–1.9	–1.6	–1.4	–1.3	–1.0
Korea	1.1	1.1	2.3	1.8	0.7	1.7	1.8	2.2	1.7	1.7
Australia	1.8	1.8	1.2	–1.3	–4.5	–4.9	–4.4	–3.7	–3.1	–2.3
Sweden	1.4	1.3	1.6	1.0	–0.1	0.6	–0.1	–0.7	–1.2	–1.3
Norway[5]	–4.0	–3.5	–3.3	–3.5	–5.5	–5.4	–4.7	–5.2	–5.7	–5.9
Denmark	1.7	1.4	2.6	2.0	0.1	–1.7	–1.0	–1.1	–0.4	–0.5
New Zealand	3.2	2.5	2.4	1.3	–1.0	–4.1	–3.7	–1.1	–0.6	–0.1
Memorandum										
Major Advanced Economies	–3.7	–2.8	–2.8	–4.1	–6.6	–6.8	–6.1	–5.4	–3.9	–3.0

Note: The country group composites for fiscal data are calculated as the sum of the U.S. dollar values for the relevant individual countries.

[1]On a national income accounts basis. The structural balance position is defined as actual net lending/borrowing minus the effects of cyclical output from potential output, corrected for one-time and other factors, such as asset and commodity prices and output composition effects. Because of the margin of uncertainty that attaches to estimates of cyclical gaps and to tax and expenditure elasticities with respect to national income, indicators of structural budget positions should be interpreted as broad orders of magnitude. Moreover, it is important to note that changes in structural balances are not necessarily attributable to policy changes but may reflect the built-in momentum of existing expenditure programs. In the period beyond that for which specific consolidation programs exist, it is assumed that the structural deficit remains unchanged.

[2]Excludes sizable one-time receipts from the sale of assets, including licenses.

[3]Excludes one-time measures based on authorities' data and, in the absence of the latter, receipts from the sale of assets.

[4]In this table, Other Advanced Economies means advanced economies excluding the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Euro Area countries.

[5]Excludes oil and income on the Government Pension Fund-Global.

Table B8. Emerging Market and Developing Economies: General Government Net Lending/Borrowing and Overall Fiscal Balance

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
General Government Net Lending/Borrowing										
Emerging Market and Developing Economies	**0.7**	**1.4**	**1.2**	**0.7**	**–4.2**	**–2.6**	**–1.2**	**–1.7**	**–2.3**	**–2.2**
Regional Groups										
Central and Eastern Europe	–2.3	–2.2	–2.0	–3.2	–6.2	–5.0	–2.3	–2.5	–3.1	–2.8
Commonwealth of Independent States[1]	6.5	6.9	5.5	4.2	–5.1	–2.6	1.8	0.7	–0.6	–0.5
Russia	8.2	8.3	6.8	4.9	–6.3	–3.4	1.5	0.4	–0.7	–0.3
Excluding Russia	1.1	2.5	1.4	2.1	–1.4	0.0	2.8	1.5	–0.1	–1.0
Developing Asia	–2.4	–1.6	–0.6	–2.3	–4.3	–2.9	–2.5	–3.1	–3.3	–3.0
China	–1.4	–0.7	0.9	–0.7	–3.1	–1.5	–1.3	–2.2	–2.5	–2.1
India	–7.2	–6.2	–4.4	–10.0	–9.8	–8.4	–8.5	–8.0	–8.5	–8.5
Excluding China and India	–0.5	0.0	–1.1	–0.6	–3.4	–2.1	–1.4	–2.2	–2.6	–2.8
Latin America and the Caribbean	–1.4	–1.3	–1.2	–0.9	–4.0	–3.2	–2.9	–3.5	–3.6	–3.6
Brazil	–3.5	–3.5	–2.7	–1.4	–3.1	–2.7	–2.5	–2.7	–3.0	–3.2
Mexico	–1.2	–1.0	–1.2	–1.0	–5.1	–4.3	–3.4	–3.7	–3.8	–4.1
Middle East, North Africa, Afghanistan, and Pakistan	10.6	11.7	9.5	11.3	–1.2	1.3	5.1	5.0	2.8	2.3
Middle East and North Africa	11.8	13.1	10.7	12.7	–0.9	1.8	6.0	6.0	3.7	2.9
Sub-Saharan Africa	2.6	4.9	1.2	0.8	–5.7	–4.0	–1.3	–2.8	–3.1	–3.0
Excluding Nigeria and South Africa	0.8	6.0	0.8	–1.0	–4.4	–1.9	–0.3	–2.0	–2.6	–2.7
Analytical Groups										
By Source of Export Earnings										
Fuel	11.7	11.8	9.0	9.5	–3.3	–0.1	4.5	3.4	1.8	1.5
Nonfuel	–2.2	–1.6	–1.1	–2.1	–4.4	–3.3	–2.7	–3.1	–3.5	–3.2
Of Which, Primary Products	0.6	4.7	3.2	2.1	–2.8	–0.1	0.9	0.2	–1.2	–1.1
By External Financing Source										
Net Debtor Economies	–2.4	–1.8	–1.8	–2.6	–5.1	–4.1	–3.4	–3.7	–4.0	–4.0
Of Which, Official Financing	–3.9	–2.9	–3.6	–3.5	–4.3	–3.5	–2.3	–4.2	–4.4	–3.5
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	–1.3	–0.5	–1.3	–0.8	–3.7	–1.9	–2.7	–3.6	–3.3	–3.4
Other Groups										
Heavily Indebted Poor Countries	–1.7	3.4	–1.4	–0.9	–3.4	–1.9	–1.9	–2.8	–3.0	–3.1

Table B8. Emerging Market and Developing Economies: General Government Net Lending/Borrowing and Overall Fiscal Balance *(concluded)*

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Memorandum										
Median										
Emerging Market and Developing Economies	–1.7	–0.7	–1.0	–1.0	–3.9	–3.1	–2.5	–2.6	–2.7	–2.8
Central and Eastern Europe	–0.9	–0.6	–1.2	–3.3	–5.6	–4.3	–3.3	–3.0	–2.8	–2.9
Commonwealth of Independent States[1]	1.4	1.5	1.2	1.1	–3.3	–3.2	–1.5	0.5	–2.2	–2.2
Developing Asia	–1.7	–0.5	–0.8	–0.5	–3.2	–2.5	–2.1	–2.2	–2.7	–2.5
Latin America and the Caribbean	–2.0	–1.4	–1.1	–1.2	–3.5	–3.0	–2.8	–3.2	–2.9	–2.5
Middle East, North Africa, Afghanistan, and Pakistan	0.9	1.2	–0.9	0.6	–4.3	–0.7	–0.8	–2.6	–3.1	–4.3
Middle East and North Africa	3.0	2.1	0.9	0.7	–4.3	–0.7	–0.7	–2.6	–3.1	–4.3
Sub-Saharan Africa	–2.0	–0.7	–1.2	–1.3	–4.1	–3.9	–2.9	–3.0	–2.8	–3.0
General Government Overall Fiscal Balance[2]										
Emerging Market and Developing Economies										
Brazil	–3.4	–2.3	–2.7	–2.1	–6.2	–5.4	–3.5	–4.1	–3.8	–4.2
Indonesia	0.6	0.2	–1.0	0.0	–1.9	–1.2	–0.7	–1.7	–2.3	–2.6
Turkey	–1.4	–1.4	–2.2	–3.0	–6.4	–3.7	–0.9	–2.1	–2.8	–2.9
Argentina[3]	–1.8	–1.1	–2.1	–0.9	–3.6	–1.4	–3.5	–4.3	–3.6	–4.1
Thailand	–0.2	0.0	0.0	–0.3	–3.5	–1.1	–1.0	–2.0	–2.9	–3.5
Colombia	0.0	–1.0	–0.8	–0.3	–2.8	–3.3	–2.0	0.2	–1.0	–0.7
Malaysia	–3.0	–2.7	–2.7	–3.6	–6.2	–4.5	–3.8	–4.5	–4.3	–4.4
Nigeria	13.0	8.9	1.6	6.3	–9.4	–6.7	0.8	–1.8	–1.8	–1.8
Philippines	–1.6	0.1	–0.6	–0.1	–2.7	–2.7	–1.0	–1.4	–1.1	–1.1
Venezuela	8.2	0.7	0.1	–3.0	–5.0	–9.4	–7.6	–11.1	–10.9	–11.1
Vietnam	–3.0	0.0	–2.4	–1.1	–7.0	–4.6	–3.4	–5.4	–4.4	–4.4
Peru	–0.4	1.9	3.2	2.6	–1.5	–0.1	2.0	2.1	0.3	0.3
Chile	4.5	7.4	7.9	4.1	–4.1	–0.4	1.4	0.6	–0.7	–0.2

Note: The country group composites for fiscal data are calculated as the sum of the U.S. dollar values for the relevant individual countries.
[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[2]Net lending/borrowing including policy lending, where policy lending represents the value of transactions in financial assets that are deemed to be for public policy purposes.
[3]Calculations are based on Argentina's official GDP data. See footnote to Table A4.

Table B9. Emerging Market and Developing Economies: General Government Net Lending/Borrowing

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Central and Eastern Europe	**–2.3**	**–2.2**	**–2.0**	**–3.2**	**–6.2**	**–5.0**	**–2.3**	**–2.5**	**–3.1**	**–2.8**
Albania	–3.4	–3.3	–3.3	–5.1	–7.4	–4.2	–3.5	–3.2	–5.5	–6.3
Bosnia and Herzegovina	0.8	2.1	0.2	–3.7	–5.9	–3.9	–2.6	–2.8	–1.6	–1.2
Bulgaria	2.3	3.3	3.3	2.9	–0.9	–4.0	–2.0	–0.5	–1.8	–1.7
Croatia	–2.8	–2.6	–2.1	–1.3	–4.2	–5.1	–5.2	–3.8	–4.7	–4.7
Hungary	–7.8	–9.4	–5.1	–3.7	–4.6	–4.4	4.2	–2.0	–2.7	–2.8
Kosovo	–3.1	2.7	7.0	–0.2	–0.6	–2.6	–1.8	–2.6	–3.8	–3.0
Latvia	–1.1	–0.5	0.6	–7.5	–7.8	–7.3	–3.2	0.1	–1.4	–0.5
Lithuania	–0.5	–0.4	–1.0	–3.3	–9.4	–7.2	–5.5	–3.3	–2.9	–2.7
FYR Macedonia	0.2	–0.5	0.6	–0.9	–2.7	–2.4	–2.5	–3.9	–4.2	–3.4
Montenegro	–1.4	3.2	6.3	–3.2	–5.4	–4.6	–5.2	–4.3	–2.3	–3.2
Poland	–4.1	–3.6	–1.9	–3.7	–7.4	–7.9	–5.0	–3.9	–4.6	–3.4
Romania	–0.7	–1.4	–3.1	–4.8	–7.3	–6.4	–4.3	–2.5	–2.3	–2.0
Serbia	1.1	–1.0	–1.4	–2.0	–3.9	–3.9	–4.3	–7.1	–7.2	–6.2
Turkey	–0.8	–0.7	–1.9	–2.7	–6.0	–3.0	–0.7	–1.6	–2.3	–2.3
Commonwealth of Independent States[1]	**6.5**	**6.9**	**5.5**	**4.2**	**–5.1**	**–2.6**	**1.8**	**0.7**	**–0.6**	**–0.5**
Russia	8.2	8.3	6.8	4.9	–6.3	–3.4	1.5	0.4	–0.7	–0.3
Excluding Russia	1.1	2.5	1.4	2.1	–1.4	0.0	2.8	1.5	–0.1	–1.0
Armenia	–2.1	–2.0	–2.3	–1.8	–7.7	–5.0	–2.9	–1.6	–2.2	–2.3
Azerbaijan	2.4	1.1	2.3	20.0	6.6	14.0	11.3	3.0	–4.9	–6.9
Belarus	1.9	1.2	1.5	1.9	–0.4	–4.3	–2.7	0.6	–0.6	–3.2
Georgia	2.2	3.4	0.8	–2.0	–6.5	–4.8	–0.9	–0.8	–2.2	–2.0
Kazakhstan	6.0	7.7	5.2	1.2	–1.3	1.5	6.0	4.5	4.8	4.1
Kyrgyz Republic	–3.8	–2.7	–0.6	1.0	–1.1	–5.8	–4.6	–5.8	–5.3	–4.2
Moldova[2]	1.5	0.0	–0.2	–1.0	–6.3	–2.5	–2.4	–2.1	–2.6	–2.8
Tajikistan	–2.9	1.7	–5.5	–5.1	–5.2	–3.0	–2.1	0.5	–2.3	–1.3
Turkmenistan	0.8	5.3	3.9	10.0	7.0	2.0	3.6	6.4	1.8	2.0
Ukraine	–2.3	–1.4	–2.0	–3.2	–6.3	–5.8	–2.8	–4.5	–4.3	–5.1
Uzbekistan	1.2	5.4	5.2	10.2	2.8	4.9	8.8	8.5	1.2	0.6
Developing Asia	**–2.4**	**–1.6**	**–0.6**	**–2.3**	**–4.3**	**–2.9**	**–2.5**	**–3.1**	**–3.3**	**–3.0**
Bangladesh	–3.3	–3.0	–2.6	–4.6	–3.7	–3.1	–4.1	–3.4	–3.8	–3.9
Bhutan	–7.2	–1.2	0.6	0.3	–0.5	1.6	–2.1	–4.3	–1.9	–1.9
Brunei Darussalam	18.0	22.1	3.4	40.0	3.8	8.4	28.1	26.0	21.6	19.8
Cambodia	–0.4	–0.2	–0.7	0.3	–4.2	–2.8	–4.1	–2.7	–2.4	–2.0
China	–1.4	–0.7	0.9	–0.7	–3.1	–1.5	–1.3	–2.2	–2.5	–2.1
Fiji	–3.3	–3.4	–2.0	0.6	–4.1	–2.1	–1.4	–1.0	–2.8	–2.0
India	–7.2	–6.2	–4.4	–10.0	–9.8	–8.4	–8.5	–8.0	–8.5	–8.5
Indonesia	0.6	0.2	–1.0	0.0	–1.8	–1.2	–0.6	–1.7	–2.2	–2.5
Kiribati	–15.2	–15.8	–16.5	–19.6	–12.0	–12.7	–21.2	–6.8	–21.1	–16.1
Lao P.D.R.	–3.4	–3.2	–2.4	–2.6	–5.3	–4.7	–2.1	–2.6	–4.5	–4.7
Malaysia	–3.0	–2.7	–2.7	–3.6	–6.2	–4.5	–3.8	–4.5	–4.3	–4.4
Maldives	–9.2	–5.5	–3.8	–11.9	–21.1	–16.3	–12.3	–13.5	–6.8	–7.0
Marshall Islands	–3.4	1.4	0.2	3.7	1.4	4.6	3.7	–1.1	–0.1	0.2
Micronesia	–5.6	–5.4	–3.5	–1.6	1.9	0.5	–0.6	0.8	0.6	0.6
Mongolia	2.4	7.6	2.6	–4.5	–5.2	0.5	–4.8	–11.8	–11.3	–7.3
Myanmar	–2.8	–3.6	–3.3	–2.4	–4.9	–5.4	–4.6	–3.7	–5.1	–4.8
Nepal	0.3	0.3	–0.8	–0.4	–2.6	–0.8	–1.0	–0.6	2.7	–0.3
Palau	1.4	0.1	–1.9	–1.6	–0.8	–0.9	1.2	–0.1	1.8	3.7
Papua New Guinea	2.7	6.5	9.0	2.5	–9.6	3.1	1.7	–3.2	–6.3	–5.9
Philippines	–1.7	0.0	–0.3	0.0	–2.6	–2.5	–0.6	–0.9	–0.8	–0.8
Samoa	0.3	–0.5	0.6	–1.5	–4.2	–7.3	–6.2	–5.5	–4.8	–3.1
Solomon Islands	–1.9	–1.3	1.7	–0.2	1.8	6.2	9.0	3.9	0.8	0.6
Sri Lanka	–7.0	–7.0	–6.9	–7.0	–9.9	–8.0	–6.9	–6.4	–5.8	–5.2
Thailand	1.5	2.2	0.2	0.1	–3.2	–0.8	–0.7	–1.7	–2.7	–3.2
Timor-Leste	6.1	19.9	37.5	44.9	31.3	37.9	42.7	47.0	36.2	37.1
Tonga	2.7	3.3	3.4	6.1	4.4	–3.7	–3.6	–0.6	0.2	0.7
Tuvalu	–11.6	–15.6	–12.3	–3.5	1.7	–24.0	–8.9	9.9	–6.6	–7.3
Vanuatu	1.9	0.5	0.3	0.0	–0.8	–2.5	–2.2	–1.6	–1.0	–2.1
Vietnam	–1.2	0.3	–2.0	–0.5	–6.6	–2.8	–2.9	–4.8	–4.0	–4.0

Table B9. Emerging Market and Developing Economies: General Government Net Lending/Borrowing *(continued)*

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Latin America and the Caribbean	**–1.4**	**–1.3**	**–1.2**	**–0.9**	**–4.0**	**–3.2**	**–2.9**	**–3.5**	**–3.6**	**–3.6**
Antigua and Barbuda	–15.2	–8.8	–5.0	–5.7	–18.2	–0.2	–3.6	–1.2	–6.2	1.7
Argentina[3]	–1.8	–1.1	–2.1	–0.9	–3.6	–1.4	–3.5	–4.3	–3.6	–4.1
The Bahamas	–2.4	–1.4	–2.4	–1.8	–3.9	–4.3	–4.6	–5.6	–7.6	–5.9
Barbados	–5.1	–3.5	–7.7	–6.7	–6.3	–7.7	–4.5	–8.6	–8.8	–7.2
Belize	–3.5	–3.9	–0.7	0.4	–1.2	–1.7	–1.1	–0.6	–1.1	–1.6
Bolivia	–2.2	4.5	1.7	3.6	0.0	1.7	0.8	1.8	1.5	1.4
Brazil	–3.5	–3.5	–2.7	–1.4	–3.1	–2.7	–2.5	–2.7	–3.0	–3.2
Chile	4.5	7.4	7.9	4.1	–4.1	–0.4	1.4	0.6	–0.7	–0.2
Colombia	0.0	–1.0	–0.8	–0.3	–2.8	–3.3	–2.0	0.2	–1.0	–0.7
Costa Rica	–2.8	–1.4	0.3	–0.3	–3.6	–5.5	–4.3	–4.7	–5.1	–5.7
Dominica	1.0	3.0	1.8	0.7	–0.3	–3.5	–4.5	–3.7	–3.9	–3.3
Dominican Republic	–0.8	–1.3	0.1	–3.0	–3.5	–2.5	–2.6	–6.6	–2.8	–1.5
Ecuador	0.6	2.9	1.8	0.5	–3.6	–1.4	0.0	–1.1	–2.0	–2.1
El Salvador	–3.0	–2.5	–1.3	–2.7	–5.6	–4.4	–3.9	–3.9	–4.2	–4.1
Grenada	0.4	–5.6	–6.4	–4.1	–5.2	–3.1	–4.4	–5.4	–9.2	–8.7
Guatemala	–1.7	–1.9	–1.4	–1.6	–3.1	–3.3	–2.8	–2.4	–2.2	–2.3
Guyana	–8.5	–8.0	–4.3	–3.6	–3.5	–2.7	–3.0	–4.5	–2.7	–2.2
Haiti	–2.7	–1.7	0.2	–2.8	–4.6	2.4	–3.7	–5.1	–5.5	–6.9
Honduras	–1.3	–2.7	–1.6	–1.7	–4.5	–2.8	–2.8	–4.2	–6.5	–6.3
Jamaica	–3.3	–4.9	–3.8	–7.5	–11.1	–6.3	–6.4	–4.1	–0.5	–0.4
Mexico	–1.2	–1.0	–1.2	–1.0	–5.1	–4.3	–3.4	–3.7	–3.8	–4.1
Nicaragua	–0.8	0.5	0.9	–0.6	–1.7	–0.6	0.3	0.0	–0.9	–1.0
Panama	–2.6	0.5	3.4	0.4	–1.0	–1.9	–2.3	–2.1	–3.1	–2.7
Paraguay	0.7	0.8	1.4	2.7	0.5	1.4	0.5	–1.2	–1.5	–1.3
Peru	–0.4	1.9	3.2	2.6	–1.5	–0.1	2.0	2.1	0.3	0.3
St. Kitts and Nevis	–3.3	–3.9	–3.5	–3.9	–2.9	–7.8	1.8	5.2	2.2	–0.4
St. Lucia	–6.9	–5.8	–1.9	–0.9	–3.0	–4.9	–6.4	–10.3	–7.5	–7.3
St. Vincent and the Grenadines	–4.5	–3.1	–3.1	–1.4	–3.0	–3.9	–3.6	–2.7	–2.6	–2.1
Suriname	–2.3	0.0	–1.1	1.6	–2.4	–3.1	0.9	–4.0	–2.9	–4.0
Trinidad and Tobago	4.0	6.1	3.6	8.0	–9.1	–3.8	0.0	–0.3	–1.4	–1.4
Uruguay	–0.4	–0.5	0.0	–1.6	–1.7	–1.5	–0.9	–2.8	–2.4	–2.7
Venezuela	4.1	–1.6	–2.8	–3.5	–8.7	–10.4	–11.6	–16.6	–15.0	–13.3
Middle East, North Africa, Afghanistan, and Pakistan	**10.6**	**11.7**	**9.5**	**11.3**	**–1.2**	**1.3**	**5.1**	**5.0**	**2.8**	**2.3**
Afghanistan	0.9	–3.1	–2.0	–4.0	–1.3	0.9	–0.8	0.2	–0.6	0.0
Algeria	13.6	13.9	6.1	9.0	–5.4	–0.4	–0.4	–5.1	–1.7	–2.3
Bahrain	3.5	2.7	1.9	4.9	–6.6	–7.0	–1.7	–2.6	–4.2	–5.0
Djibouti	0.3	–2.4	–2.6	1.3	–4.6	–0.5	–0.7	–2.7	–3.1	–4.8
Egypt	–8.4	–9.2	–7.5	–8.0	–6.9	–8.3	–9.8	–10.7	–14.7	–13.2
Iran	3.0	2.1	7.4	0.7	0.9	3.0	4.1	–2.5	–2.5	–4.4
Iraq	4.1	10.7	7.8	–0.9	–12.7	–4.3	4.9	4.1	–0.7	–0.3
Jordan	–5.0	–3.5	–5.7	–5.5	–8.9	–5.6	–6.8	–8.8	–9.1	–8.0
Kuwait	43.3	35.4	39.1	19.8	26.8	24.5	33.3	34.0	29.0	25.9
Lebanon	–8.6	–10.5	–10.9	–9.7	–8.3	–7.7	–6.1	–9.0	–10.4	–11.0
Libya	31.4	31.8	28.6	28.3	6.2	17.2	–6.6	19.4	–5.4	–3.9
Mauritania	. . .	. . .	–1.6	–6.5	–5.1	–1.9	–1.5	2.8	–4.4	–8.2
Morocco	–6.2	–2.0	–0.1	0.7	–1.8	–4.4	–6.7	–7.6	–5.5	–4.8
Oman	12.9	14.1	12.1	16.8	–0.3	5.5	9.1	4.5	6.4	3.8
Pakistan[4]	–2.8	–3.4	–5.1	–7.1	–5.0	–5.9	–6.9	–8.4	–8.5	–5.5
Qatar	8.4	7.9	9.9	10.2	12.5	2.5	3.6	8.1	10.7	8.4
Saudi Arabia	21.3	24.4	15.0	31.6	–4.1	2.1	12.0	15.0	9.6	8.6
Sudan[5]	–2.5	–1.4	–3.5	0.6	–5.1	0.3	0.2	–3.8	–2.0	–0.9
Syria[6]	–4.4	–1.1	–3.0	–2.9	–2.9	–7.8	. . .	. . .	. . .	. . .
Tunisia	–2.8	–2.6	–2.0	–0.6	–1.2	–0.9	–3.4	–4.9	–6.8	–4.3
United Arab Emirates	15.8	20.0	18.2	21.4	–0.5	4.7	11.0	13.3	11.1	10.8
Yemen	–1.8	1.2	–7.2	–4.5	–10.2	–4.0	–4.4	–6.3	–5.8	–5.8

Table B9. Emerging Market and Developing Economies: General Government Net Lending/Borrowing *(concluded)*

(Percent of GDP)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Sub-Saharan Africa	**2.6**	**4.9**	**1.2**	**0.8**	**–5.7**	**–4.0**	**–1.3**	**–2.8**	**–3.1**	**–3.0**
Angola	9.4	11.8	4.7	–4.5	–8.3	4.6	8.7	4.5	1.2	–0.8
Benin	–2.3	–0.2	0.3	–0.1	–3.3	–0.4	–1.4	–0.3	–0.4	–1.5
Botswana	10.2	13.0	5.5	–7.5	–13.5	–7.5	–0.1	0.2	0.2	1.5
Burkina Faso	–5.5	16.1	–6.7	–4.3	–5.3	–4.6	–2.4	–3.2	–2.3	–3.2
Burundi	–3.6	–1.0	–2.5	–2.7	–5.3	–3.6	–4.0	–3.7	–1.7	–2.5
Cameroon	3.6	32.8	4.7	2.2	–0.1	–1.1	–2.7	–1.1	–3.3	–3.5
Cape Verde	–6.0	–5.1	–0.9	–0.6	–5.9	–10.7	–7.7	–9.9	–8.1	–8.4
Central African Republic	–4.6	9.1	1.2	–1.0	–0.1	–1.4	–2.4	0.0	–1.6	–1.3
Chad	–0.1	2.2	2.5	3.6	–9.2	–4.2	2.4	0.5	–2.4	–0.7
Comoros	0.1	–2.6	–2.0	–2.5	0.6	7.0	1.4	3.4	18.6	–0.8
Democratic Republic of the Congo	–4.3	–3.6	–3.8	–3.8	–2.6	4.9	–1.8	–0.1	–2.8	–3.4
Republic of Congo	14.6	16.6	9.4	23.4	4.8	16.1	16.4	6.4	14.3	15.5
Côte d'Ivoire	–1.7	–1.8	–0.8	–0.6	–1.6	–2.3	–5.7	–3.4	–3.1	–3.5
Equatorial Guinea	22.8	28.3	21.8	18.7	–9.4	–6.1	1.0	–9.7	–4.7	–4.4
Eritrea	–22.2	–14.1	–15.7	–21.1	–14.7	–16.0	–16.2	–13.5	–12.5	–11.6
Ethiopia	–4.2	–3.9	–3.6	–2.9	–0.9	–1.3	–1.6	–1.2	–2.8	–3.1
Gabon	7.8	8.3	8.0	10.9	6.8	2.7	2.4	1.5	–2.3	–2.6
The Gambia	–5.9	–5.1	0.4	–1.3	–2.7	–5.4	–4.7	–4.4	–2.7	–2.0
Ghana	–2.8	–4.7	–5.6	–8.4	–7.0	–9.4	–5.5	–9.3	–7.0	–7.3
Guinea	–1.6	–3.1	0.3	–1.3	–7.1	–14.0	–1.3	–3.3	–4.8	–2.2
Guinea-Bissau	–7.6	–5.5	–10.6	–2.4	1.6	–2.1	–2.1	–3.1	–0.1	–1.7
Kenya	–1.8	–2.5	–3.2	–4.4	–5.4	–5.5	–5.1	–6.3	–5.8	–4.2
Lesotho	4.5	14.3	11.1	8.9	–4.0	–5.1	–10.6	5.3	2.0	2.2
Liberia	0.0	4.8	3.0	–9.8	–10.0	–5.7	–3.1	–1.6	–5.5	–5.3
Madagascar	–3.0	–0.5	–2.7	–1.1	–3.1	–1.5	–4.8	–2.9	–2.7	–3.0
Malawi	–2.5	0.7	–3.5	–4.5	–4.4	2.6	–5.3	–4.0	–2.7	–2.1
Mali	–3.1	31.3	–3.2	–2.2	–4.2	–2.7	–3.7	–1.1	–2.5	–3.0
Mauritius	–4.7	–4.4	–3.3	–2.8	–3.6	–3.2	–3.2	–1.8	–1.7	–1.6
Mozambique	–2.8	–4.1	–2.9	–2.5	–5.5	–4.3	–5.0	–4.0	–4.6	–7.2
Namibia	–0.5	2.9	5.9	4.2	–0.1	–4.6	–6.6	–3.0	–4.2	–1.6
Niger	–2.0	40.3	–1.0	1.5	–5.4	–2.4	–1.5	–2.6	–4.4	–4.0
Nigeria	13.0	8.9	1.6	6.3	–9.4	–6.7	0.8	–1.8	–1.8	–1.8
Rwanda	0.9	0.2	–1.8	1.0	0.3	0.4	–2.2	–1.8	–2.8	–2.9
São Tomé and Príncipe	27.2	–12.7	125.4	14.2	–18.4	–11.0	–12.0	–10.8	–8.0	–8.5
Senegal	–2.8	–5.4	–3.8	–4.7	–4.9	–5.2	–6.3	–5.6	–5.3	–4.6
Seychelles	–0.3	–6.1	–9.5	5.5	2.8	–0.8	2.5	2.4	2.8	3.0
Sierra Leone	–1.9	–1.6	20.1	–3.5	–2.3	–5.0	–4.6	–5.2	–3.1	–4.0
South Africa	0.0	1.2	1.4	–0.4	–5.5	–5.1	–4.0	–4.8	–4.9	–4.7
South Sudan	. . .	. . .	. . .	. . .	. . .	. . .	4.4	–16.0	–9.0	8.1
Swaziland	–2.0	10.1	–1.6	–0.7	–6.0	–11.5	–5.6	3.7	–2.6	–7.2
Tanzania	–4.0	–4.5	–1.9	–2.6	–6.0	–6.5	–5.0	–5.0	–5.3	–4.5
Togo	–2.4	–2.8	–1.9	–0.9	–2.8	–1.6	–2.9	–6.9	–6.0	–4.1
Uganda	–0.2	–0.8	–1.1	–2.7	–2.3	–6.7	–3.1	–3.5	–1.8	–6.0
Zambia	–2.8	20.2	–1.3	–0.8	–2.5	–3.0	–2.2	–3.1	–7.8	–6.6
Zimbabwe	–8.1	–3.2	–3.9	–2.7	–2.8	0.9	–1.7	–0.7	–0.7	1.3

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[2]Moldova projections are based on data available for the first quarter of 2013.
[3]Calculations are based on Argentina's official GDP data. See footnote to Table A4.
[4]Pakistan's data for the projection years exclude payments for electricity arrears and commodity operations.
[5]Data for 2011 exclude South Sudan after July 9. Data for 2012 and onward pertain to the current Sudan.
[6]Data for Syria are excluded for 2011 onward due to the uncertain political situation.

Table B10. Advanced Economies: Exchange Rates

	2005	2006	2007	2008	2009	2010	2011	2012	Exchange Rate Assumption 2013
					U.S. Dollars per National Currency Unit				
U.S. Dollar Nominal Exchange Rates									
Euro	1.246	1.256	1.371	1.472	1.393	1.327	1.391	1.286	1.326
Pound Sterling	1.820	1.843	2.002	1.853	1.564	1.546	1.604	1.585	1.541
					National Currency Units per U.S. Dollar				
Japanese Yen	110.218	116.299	117.754	103.359	93.570	87.780	79.807	79.790	96.511
Canadian Dollar	1.212	1.134	1.074	1.067	1.143	1.030	0.990	0.999	1.027
Swedish Krona	7.473	7.378	6.759	6.591	7.654	7.208	6.494	6.775	6.521
Danish Krone	5.997	5.947	5.444	5.098	5.361	5.624	5.369	5.792	5.662
Swiss Franc	1.245	1.254	1.200	1.083	1.088	1.043	0.888	0.938	0.935
Norwegian Krone	6.443	6.413	5.862	5.640	6.288	6.044	5.605	5.818	5.865
Israeli New Shekel	4.488	4.456	4.108	3.588	3.932	3.739	3.578	3.858	3.852
Icelandic Krona	62.85	69.85	64.06	87.95	123.64	122.24	116.04	125.11	122.76
Korean Won	1,024.1	954.8	929.3	1,102.0	1,276.9	1,156.1	1,108.3	1,126.5	1,111.1
Australian Dollar	1.312	1.327	1.192	1.173	1.263	1.087	0.969	0.965	1.040
New Taiwan Dollar	32.18	32.53	32.84	31.53	33.06	31.65	29.47	29.62	29.82
Hong Kong Dollar	7.777	7.768	7.801	7.787	7.752	7.769	7.784	7.756	7.757
Singapore Dollar	1.664	1.589	1.507	1.415	1.455	1.364	1.258	1.250	1.257
					Index, 2005 = 100				*Percent Change from Previous Assumption*[2]
Real Effective Exchange Rates[1]									
United States	100.0	99.8	93.6	91.2	96.0	91.5	86.1	89.6	–0.8
Euro Area[3]	100.0	99.9	105.0	113.1	112.3	106.7	104.9	99.8	0.9
Germany	100.0	96.5	97.5	102.1	104.0	102.7	98.7	96.6	0.4
France	100.0	102.2	105.2	105.8	103.6	104.3	105.4	104.8	0.3
Italy	100.0	101.5	105.9	112.1	112.5	111.3	119.4	119.8	0.3
Spain	100.0	103.1	108.9	114.6	113.2	107.9	104.2	98.0	0.3
Netherlands	100.0	99.6	100.2	104.4	102.9	99.2	99.1	97.3	0.3
Belgium	100.0	102.6	105.0	106.4	106.2	102.6	102.6	101.7	0.3
Austria	100.0	98.3	97.8	94.6	93.4	94.0	94.0	93.2	0.2
Greece	100.0	103.1	105.7	104.1	104.4	103.2	102.9	93.2	0.2
Portugal	100.0	101.4	101.3	100.8	98.7	99.6	100.4	94.3	0.2
Finland	100.0	95.2	91.5	92.7	94.2	91.5	91.5	90.4	0.4
Ireland	100.0	100.5	98.7	98.1	83.7	71.6	65.4	62.6	0.6
Slovak Republic	100.0	101.2	107.3	117.8	129.1	127.6	127.7	126.1	0.2
Slovenia	100.0	101.4	104.6	107.4	112.3	111.2	111.7	110.2	0.2
Luxembourg	100.0	102.7	104.3	105.7	105.9	102.5	102.2	101.4	0.3
Estonia	100.0	100.4	101.3	103.5	103.8	102.6	102.3	100.6	0.3
Cyprus	100.0	99.7	100.4	106.8	108.5	104.7	103.7	101.0	0.3
Malta	100.0	100.0	103.0	108.3	108.7	105.1	104.0	100.8	0.5
Japan	100.0	91.0	81.8	89.7	108.2	109.8	118.5	119.7	–0.7
United Kingdom	100.0	102.8	105.0	89.6	82.5	88.3	89.0	92.5	–0.5
Canada	100.0	108.9	116.2	113.7	104.9	117.5	120.5	118.9	0.0
Korea	100.0	106.6	106.5	83.9	71.8	78.2	74.4	77.0	1.7
Australia	100.0	103.4	114.8	113.4	105.4	130.3	145.5	153.8	–3.2
Taiwan Province of China	100.0	94.9	87.4	86.4	75.8	67.4	70.0	65.3	–0.1
Sweden	100.0	94.9	99.1	100.2	97.1	93.8	91.0	92.2	0.4
Hong Kong SAR	100.0	97.6	93.8	89.9	90.8	89.0	88.0	93.7	–0.4
Switzerland	100.0	99.0	97.5	101.0	106.4	112.5	129.0	130.3	0.1
Singapore	100.0	106.4	111.8	119.7	116.7	131.4	142.1	153.1	–0.9
Czech Republic	100.0	99.6	101.1	108.2	99.3	98.1	98.2	93.7	0.2
Norway	100.0	108.2	115.5	116.3	110.7	119.2	127.8	131.6	–0.5
Israel	100.0	102.1	106.7	117.7	110.1	120.9	122.8	118.8	1.0
Denmark	100.0	100.0	103.5	102.0	101.9	95.4	92.2	91.7	0.4
New Zealand	100.0	96.3	102.9	95.7	85.9	96.6	98.5	99.1	1.5
Iceland	100.0	100.1	112.5	83.1	56.2	63.4	65.1	64.2	–0.9

[1]Defined as the ratio, in common currency, of the unit labor costs in the manufacturing sector to the weighted average of those of its industrial country trading partners, using 2004–06 trade weights.
[2]In nominal effective terms. Average June 1–July 9, 2013, compared with July 29–August 26, 2013, rates.
[3]A synthetic euro for the period prior to January 1, 1999, is used in the calculation of real effective exchange rates for the euro. See Box 5.5 of the October 1998 *World Economic Outlook*.

Table B11. Emerging Market and Developing Economies: Broad Money Aggregates

(Annual percent change)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Emerging Market and Developing Economies	**19.5**	**21.3**	**20.7**	**18.1**	**16.0**	**16.3**	**16.9**	**14.1**	**13.4**	**12.0**
Regional Groups										
Central and Eastern Europe	23.4	20.6	16.1	18.6	9.0	11.8	11.6	6.6	8.0	8.4
Commonwealth of Independent States[1]	37.2	42.6	42.1	17.5	15.5	24.5	22.6	13.5	15.1	13.5
Russia	36.3	40.5	41.2	13.5	17.3	24.6	20.9	12.1	13.9	12.3
Excluding Russia	39.8	49.3	45.1	31.2	10.0	24.1	28.3	18.2	18.7	17.5
Developing Asia	16.4	17.8	17.3	17.0	22.7	17.6	16.1	14.3	11.6	10.7
China	16.3	17.0	16.7	17.8	28.4	18.9	17.3	14.4	11.9	10.0
India	21.1	21.7	21.4	19.3	16.9	16.1	13.2	13.8	12.6	14.1
Excluding China and India	12.7	16.3	15.1	12.8	12.7	14.8	14.9	14.4	9.7	10.4
Latin America and the Caribbean	18.4	18.6	16.9	17.6	11.3	16.2	19.7	18.2	16.5	14.6
Brazil	18.5	18.0	18.7	17.8	16.3	15.8	18.5	15.9	15.8	15.5
Mexico	14.8	13.0	11.2	16.8	6.1	12.0	15.7	14.4	11.1	8.8
Middle East, North Africa, Afghanistan, and Pakistan	19.6	21.6	24.9	18.3	13.0	11.6	14.4	12.7	16.5	13.1
Middle East and North Africa	19.6	22.3	25.3	18.5	13.2	11.5	14.3	12.6	16.6	13.1
Sub-Saharan Africa	16.7	28.9	26.4	29.0	12.7	12.7	15.7	11.8	14.3	13.2
Analytical Groups										
By Source of Export Earnings										
Fuel	27.8	35.6	33.4	21.2	15.7	17.3	20.2	15.6	17.7	14.5
Nonfuel	17.7	18.1	17.5	17.3	16.0	16.1	16.0	13.7	12.3	11.4
Of Which, Primary Products	19.2	19.0	20.9	19.1	11.1	19.7	18.5	14.8	11.6	12.2
By External Financing Source										
Net Debtor Economies	18.7	18.9	18.1	17.5	11.4	15.1	15.5	13.5	12.8	12.3
Of Which, Official Financing	18.2	17.5	16.6	15.1	12.9	15.3	16.9	14.5	13.2	12.9
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	18.5	24.7	20.7	15.4	17.8	28.6	25.6	26.0	22.3	17.3
Other Groups										
Heavily Indebted Poor Countries	17.0	24.2	20.6	20.7	17.0	22.9	19.3	18.1	15.2	14.0
Memorandum										
Median										
Emerging Market and Developing Economies	16.2	18.7	19.3	15.8	12.5	13.6	14.1	11.5	11.0	10.2
Central and Eastern Europe	21.0	22.4	16.9	8.3	5.2	8.8	7.9	4.5	6.5	6.6
Commonwealth of Independent States[1]	29.0	43.4	44.4	20.7	17.0	23.3	22.3	20.1	17.5	16.9
Developing Asia	15.5	19.4	18.0	12.0	19.6	15.9	16.5	14.6	10.6	10.0
Latin America and the Caribbean	12.5	16.7	16.1	13.2	8.1	10.1	10.6	10.6	9.3	8.9
Middle East, North Africa, Afghanistan, and Pakistan	14.3	18.1	19.3	16.2	11.6	12.1	12.2	10.5	11.2	10.1
Middle East and North Africa	14.1	18.7	19.1	16.2	11.6	11.8	10.2	10.5	11.2	10.1
Sub-Saharan Africa	16.0	18.4	20.1	22.3	16.4	19.1	14.4	14.0	11.3	10.6

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table B12. Advanced Economies: Export Volumes, Import Volumes, and Terms of Trade in Goods and Services

(Annual percent change)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Export Volume												
Advanced Economies	**6.3**	**3.8**	**6.1**	**8.9**	**6.9**	**2.1**	**–11.6**	**12.4**	**5.7**	**2.0**	**2.7**	**4.7**
United States	4.8	4.7	6.0	8.9	8.9	5.7	–9.1	11.5	7.1	3.5	2.4	3.6
Euro Area[1]	6.6	3.3	5.2	8.9	6.6	0.6	–12.7	11.6	6.3	2.3	2.0	4.5
Germany	7.4	5.2	7.7	13.1	8.0	2.8	–13.0	15.2	8.0	3.2	2.8	6.7
France	5.7	1.8	2.9	5.2	2.3	–0.3	–12.1	9.5	5.4	2.4	1.2	3.0
Italy	3.6	1.6	3.4	8.4	6.2	–2.8	–17.5	11.4	5.9	2.3	–0.6	2.3
Spain	7.3	3.6	2.5	6.7	6.7	–1.0	–10.0	11.7	7.6	2.1	5.7	5.8
Japan	5.5	3.0	6.2	9.9	8.7	1.4	–24.2	24.4	–0.4	–0.1	4.1	7.1
United Kingdom	5.2	2.7	9.1	12.0	–2.1	1.1	–8.7	6.7	4.5	0.9	2.2	2.8
Canada	5.4	0.5	2.2	0.9	1.1	–4.5	–13.1	6.9	4.7	1.5	1.7	4.8
Other Advanced Economies[2]	8.0	5.1	7.7	9.3	9.5	4.1	–8.1	13.5	5.9	1.5	3.9	5.5
Memorandum												
Major Advanced Economies	5.4	3.5	5.9	9.2	5.8	1.8	–13.2	12.8	5.6	2.4	2.3	4.6
Import Volume												
Advanced Economies	**6.8**	**2.9**	**6.3**	**7.8**	**5.4**	**0.5**	**–12.1**	**11.7**	**4.7**	**1.0**	**1.5**	**4.0**
United States	8.1	2.1	6.1	6.1	2.3	–2.6	–13.7	12.8	4.9	2.2	1.5	3.5
Euro Area[1]	6.6	2.5	5.8	8.5	6.3	0.4	–11.3	9.7	4.4	–1.2	0.4	3.9
Germany	6.2	4.9	6.2	11.8	5.4	3.4	–7.8	12.5	7.4	1.4	3.1	7.4
France	6.0	2.3	5.6	5.1	5.5	0.9	–9.6	8.9	5.1	–1.1	0.7	2.7
Italy	5.0	–0.1	3.5	7.9	5.2	–3.0	–13.4	12.6	0.5	–7.7	–4.3	0.5
Spain	9.6	0.4	7.7	10.2	8.0	–5.2	–17.2	9.3	–0.1	–5.7	–1.0	1.8
Japan	4.6	2.2	4.2	4.5	2.3	0.3	–15.7	11.1	5.9	5.4	2.3	3.8
United Kingdom	7.1	1.4	6.9	10.0	–1.5	–1.7	–10.7	7.9	0.3	2.8	–0.1	2.0
Canada	5.6	3.3	7.3	5.3	5.8	0.8	–12.4	13.6	5.7	3.1	1.5	3.9
Other Advanced Economies[2]	7.1	4.9	7.6	8.9	10.0	4.4	–11.6	15.3	5.9	1.6	3.4	5.3
Memorandum												
Major Advanced Economies	6.6	2.5	5.8	7.4	3.2	–0.5	–11.9	11.6	4.7	1.4	1.2	3.9
Terms of Trade												
Advanced Economies	**0.0**	**–0.6**	**–1.3**	**–1.2**	**0.3**	**–2.1**	**2.5**	**–1.1**	**–1.6**	**–0.7**	**0.0**	**–0.2**
United States	0.1	–0.5	–1.7	–0.6	–0.2	–5.3	5.6	–1.5	–1.3	0.4	0.2	–0.4
Euro Area[1]	0.1	–0.6	–1.2	–1.5	0.6	–1.6	3.1	–2.1	–2.1	–0.8	–0.2	0.0
Germany	0.1	–0.5	–1.7	–1.6	0.6	–1.7	4.2	–1.9	–2.2	–0.4	–0.2	0.1
France	–0.1	–0.4	–1.3	–1.5	1.3	–0.7	2.8	–1.5	–2.2	–0.7	–0.2	–0.3
Italy	0.0	–1.1	–2.8	–3.2	0.9	–1.6	5.3	–3.8	–3.1	–1.7	0.2	–0.6
Spain	0.8	–0.4	0.5	0.3	0.8	–1.6	4.1	–2.5	–3.0	–2.2	–0.3	0.1
Japan	–1.7	–2.9	–6.8	–6.7	–4.0	–9.6	12.8	–5.6	–7.1	–0.9	–1.1	1.5
United Kingdom	0.7	–0.6	–1.7	–0.5	0.0	–0.9	–0.6	–0.3	–1.6	–0.2	0.0	0.1
Canada	1.1	1.0	3.5	1.0	3.0	4.3	–8.9	4.9	3.4	–0.9	0.4	–0.1
Other Advanced Economies[2]	–0.2	–0.3	0.1	–0.1	0.2	–0.7	–0.7	1.1	–0.7	–0.9	–0.2	–0.6
Memorandum												
Major Advanced Economies	0.1	–0.7	–2.1	–1.8	0.4	–2.8	4.0	–1.9	–2.0	–0.7	0.1	–0.1
Memorandum												
Trade in Goods												
Advanced Economies												
Export Volume	6.4	3.5	5.7	8.8	5.8	1.5	–13.4	14.3	5.9	1.7	2.4	4.7
Import Volume	7.1	2.8	6.6	8.1	4.8	–0.1	–13.1	13.4	5.2	0.5	1.0	4.1
Terms of Trade	–0.1	–0.6	–1.5	–1.3	0.4	–2.5	3.8	–1.3	–1.8	–1.2	–0.3	–0.1

[1]Calculated as the average of individual Euro Area countries.
[2]In this table, Other Advanced Economies means advanced economies excluding the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Euro Area countries.

Table B13. Emerging Market and Developing Economies by Region: Total Trade in Goods

(Annual percent change)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Emerging Market and Developing Economies												
Value in U.S. Dollars												
Exports	12.0	11.8	25.2	21.8	19.4	22.3	–22.9	27.6	24.8	4.2	2.5	4.8
Imports	10.5	12.1	18.6	18.9	23.9	22.9	–19.3	26.2	23.0	4.5	5.2	5.9
Volume												
Exports	8.8	5.8	11.0	10.3	8.6	3.3	–8.1	13.8	6.7	4.7	3.3	5.7
Imports	8.2	7.4	11.1	11.5	14.4	7.7	–9.7	15.2	9.9	5.1	5.3	6.0
Unit Value in U.S. Dollars												
Exports	3.1	5.9	13.2	10.9	10.1	18.3	–15.6	12.8	17.0	–0.5	–0.8	–0.9
Imports	2.1	4.5	7.0	7.0	8.3	14.0	–10.3	9.9	12.5	–0.7	–0.2	0.0
Terms of Trade	1.0	1.4	5.8	3.6	1.6	3.8	–5.9	2.6	4.1	0.3	–0.6	–0.9
Regional Groups												
Central and Eastern Europe												
Value in U.S. Dollars												
Exports	15.8	9.5	16.2	20.2	24.0	21.0	–22.4	16.1	20.1	0.0	4.4	4.8
Imports	16.5	8.7	16.3	22.1	27.1	21.5	–31.1	19.3	23.2	–4.6	4.3	4.3
Volume												
Exports	11.1	5.9	9.8	12.2	9.2	4.5	–8.9	13.1	6.6	5.1	3.5	5.0
Imports	11.9	4.5	7.5	12.8	14.1	2.5	–16.1	11.9	7.4	–0.1	4.0	4.7
Unit Value in U.S. Dollars												
Exports	4.2	3.3	5.5	7.2	13.6	15.2	–14.5	2.4	12.0	–5.2	0.9	–0.1
Imports	3.7	4.0	8.0	8.3	11.6	18.3	–17.2	6.5	14.2	–4.7	0.2	–0.4
Terms of Trade	0.4	–0.7	–2.3	–1.1	1.7	–2.7	3.3	–3.8	–1.9	–0.5	0.6	0.3
Commonwealth of Independent States[1]												
Value in U.S. Dollars												
Exports	11.1	11.7	27.5	24.7	20.6	36.2	–35.8	30.5	34.5	3.0	–1.3	1.3
Imports	7.7	13.6	22.8	29.5	36.2	30.9	–34.2	27.4	31.6	6.7	1.3	5.8
Volume												
Exports	7.0	2.8	4.7	7.8	6.7	0.7	–13.4	7.3	7.7	3.7	1.4	3.4
Imports	7.2	8.5	15.3	20.8	23.0	12.0	–27.6	18.5	16.7	9.4	1.7	6.3
Unit Value in U.S. Dollars												
Exports	4.3	8.9	21.7	15.8	13.0	35.7	–25.0	22.0	25.0	–0.6	–2.6	–2.0
Imports	0.8	4.7	6.4	7.2	10.9	16.9	–8.9	7.7	12.8	–2.4	–0.4	–0.4
Terms of Trade	3.5	4.0	14.4	8.0	1.9	16.1	–17.7	13.2	10.8	1.9	–2.3	–1.6
Developing Asia												
Value in U.S. Dollars												
Exports	13.5	13.2	23.0	23.1	21.9	16.7	–15.0	31.0	20.1	5.5	5.7	7.5
Imports	12.1	13.4	18.4	17.2	20.6	19.4	–12.8	35.4	25.2	4.5	6.0	7.3
Volume												
Exports	12.4	8.9	17.2	16.9	13.3	4.8	–8.3	22.9	8.5	4.3	5.5	6.9
Imports	9.6	8.3	11.7	10.6	11.9	5.3	–2.6	19.0	10.4	4.9	6.3	6.8
Unit Value in U.S. Dollars												
Exports	1.0	4.1	5.1	5.7	7.9	11.5	–7.1	7.0	10.7	1.2	0.1	0.5
Imports	2.4	4.8	6.0	6.3	7.7	13.4	–10.1	13.8	13.5	–0.3	–0.3	0.4
Terms of Trade	–1.3	–0.6	–0.9	–0.6	0.2	–1.7	3.3	–6.0	–2.4	1.4	0.4	0.1
Latin America and the Caribbean												
Value in U.S. Dollars												
Exports	9.6	9.3	20.7	19.6	12.4	15.8	–22.3	26.7	23.8	1.5	1.9	2.4
Imports	7.5	10.7	18.3	19.2	19.4	21.5	–24.6	29.2	22.3	4.2	4.9	3.4
Volume												
Exports	7.1	2.9	6.9	5.7	3.2	–0.5	–8.9	8.4	4.2	3.4	2.6	5.0
Imports	6.1	6.4	9.8	12.8	12.1	7.3	–18.8	22.6	12.9	2.7	4.2	3.8
Unit Value in U.S. Dollars												
Exports	2.4	6.2	13.0	13.3	9.0	16.4	–14.8	17.3	18.8	–1.8	–0.7	–2.5
Imports	1.3	4.1	7.9	5.8	6.5	12.9	–6.5	5.6	8.9	1.4	0.7	–0.4
Terms of Trade	1.2	2.0	4.8	7.0	2.4	3.0	–8.9	11.2	9.1	–3.2	–1.4	–2.0

Table B13. Emerging Market and Developing Economies by Region: Total Trade in Goods *(concluded)*

(Annual percent change)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Middle East, North Africa, Afghanistan, and Pakistan												
Value in U.S. Dollars												
Exports	11.6	12.5	38.2	21.0	17.2	32.4	–29.9	24.4	32.6	8.0	–2.5	2.4
Imports	8.7	12.1	19.9	15.8	30.2	30.7	–10.6	6.9	10.4	12.5	5.8	5.7
Volume												
Exports	4.0	3.4	6.7	3.3	4.5	4.5	–4.3	3.0	4.6	7.4	–0.3	4.9
Imports	6.2	7.9	13.7	7.3	19.9	16.3	–2.2	0.6	1.8	11.2	6.2	6.2
Unit Value in U.S. Dollars												
Exports	7.2	8.7	29.9	17.1	12.0	25.5	–26.4	20.4	27.9	–0.2	–2.4	–2.6
Imports	1.7	4.1	7.1	9.1	8.4	11.3	–9.6	7.1	11.5	–0.1	–1.1	–0.4
Terms of Trade	5.4	4.4	21.2	7.3	3.3	12.8	–18.6	12.4	14.7	–0.2	–1.3	–2.2
Sub-Saharan Africa												
Value in U.S. Dollars												
Exports	9.1	10.9	27.2	19.0	20.1	23.8	–26.8	29.4	28.4	–2.6	1.4	4.5
Imports	8.6	11.8	18.8	16.0	22.2	23.6	–14.9	19.6	25.3	2.8	5.7	5.8
Volume												
Exports	. . .	3.6	6.2	3.2	7.8	2.4	–5.2	6.0	4.2	3.5	2.7	5.8
Imports	6.8	7.5	8.9	8.1	15.3	11.3	–4.1	7.9	10.7	4.5	6.5	6.7
Unit Value in U.S. Dollars												
Exports	. . .	7.4	20.1	15.9	11.2	21.3	–21.6	22.8	21.7	–3.1	–1.8	–2.4
Imports	2.1	4.3	9.6	8.1	6.2	11.2	–10.5	11.1	12.2	–1.4	–0.6	–0.8
Terms of Trade	. . .	3.0	9.6	7.2	4.7	9.1	–12.4	10.5	8.5	–1.7	–1.2	–1.6

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table B14. Emerging Market and Developing Economies by Source of Export Earnings: Total Trade in Goods

(Annual percent change)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Fuel												
Value in U.S. Dollars												
Exports	11.8	12.5	39.0	22.8	17.3	34.3	–33.5	27.5	34.8	6.8	–2.2	1.4
Imports	9.0	13.3	22.1	20.4	34.3	29.0	–18.5	13.7	19.8	10.6	5.6	6.1
Volume												
Exports	4.7	2.8	6.7	4.1	4.2	2.8	–7.1	3.5	4.8	6.0	0.0	4.1
Imports	7.3	8.9	15.6	12.8	24.0	13.9	–12.9	6.8	10.0	10.4	5.4	6.7
Unit Value in U.S. Dollars												
Exports	6.9	9.4	30.6	18.0	12.4	30.2	–28.0	23.1	28.3	0.2	–2.3	–2.7
Imports	1.2	4.3	7.2	8.0	8.2	12.4	–7.1	7.6	10.0	–0.8	–0.3	–0.4
Terms of Trade	5.6	4.8	21.9	9.3	3.9	15.8	–22.5	14.4	16.6	1.0	–2.0	–2.3
Nonfuel												
Value in U.S. Dollars												
Exports	12.1	11.5	20.0	21.3	20.3	17.2	–17.6	27.7	20.5	3.3	4.6	6.2
Imports	10.9	11.8	17.9	18.6	21.7	21.4	–19.5	29.4	23.6	3.2	5.1	5.9
Volume												
Exports	10.2	6.9	12.6	13.0	10.5	3.5	–8.6	17.8	7.4	4.1	4.7	6.4
Imports	8.4	7.1	10.3	11.3	12.3	6.2	–9.0	17.2	9.8	4.0	5.3	5.8
Unit Value in U.S. Dollars												
Exports	1.8	4.5	6.8	7.8	9.0	13.3	–9.7	8.9	12.6	–0.8	–0.2	–0.2
Imports	2.2	4.5	7.0	6.8	8.3	14.3	–11.1	10.5	13.0	–0.7	–0.2	0.1
Terms of Trade	–0.4	0.0	–0.1	0.9	0.7	–0.9	1.6	–1.5	–0.3	–0.1	0.0	–0.3
Primary Products												
Value in U.S. Dollars												
Exports	7.8	11.7	23.4	34.3	19.6	10.4	–15.2	31.6	18.8	–3.5	1.2	6.7
Imports	5.7	14.6	28.1	18.7	23.9	34.1	–20.7	30.5	25.5	7.3	5.0	6.2
Volume												
Exports	5.9	3.8	5.8	5.0	6.9	1.5	–3.0	5.0	3.7	0.9	4.5	8.4
Imports	4.7	10.2	15.9	11.5	16.4	17.4	–11.0	21.8	13.5	7.1	5.5	7.1
Unit Value in U.S. Dollars												
Exports	2.4	8.0	17.1	28.7	11.7	9.1	–11.9	26.1	15.4	–3.9	–3.0	–1.5
Imports	1.2	4.2	11.2	6.9	6.5	14.4	–11.0	7.3	10.6	0.4	–0.5	–0.9
Terms of Trade	1.2	3.6	5.3	20.4	4.8	–4.7	–1.1	17.5	4.3	–4.2	–2.5	–0.6

Table B15. Advanced Economies: Current Account Transactions

(Billions of U.S. dollars)

									Projections	
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Exports	6,951.4	7,838.5	8,914.9	9,879.0	7,745.7	9,162.2	10,648.4	10,478.7	10,692.7	11,230.6
Imports	–7,478.7	–8,495.2	–9,534.4	–10,673.3	–8,109.1	–9,640.0	–11,342.2	–11,166.8	–11,274.8	–11,784.6
Trade Balance	–527.3	–656.7	–619.4	–794.2	–363.4	–477.8	–693.9	–688.1	–582.1	–554.1
Services, Credits	2,043.9	2,285.7	2,712.6	3,021.2	2,723.7	2,935.7	3,272.8	3,289.2	3,438.5	3,614.5
Services, Debits	–1,817.7	–1,985.3	–2,297.3	–2,553.4	–2,312.7	–2,452.0	–2,683.1	–2,681.4	–2,758.2	–2,883.7
Balance on Services	226.2	300.4	415.3	467.9	411.0	483.7	589.8	607.8	680.3	730.8
Balance on Goods and Services	–301.2	–356.2	–204.1	–326.4	47.5	6.0	–104.1	–80.3	98.2	176.7
Income, Net	181.2	191.1	203.4	190.8	230.2	342.7	430.2	417.9	344.3	304.0
Current Transfers, Net	–252.9	–255.9	–315.8	–344.9	–335.9	–361.6	–380.8	–374.5	–380.6	–391.3
Current Account Balance	**–372.9**	**–421.0**	**–316.5**	**–480.4**	**–58.2**	**–12.9**	**–54.7**	**–36.9**	**61.8**	**89.3**
Balance on Goods and Services										
Advanced Economies	**–301.2**	**–356.2**	**–204.1**	**–326.4**	**47.5**	**6.0**	**–104.1**	**–80.3**	**98.2**	**176.7**
United States	–707.9	–752.4	–699.1	–702.3	–383.7	–499.4	–556.8	–534.7	–502.1	–531.5
Euro Area[1]	156.8	131.5	198.3	132.1	184.1	190.0	208.3	341.3	435.9	496.0
Germany	145.4	161.7	233.9	227.2	160.8	186.3	189.1	203.1	204.8	207.6
France	–12.6	–22.8	–36.6	–63.2	–34.3	–42.6	–62.8	–48.8	–49.4	–51.4
Italy	0.0	–14.4	–5.4	–15.8	–10.6	–40.0	–32.1	22.0	45.6	53.9
Spain	–57.8	–76.6	–93.3	–88.0	–23.1	–26.7	–10.7	14.5	43.5	65.7
Japan	69.8	62.9	83.9	17.6	23.0	74.9	–42.8	–104.5	–89.6	–51.5
United Kingdom	–64.8	–64.9	–73.5	–60.4	–36.6	–50.8	–37.3	–53.7	–36.0	–30.5
Canada	45.4	35.2	31.0	26.7	–20.1	–30.7	–22.1	–36.3	–32.5	–29.8
Other Advanced Economies[2]	199.6	231.4	255.4	259.9	280.8	321.9	346.6	307.5	322.5	324.0
Memorandum										
Major Advanced Economies	–524.8	–594.5	–465.8	–570.1	–301.5	–402.2	–564.8	–552.9	–459.2	–433.2
Income, Net										
Advanced Economies	**181.2**	**191.1**	**203.4**	**190.8**	**230.2**	**342.7**	**430.2**	**417.9**	**344.3**	**304.0**
United States	67.6	43.3	100.6	146.1	123.6	177.7	232.7	223.9	183.7	175.7
Euro Area[1]	–10.1	27.8	–20.4	–79.0	–8.1	32.3	38.7	33.2	6.3	–16.0
Germany	30.4	55.8	58.8	47.7	82.2	71.5	82.1	82.8	59.2	57.8
France	29.6	37.3	42.8	49.1	45.7	51.1	62.8	38.2	45.5	47.5
Italy	–2.2	3.1	–1.6	–28.5	–14.5	–11.0	–13.0	–17.0	–18.7	–21.3
Spain	–21.3	–26.1	–41.2	–52.2	–36.1	–26.4	–35.8	–24.1	–18.6	–23.2
Japan	103.9	118.7	139.8	155.3	135.9	141.5	176.0	179.1	163.3	155.0
United Kingdom	43.3	15.9	38.0	60.2	28.8	20.7	36.1	–3.6	3.2	7.9
Canada	–22.3	–15.6	–17.5	–24.3	–17.6	–22.8	–23.4	–22.5	–21.4	–25.1
Other Advanced Economies[2]	–1.3	1.0	–37.1	–67.6	–32.3	–6.7	–29.8	7.7	9.2	6.4
Memorandum										
Major Advanced Economies	250.3	258.6	360.8	405.7	384.0	428.6	553.2	481.0	414.8	397.6

[1]Calculated as the sum of the individual Euro Area countries.
[2]In this table, Other Advanced Economies means advanced economies excluding the G7 (Canada, France, Germany, Italy, Japan, United Kingdom, United States) and Euro Area countries.

Table B16. Emerging Market and Developing Economies: Balances on Current Account

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	20102011		2012	Projections 2013	2014
Emerging Market and Developing Economies	**407.0**	**627.2**	**596.9**	**669.2**	**253.8**	**323.3**	**410.5**	**380.6**	**235.8**	**240.7**
Regional Groups										
Central and Eastern Europe	–60.5	–88.5	–136.1	–159.0	–48.1	–82.6	–119.3	–79.4	–84.8	–90.1
Commonwealth of Independent States[1]	87.5	94.0	65.6	108.7	42.9	69.0	109.4	76.7	59.0	47.6
Russia	84.4	92.3	71.3	103.9	50.4	67.5	97.3	74.8	61.2	51.8
Excluding Russia	3.1	1.7	–5.8	4.7	–7.5	1.6	12.2	1.9	–2.2	–4.2
Developing Asia	142.7	271.0	394.9	429.4	276.8	238.8	97.6	108.7	138.5	182.9
China	132.4	231.8	353.2	420.6	243.3	237.8	136.1	193.1	223.7	258.9
India	–9.9	–9.6	–15.7	–27.9	–38.2	–45.9	–78.2	–88.2	–77.6	–66.1
Excluding China and India	20.3	48.8	57.5	36.7	71.7	47.0	39.6	3.7	–7.7	–9.9
Latin America and the Caribbean	32.8	46.6	6.7	–39.0	–30.3	–62.8	–77.9	–104.5	–140.6	–142.0
Brazil	14.0	13.6	1.6	–28.2	–24.3	–47.3	–52.5	–54.2	–74.0	–68.6
Mexico	–8.6	–7.4	–14.3	–19.6	–7.7	–3.2	–11.8	–14.2	–17.7	–20.6
Middle East, North Africa, Afghanistan, and Pakistan	206.2	276.4	256.5	333.2	40.0	176.2	418.1	417.2	315.9	299.6
Middle East and North Africa	207.5	281.5	262.9	346.6	49.1	179.7	417.4	421.1	317.6	300.6
Sub-Saharan Africa	–1.7	27.7	9.3	–4.0	–27.6	–15.4	–17.3	–38.3	–52.0	–57.3
Excluding Nigeria and South Africa	–3.0	4.7	1.4	–13.7	–30.1	–18.6	–12.5	–34.6	–39.9	–46.2
Analytical Groups										
By Source of Export Earnings										
Fuel	348.7	472.8	416.4	582.6	138.8	316.9	629.5	615.1	474.4	433.2
Nonfuel	58.3	154.4	180.5	86.7	115.0	6.4	–222.4	–231.7	–236.8	–193.7
Of Which, Primary Products	–3.8	6.7	5.5	–18.5	–7.5	–9.3	–20.6	–48.1	–55.4	–56.1
By External Financing Source										
Net Debtor Economies	–100.5	–114.4	–223.2	–374.4	–178.5	–273.9	–391.6	–447.4	–473.6	–469.2
Of Which, Official Financing	–17.0	–18.3	–21.3	–36.2	–20.0	–13.8	–12.5	–23.3	–19.9	–20.7
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	–6.1	–4.3	–13.7	–27.0	–20.8	–33.7	–41.2	–52.2	–56.1	–58.0
Other Groups										
Heavily Indebted Poor Countries	–13.9	–12.0	–16.1	–24.7	–22.2	–19.8	–23.3	–42.1	–48.0	–51.3

Table B16. Emerging Market and Developing Economies: Balances on Current Account *(concluded)*

(Percent of exports of goods and services)

	Averages										Projections	
	1995–2004	2005–14	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Emerging Market and Developing Economies	**0.0**	**6.7**	**10.4**	**13.2**	**10.5**	**9.7**	**4.7**	**4.7**	**4.9**	**4.3**	**2.6**	**2.5**
Regional Groups												
Central and Eastern Europe	–11.3	–14.8	–15.1	–18.7	–23.1	–22.2	–8.5	–12.8	–15.6	–10.4	–10.6	–10.7
Commonwealth of Independent States[1]	11.9	11.8	22.6	19.5	11.2	13.7	8.2	10.3	12.4	8.4	6.5	5.1
Russia	19.5	17.6	31.4	27.7	18.3	19.9	14.7	15.3	17.0	12.6	10.4	8.8
Excluding Russia	–4.8	0.2	2.6	1.1	–3.0	1.8	–4.1	0.7	3.9	0.6	–0.7	–1.3
Developing Asia	4.1	9.1	9.4	14.5	17.3	16.1	12.1	8.0	2.7	2.9	3.5	4.2
China	8.8	15.7	15.8	21.8	26.3	26.6	18.2	13.6	6.5	8.6	9.2	9.8
India	–3.3	–11.9	–6.1	–4.7	–6.1	–9.5	–13.7	–12.0	–17.3	–19.5	–16.5	–13.1
Excluding China and India	2.1	4.4	3.9	8.1	8.4	4.7	10.7	5.5	3.9	0.4	–0.7	–0.8
Latin America and the Caribbean	–11.1	–3.9	5.0	6.0	0.8	–3.8	–3.8	–6.2	–6.3	–8.3	–11.0	–10.9
Brazil	–29.9	–11.3	10.4	8.7	0.8	–12.3	–13.4	–20.2	–17.8	–19.2	–25.9	–24.1
Mexico	–6.9	–3.8	–3.7	–2.8	–4.9	–6.3	–3.2	–1.0	–3.2	–3.7	–4.4	–4.9
Middle East, North Africa, Afghanistan, and Pakistan	8.6	21.9	28.4	31.5	25.0	24.9	4.1	14.8	27.2	25.3	19.5	18.0
Middle East and North Africa	9.3	22.8	29.4	32.9	26.2	26.4	5.2	15.5	27.8	26.1	20.1	18.5
Sub-Saharan Africa	–7.9	–3.6	–0.7	10.3	2.9	–1.0	–9.4	–4.1	–3.7	–8.2	–11.0	–11.5
Excluding Nigeria and South Africa	–13.0	–8.3	–2.8	3.6	0.9	–6.8	–19.2	–9.6	–4.8	–13.4	–15.1	–16.3
Analytical Groups												
By Source of Export Earnings												
Fuel	12.9	23.3	31.6	34.8	26.2	27.5	9.7	17.4	26.1	23.9	18.8	16.8
Nonfuel	–4.2	0.2	2.1	4.6	4.4	1.8	2.9	0.1	–3.7	–3.7	–3.6	–2.8
Of Which, Primary Products	–12.1	–7.6	–3.1	4.2	2.9	–8.7	–4.1	–3.9	–7.3	–17.6	–20.0	–18.8
By External Financing Source												
Net Debtor Economies	–8.8	–9.4	–5.5	–5.3	–8.7	–12.3	–7.1	–8.8	–10.5	–11.9	–12.2	–11.5
Of Which, Official Financing	–11.3	–8.3	–10.5	–9.7	–9.3	–13.4	–9.0	–5.2	–4.3	–8.4	–6.9	–6.7
Net Debtor Economies by Debt-Servicing Experience												
Economies with Arrears and/or Rescheduling during 2007–11	–12.7	–10.0	–3.8	–2.3	–6.0	–9.7	–9.1	–11.9	–11.7	–14.9	–15.6	–15.4
Other Groups												
Heavily Indebted Poor Countries	–24.3	–20.6	–20.2	–14.3	–16.1	–20.6	–21.4	–15.0	–14.5	–26.0	–29.0	–28.8
Memorandum												
Median												
Emerging Market and Developing Economies	–11.3	–14.3	–7.7	–9.7	–15.4	–19.7	–14.4	–12.4	–13.9	–16.8	–17.5	–15.3

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table B17. Emerging Market and Developing Economies by Region: Current Account Transactions

(Billions of U.S. dollars)

									Projections	
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Emerging Market and Developing Economies										
Exports of Goods	3,389.3	4,126.9	4,929.1	6,028.9	4,649.2	5,933.1	7,403.0	7,714.5	7,903.9	8,282.9
Imports of Goods	–2,838.9	–3,377.1	–4,187.4	–5,146.0	–4,152.7	–5,244.5	–6,448.4	–6,736.6	–7,086.4	–7,506.9
Trade Balance	550.4	749.8	741.6	882.9	496.5	688.5	954.7	977.9	817.5	776.0
Services, Net	–85.5	–105.6	–135.2	–190.8	–208.6	–230.5	–293.1	–361.9	–359.7	–333.7
Balance on Goods and Services	464.9	644.2	606.5	692.1	287.9	458.0	661.6	616.0	457.8	442.2
Income, Net	–241.4	–242.6	–264.2	–301.2	–284.2	–401.0	–525.0	–487.9	–492.7	–500.3
Current Transfers, Net	183.5	225.6	254.6	278.3	250.0	266.2	273.8	252.5	270.8	298.8
Current Account Balance	**407.0**	**627.2**	**596.9**	**669.2**	**253.8**	**323.3**	**410.5**	**380.6**	**235.8**	**240.7**
Memorandum										
Exports of Goods and Services	3,913.5	4,743.4	5,684.7	6,912.8	5,446.6	6,876.3	8,439.9	8,795.7	9,059.2	9,550.4
Interest Payments	162.5	198.6	243.2	254.6	227.5	240.3	285.7	282.6	296.9	312.1
Oil Trade Balance	559.8	666.0	754.8	988.0	595.6	765.1	1,001.5	1,014.3	915.1	897.1
Regional Groups										
Central and Eastern Europe										
Exports of Goods	313.2	376.5	469.0	567.3	439.8	510.7	613.5	613.7	640.5	670.8
Imports of Goods	–398.2	–486.2	–619.8	–752.9	–518.9	–618.8	–762.3	–727.7	–758.6	–791.4
Trade Balance	–85.0	–109.7	–150.9	–185.5	–79.1	–108.1	–148.8	–114.0	–118.2	–120.6
Services, Net	27.8	27.5	34.3	42.7	39.8	39.1	48.5	51.4	56.4	60.7
Balance on Goods and Services	–57.2	–82.2	–116.6	–142.8	–39.3	–69.0	–100.3	–62.6	–61.8	–60.0
Income, Net	–22.6	–29.4	–45.4	–44.0	–35.4	–40.1	–48.9	–43.9	–49.4	–55.0
Current Transfers, Net	19.4	23.1	25.8	27.8	26.6	26.5	29.9	27.1	26.4	24.9
Current Account Balance	**–60.5**	**–88.5**	**–136.1**	**–159.0**	**–48.1**	**–82.6**	**–119.3**	**–79.4**	**–84.8**	**–90.1**
Memorandum										
Exports of Goods and Services	400.2	472.7	590.0	715.9	569.1	643.7	764.6	765.2	801.1	839.1
Interest Payments	25.0	32.6	47.7	51.9	46.7	46.8	54.3	52.4	54.2	59.2
Oil Trade Balance	–41.5	–55.4	–63.5	–89.3	–56.1	–70.4	–99.1	–103.2	–102.7	–105.5
Commonwealth of Independent States[1]										
Exports of Goods	341.4	425.8	513.5	699.5	449.3	586.3	788.1	811.7	801.3	811.9
Imports of Goods	–214.0	–276.8	–376.9	–493.4	–324.5	–413.4	–543.8	–579.3	–586.9	–621.9
Trade Balance	127.4	149.0	136.6	206.1	124.8	172.9	244.4	232.4	214.4	190.0
Services, Net	–17.2	–16.7	–25.3	–29.9	–26.0	–33.5	–39.9	–54.6	–57.0	–60.6
Balance on Goods and Services	110.2	132.3	111.3	176.2	98.8	139.4	204.5	177.8	157.4	129.4
Income, Net	–26.8	–42.2	–48.1	–72.0	–59.1	–73.8	–99.2	–103.0	–101.3	–88.0
Current Transfers, Net	4.1	3.9	2.4	4.4	3.2	3.5	4.2	1.9	2.9	6.2
Current Account Balance	**87.5**	**94.0**	**65.6**	**108.7**	**42.9**	**69.0**	**109.4**	**76.7**	**59.0**	**47.6**
Memorandum										
Exports of Goods and Services	387.8	482.8	584.6	790.7	524.0	669.7	886.0	919.0	909.4	924.1
Interest Payments	15.3	20.8	27.6	31.6	28.2	28.7	33.2	28.7	27.7	21.1
Oil Trade Balance	141.2	182.0	220.8	311.6	194.7	265.2	370.3	381.6	380.7	373.5
Developing Asia										
Exports of Goods	1,316.6	1,620.5	1,975.3	2,305.1	1,959.5	2,566.7	3,083.3	3,253.7	3,437.7	3,694.3
Imports of Goods	–1,190.2	–1,395.3	–1,681.7	–2,008.0	–1,751.7	–2,371.3	–2,968.9	–3,103.6	–3,290.3	–3,529.6
Trade Balance	126.4	225.2	293.5	297.2	207.7	195.3	114.4	150.1	147.4	164.8
Services, Net	–8.5	–2.0	10.8	14.1	–10.7	–6.5	–25.4	–46.9	–33.0	–0.7
Balance on Goods and Services	117.8	223.2	304.3	311.3	197.0	188.8	89.0	103.1	114.4	164.1
Income, Net	–52.8	–44.0	–28.9	–15.9	–50.2	–93.9	–138.8	–126.8	–126.9	–151.8
Current Transfers, Net	77.7	91.8	119.5	134.0	129.9	143.9	147.3	132.4	150.9	170.7
Current Account Balance	**142.7**	**271.0**	**394.9**	**429.4**	**276.8**	**238.8**	**97.6**	**108.7**	**138.5**	**182.9**
Memorandum										
Exports of Goods and Services	1,517.2	1,863.6	2,285.3	2,665.4	2,283.7	2,980.0	3,551.4	3,747.5	3,981.8	4,318.7
Interest Payments	33.4	51.3	59.6	59.7	55.3	66.6	85.5	81.2	99.6	112.8
Oil Trade Balance	–107.3	–140.7	–172.8	–257.7	–183.5	–255.3	–388.0	–430.5	–446.1	–452.6

Table B17. Emerging Market and Developing Economies by Region: Current Account Transactions *(concluded)*

(Billions of U.S. dollars)

									Projections	
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Latin America and the Caribbean										
Exports of Goods	577.2	690.3	776.1	898.6	698.2	884.8	1,095.6	1,112.2	1,132.9	1,160.3
Imports of Goods	–496.7	–592.1	–707.1	–859.1	–647.4	–836.5	–1,023.1	–1,066.1	–1,118.2	–1,155.9
Trade Balance	80.5	98.2	69.0	39.5	50.8	48.3	72.5	46.1	14.7	4.4
Services, Net	–17.2	–19.5	–26.3	–35.5	–50.0	–52.3	–66.2	–87.1	–87.4	–84.5
Balance on Goods and Services	63.3	78.6	42.6	4.0	0.8	–4.0	6.3	–40.9	–72.7	–80.1
Income, Net	–84.0	–96.2	–103.1	–110.5	–88.9	–119.6	–147.4	–125.5	–131.4	–128.2
Current Transfers, Net	53.5	64.2	67.2	67.4	57.9	60.8	63.1	61.9	63.5	66.3
Current Account Balance	**32.8**	**46.6**	**6.7**	**–39.0**	**–30.3**	**–62.8**	**–77.9**	**–104.5**	**–140.6**	**–142.0**
Memorandum										
Exports of Goods and Services	655.3	777.2	877.0	1,014.1	802.9	1,019.0	1,228.9	1,251.4	1,273.3	1,307.3
Interest Payments	48.2	49.9	54.2	54.0	46.1	46.9	54.6	58.1	54.9	54.3
Oil Trade Balance	53.6	62.7	54.8	68.1	45.4	47.0	62.4	63.4	45.6	41.3
Middle East, North Africa, Afghanistan, and Pakistan										
Exports of Goods	643.8	779.2	913.4	1,209.4	847.4	1,054.4	1,398.4	1,510.2	1,472.6	1,507.6
Imports of Goods	–385.1	–445.9	–580.6	–758.7	–678.1	–725.0	–800.4	–900.4	–952.8	–1,006.8
Trade Balance	258.6	333.4	332.9	450.7	169.3	329.4	598.0	609.8	519.8	500.8
Services, Net	–46.8	–65.1	–84.9	–117.4	–108.2	–118.1	–139.4	–152.4	–159.5	–167.6
Balance on Goods and Services	211.9	268.3	248.0	333.3	61.1	211.2	458.5	457.4	360.3	333.1
Income, Net	–19.2	–1.6	6.9	–1.2	–11.1	–21.4	–23.0	–21.9	–21.3	–13.3
Current Transfers, Net	13.5	9.7	1.6	1.2	–10.0	–13.7	–17.5	–18.3	–23.1	–20.2
Current Account Balance	**206.2**	**276.4**	**256.5**	**333.2**	**40.0**	**176.2**	**418.1**	**417.2**	**315.9**	**299.6**
Memorandum										
Exports of Goods and Services	725.5	877.7	1,027.8	1,337.8	973.7	1,189.8	1,534.2	1,647.3	1,618.7	1,663.0
Interest Payments	27.5	31.2	40.4	43.8	40.1	39.3	42.1	43.6	41.6	45.1
Oil Trade Balance	446.6	537.2	615.1	824.9	514.8	672.7	923.7	967.5	901.1	901.7
Sub-Saharan Africa										
Exports of Goods	197.2	234.6	281.7	348.9	255.0	330.2	424.1	413.0	418.9	437.9
Imports of Goods	–154.7	–180.9	–221.2	–274.0	–232.1	–279.5	–349.9	–359.5	–379.6	–401.3
Trade Balance	42.5	53.7	60.5	74.9	23.0	50.8	74.2	53.5	39.3	36.7
Services, Net	–23.6	–29.7	–43.6	–64.8	–53.5	–59.2	–70.6	–72.3	–79.2	–81.0
Balance on Goods and Services	18.9	24.0	16.9	10.1	–30.5	–8.4	3.6	–18.8	–39.9	–44.3
Income, Net	–36.0	–29.2	–45.6	–57.6	–39.5	–52.3	–67.7	–66.9	–62.2	–63.9
Current Transfers, Net	15.4	32.9	38.1	43.5	42.4	45.3	46.8	47.4	50.1	50.9
Current Account Balance	**–1.7**	**27.7**	**9.3**	**–4.0**	**–27.6**	**–15.4**	**–17.3**	**–38.3**	**–52.0**	**–57.3**
Memorandum										
Exports of Goods and Services	227.4	269.5	320.0	388.9	293.2	374.2	474.7	465.2	474.8	498.1
Interest Payments	13.1	12.8	13.6	13.5	11.2	12.0	15.8	18.6	19.0	19.6
Oil Trade Balance	67.1	80.2	100.4	130.4	80.3	105.9	132.2	135.4	136.5	138.7

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table B18. Emerging Market and Developing Economies by Analytical Criteria: Current Account Transactions

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
By Source of Export Earnings										
Fuel										
Exports	1,027.9	1,262.4	1,480.4	1,988.0	1,321.8	1,684.8	2,271.1	2,426.7	2,372.7	2,406.2
Imports	–494.9	–597.7	–802.9	–1,035.6	–843.6	–958.9	–1,148.8	–1,270.6	–1,341.5	–1,423.0
Trade Balance	533.0	664.7	677.6	952.4	478.1	725.9	1,122.3	1,156.1	1,031.2	983.2
Services, Net	–101.8	–125.8	–174.9	–236.2	–227.5	–242.1	–279.3	–322.4	–338.4	–353.1
Balance on Goods and Services	431.2	538.9	502.7	716.2	250.6	483.8	843.0	833.7	692.8	630.1
Income, Net	–66.4	–55.2	–60.2	–102.1	–71.7	–116.6	–154.8	–149.8	–142.9	–117.3
Current Transfers, Net	–16.0	–10.8	–26.1	–31.5	–40.1	–50.3	–58.7	–68.7	–75.5	–79.6
Current Account Balance	**348.7**	**472.8**	**416.4**	**582.6**	**138.8**	**316.9**	**629.5**	**615.1**	**474.4**	**433.2**
Memorandum										
Exports of Goods and Services	1,104.9	1,358.8	1,592.4	2,115.0	1,437.0	1,826.5	2,411.9	2,576.7	2,529.3	2,571.7
Interest Payments	43.6	51.5	66.6	71.4	63.7	64.6	72.5	69.3	65.3	61.4
Oil Trade Balance	737.7	899.6	1,044.0	1,428.7	892.3	1,163.8	1,591.6	1,671.9	1,592.4	1,584.1
Nonfuel										
Exports	2,361.4	2,864.5	3,448.6	4,040.9	3,327.5	4,248.3	5,119.6	5,286.9	5,527.7	5,867.9
Imports	–2,344.0	–2,779.4	–3,384.6	–4,110.4	–3,309.1	–4,285.6	–5,295.7	–5,462.3	–5,741.2	–6,079.9
Trade Balance	17.4	85.1	64.1	–69.5	18.4	–37.3	–176.1	–175.4	–213.4	–212.0
Services, Net	16.4	20.3	39.7	45.4	18.9	11.5	–12.6	–38.9	–20.0	20.6
Balance on Goods and Services	33.7	105.4	103.8	–24.1	37.3	–25.8	–188.7	–214.3	–233.5	–191.4
Income, Net	–175.0	–187.4	–204.0	–199.1	–212.5	–284.4	–366.2	–338.6	–349.6	–380.7
Current Transfers, Net	199.6	236.4	280.7	309.9	290.2	316.6	332.5	321.2	346.3	378.4
Current Account Balance	**58.3**	**154.4**	**180.5**	**86.7**	**115.0**	**6.4**	**–222.4**	**–231.7**	**–236.8**	**–193.7**
Memorandum										
Exports of Goods and Services	2,808.6	3,384.6	4,092.3	4,797.8	4,009.5	5,049.9	6,015.5	6,217.9	6,526.4	6,969.8
Interest Payments	118.8	147.1	176.7	183.2	163.8	175.8	213.2	213.3	231.5	250.7
Oil Trade Balance	–177.8	–233.7	–289.2	–440.7	–296.7	–398.6	–590.2	–657.7	–677.3	–687.0
Nonfuel Primary Products										
Exports	106.0	142.4	170.3	188.1	159.4	210.0	249.4	240.7	243.6	259.9
Imports	–87.5	–103.9	–128.8	–172.7	–136.5	–179.0	–224.3	–240.4	–252.7	–268.2
Trade Balance	18.4	38.5	41.5	15.5	22.9	30.9	25.1	0.3	–9.1	–8.4
Services, Net	–8.5	–10.3	–13.0	–15.5	–14.8	–19.3	–22.2	–27.2	–29.4	–28.1
Balance on Goods and Services	10.0	28.3	28.6	0.0	8.1	11.7	2.9	–26.9	–38.5	–36.4
Income, Net	–23.5	–34.7	–37.1	–33.5	–30.5	–39.9	–40.1	–37.6	–35.2	–38.1
Current Transfers, Net	9.8	13.1	14.1	15.0	15.0	18.9	16.7	16.4	18.3	18.4
Current Account Balance	**–3.8**	**6.7**	**5.5**	**–18.5**	**–7.5**	**–9.3**	**–20.6**	**–48.1**	**–55.4**	**–56.1**
Memorandum										
Exports of Goods and Services	122.5	160.4	191.4	212.8	181.5	236.2	282.0	274.0	277.2	297.9
Interest Payments	9.6	10.1	10.4	10.9	9.9	9.6	10.7	12.2	11.4	11.2
Oil Trade Balance	–3.7	–2.9	–1.7	–7.2	–3.3	–2.2	–9.4	–18.3	–18.6	–16.8
By External Financing Source										
Net Debtor Economies										
Exports	1,462.2	1,747.6	2,073.0	2,461.4	1,989.2	2,501.6	3,056.6	3,072.0	3,163.1	3,315.1
Imports	–1,585.1	–1,886.6	–2,329.4	–2,880.7	–2,230.5	–2,788.6	–3,447.9	–3,536.8	–3,667.1	–3,834.5
Trade Balance	–122.9	–139.0	–256.4	–419.4	–241.3	–286.9	–391.3	–464.8	–504.0	–519.4
Services, Net	18.9	18.6	30.5	41.6	34.1	26.6	33.6	37.8	46.1	62.3
Balance on Goods and Services	–104.0	–120.4	–226.0	–377.8	–207.2	–260.4	–357.7	–426.9	–458.0	–457.1
Income, Net	–167.3	–194.6	–231.1	–254.4	–219.8	–280.4	–331.8	–326.7	–337.1	–350.0
Current Transfers, Net	170.8	200.5	233.9	257.7	248.5	266.9	297.9	306.2	321.5	337.9
Current Account Balance	**–100.5**	**–114.4**	**–223.2**	**–374.4**	**–178.5**	**–273.9**	**–391.6**	**–447.4**	**–473.6**	**–469.2**
Memorandum										
Exports of Goods and Services	1,812.7	2,150.3	2,558.6	3,035.5	2,507.9	3,100.1	3,718.3	3,760.6	3,884.8	4,086.9
Interest Payments	103.2	129.9	158.4	164.1	143.3	150.7	180.2	175.6	185.6	196.0
Oil Trade Balance	–87.0	–110.4	–144.9	–215.5	–153.3	–185.4	–278.4	–316.2	–330.3	–348.5

Table B18. Emerging Market and Developing Economies by Analytical Criteria: Current Account Transactions *(concluded)*

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Official Financing										
Exports	133.1	158.7	193.1	228.3	181.3	221.3	245.0	233.9	240.6	256.1
Imports	–156.5	–184.2	–220.6	–270.4	–221.3	–258.5	–284.4	–287.0	–294.8	–311.8
Trade Balance	–23.4	–25.5	–27.5	–42.0	–40.0	–37.2	–39.4	–53.1	–54.3	–55.7
Services, Net	–8.5	–10.7	–11.6	–15.9	–8.8	–10.1	–12.4	–14.2	–12.1	–11.9
Balance on Goods and Services	–31.9	–36.2	–39.0	–57.9	–48.8	–47.3	–51.8	–67.3	–66.4	–67.6
Income, Net	–17.6	–19.3	–24.6	–26.8	–23.0	–25.2	–24.2	–24.8	–26.2	–27.9
Current Transfers, Net	32.6	37.3	42.4	48.6	51.7	58.6	63.6	68.8	72.7	74.8
Current Account Balance	**–17.0**	**–18.3**	**–21.3**	**–36.2**	**–20.0**	**–13.8**	**–12.5**	**–23.3**	**–19.9**	**–20.7**
Memorandum										
Exports of Goods and Services	160.2	187.9	229.0	268.9	221.5	265.1	290.0	277.5	288.1	307.5
Interest Payments	10.3	11.9	13.8	17.2	15.2	14.5	15.7	17.5	12.7	12.7
Oil Trade Balance	1.5	0.0	0.2	–1.9	–4.5	–0.3	–9.0	–20.3	–19.9	–20.7
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11										
Exports	132.0	157.5	187.0	231.5	183.8	232.1	291.2	287.3	292.2	305.1
Imports	–140.0	–168.2	–208.1	–264.9	–211.9	–267.0	–331.1	–339.2	–350.5	–367.1
Trade Balance	–8.0	–10.7	–21.2	–33.4	–28.2	–34.9	–39.8	–51.9	–58.3	–62.0
Services, Net	–4.9	–5.2	–5.1	–7.7	–4.9	–7.6	–8.4	–7.6	–6.3	–4.3
Balance on Goods and Services	–12.9	–15.9	–26.3	–41.1	–33.0	–42.5	–48.2	–59.5	–64.6	–66.3
Income, Net	–20.7	–20.4	–21.8	–24.5	–25.8	–31.2	–33.3	–32.7	–34.3	–36.3
Current Transfers, Net	27.5	32.0	34.3	38.5	37.9	40.0	40.3	40.0	42.8	44.6
Current Account Balance	**–6.1**	**–4.3**	**–13.7**	**–27.0**	**–20.8**	**–33.7**	**–41.2**	**–52.2**	**–56.1**	**–58.0**
Memorandum										
Exports of Goods and Services	160.9	191.4	228.1	279.3	229.0	284.0	350.5	350.4	359.3	377.1
Interest Payments	17.1	16.7	18.1	18.0	15.8	16.0	17.9	18.3	18.7	21.3
Oil Trade Balance	6.1	9.2	6.8	5.1	3.0	3.0	–7.0	–16.8	–18.2	–16.8
Other Groups										
Heavily Indebted Poor Countries										
Exports	56.5	69.5	82.9	100.7	84.9	111.9	135.0	135.0	137.4	147.7
Imports	–71.5	–83.0	–101.6	–127.9	–113.5	–133.7	–160.0	–174.2	–184.8	–197.4
Trade Balance	–15.0	–13.4	–18.6	–27.2	–28.5	–21.8	–25.0	–39.2	–47.4	–49.7
Services, Net	–10.6	–13.4	–14.9	–18.4	–16.3	–20.6	–21.5	–24.2	–25.3	–25.1
Balance on Goods and Services	–25.6	–26.8	–33.6	–45.6	–44.9	–42.4	–46.5	–63.5	–72.7	–74.9
Income, Net	–10.8	–10.7	–13.0	–13.4	–12.5	–16.2	–16.2	–19.2	–17.8	–19.4
Current Transfers, Net	22.5	25.5	30.5	34.3	35.1	38.8	39.4	40.6	42.5	43.0
Current Account Balance	**–13.9**	**–12.0**	**–16.1**	**–24.7**	**–22.2**	**–19.8**	**–23.3**	**–42.1**	**–48.0**	**–51.3**
Memorandum										
Exports of Goods and Services	69.0	83.7	99.8	120.3	103.8	132.1	160.2	161.9	165.2	178.2
Interest Payments	8.3	7.7	8.1	7.5	7.7	8.1	9.5	11.8	9.7	10.1
Oil Trade Balance	3.2	5.8	6.3	5.7	3.6	6.3	4.0	–7.2	–8.0	–5.5

Table B19. Summary of Balance of Payments, Financial Flows, and External Financing

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Emerging Market and Developing Economies										
Balance of Payments[1]										
Balance on Current Account	407.0	627.2	596.9	669.2	253.8	323.3	410.5	380.6	235.8	240.7
Balance on Goods and Services	464.9	644.2	606.5	692.1	287.9	458.0	661.6	616.0	457.8	442.2
Income, Net	–241.4	–242.6	–264.2	–301.2	–284.2	–401.0	–525.0	–487.9	–492.7	–500.3
Current Transfers, Net	183.5	225.6	254.6	278.3	250.0	266.2	273.8	252.5	270.8	298.8
Balance on Capital and Financial Account	–315.5	–528.7	–540.0	–512.0	–21.6	–95.3	–190.5	–145.0	–148.2	–158.4
Balance on Capital Account[2]	12.2	62.6	17.3	26.8	23.3	58.7	39.4	32.9	70.6	42.2
Balance on Financial Account	–327.5	–590.4	–556.5	–538.3	–42.8	–152.1	–228.2	–171.1	–211.7	–199.8
Direct Investment, Net	275.1	302.9	444.6	471.8	329.8	409.1	526.7	465.5	423.0	435.5
Portfolio Investment, Net	22.8	–94.6	41.5	–161.1	91.6	236.1	87.9	240.6	101.9	61.0
Other Investment, Net	–68.9	–76.5	152.9	–187.6	32.2	27.3	–127.7	–468.9	–192.2	–169.3
Change in Reserves (– = increase)	–556.6	–722.3	–1,195.5	–661.4	–496.5	–824.6	–715.1	–408.4	–544.5	–527.0
Errors and Omissions, Net	–91.7	–99.3	–57.1	–157.3	–232.9	–229.8	–218.7	–241.7	–92.0	–82.9
Financial Flows										
Balance on Financial Account	–327.5	–590.4	–556.5	–538.3	–42.8	–152.1	–228.2	–171.1	–211.7	–199.8
Change in Reserves (– = increase)	–556.6	–722.3	–1,195.5	–661.4	–496.5	–824.6	–715.1	–408.4	–544.5	–527.0
Official Flows, Net	–87.1	–178.9	–59.2	–78.0	171.8	100.5	–12.4	0.2	–65.6	–39.4
Private Flows, Net[3]	316.2	310.7	698.1	201.1	281.9	572.0	499.3	237.1	398.4	366.6
Direct Investment, Net	275.1	302.9	444.6	471.8	329.8	409.1	526.7	465.5	423.0	435.5
Private Portfolio Investment, Net	38.1	–41.5	98.3	–78.4	57.3	184.5	79.0	229.9	154.3	130.4
Other Private Financial Flows, Net	2.9	49.3	155.2	–192.3	–105.3	–21.6	–106.4	–458.3	–179.0	–199.3
External Financing[4]										
Net External Financing[5]	623.3	897.2	1,551.6	820.1	779.3	1,441.5	1,369.3	1,224.6	1,135.7	1,173.9
Non-Debt-Creating Flows	417.6	604.1	737.7	624.7	602.2	817.4	800.2	815.0	750.2	786.0
Capital Transfers[6]	12.2	62.6	17.3	26.8	23.3	58.7	39.4	32.9	70.6	42.2
Foreign Direct Investment and Equity Securities Liabilities[7]	394.3	530.1	708.5	578.7	560.8	742.2	737.2	756.6	655.8	717.0
Net External Borrowing[8]	209.2	299.7	821.8	203.2	185.9	633.0	579.8	421.7	397.9	401.1
Borrowing from Official Creditors[9,10]	–74.7	–104.1	11.5	56.2	103.4	66.1	46.9	24.7	3.1	35.0
Borrowing from Banks[9]	58.3	114.4	219.9	121.5	–26.8	105.0	97.4	74.3	150.0	166.6
Borrowing from Other Private Creditors[9]	225.5	289.4	590.4	25.5	109.4	461.9	435.5	322.7	244.8	199.5
Memorandum										
Balance on Goods and Services in Percent of GDP[11]	4.2	5.0	3.8	3.6	1.6	2.1	2.6	2.3	1.6	1.5
Scheduled Amortization of External Debt	939.3	1,097.7	1,204.4	1,507.8	1,484.8	1,532.4	1,801.1	2,014.3	2,126.5	2,299.3
Gross External Financing[12]	1,554.1	1,978.0	2,742.0	2,319.9	2,252.6	2,955.4	3,149.2	3,226.2	3,249.5	3,460.6
Gross External Borrowing[13]	1,123.7	1,395.0	1,998.7	1,682.2	1,642.4	2,129.1	2,337.3	2,398.7	2,468.1	2,638.7
Exceptional External Financing, Net	–11.2	21.7	6.7	11.1	24.3	27.3	6.2	4.7	31.0	2.6
Of Which,										
Arrears on Debt Service	–17.2	–18.3	–10.6	–6.2	–6.7	–5.8	5.1	–4.0	–34.6	2.5
Debt Forgiveness	15.0	61.5	10.7	15.8	10.0	22.2	1.8	3.9	32.9	2.1
Rescheduling of Debt Service	25.2	20.3	6.0	12.8	11.6	8.0	0.3	1.8	32.3	–0.3

[1]Standard presentation in accordance with the IMF's *Balance of Payments Manual*, Fifth Edition (1993).
[2]Comprises capital transfers including debt forgiveness and acquisition/disposal of nonproduced, nonfinancial assets.
[3]Private financial flows comprise direct investment, portfolio investment, and other long- and short-term investment flows. Because of limitations on the data coverage for net official flows, the residually derived data for net private flows may include some official flows.
[4]As defined in the *World Economic Outlook* (see footnote 5). It should be noted that there is no generally accepted standard definition of external financing.
[5]Defined as the sum, with opposite sign, of the goods and services balance, net income and current transfers, direct investment abroad, change in reserve assets, net acquisition of other assets (such as recorded private portfolio assets, export credit, and the collateral for debt-reduction operations), and net errors and omissions. Thus, net external financing, according to the definition adopted in the *World Economic Outlook*, measures the total amount required to finance the current account, direct investment outflows, net reserve transactions (often at the discretion of the monetary authorities), net acquisition of nonreserve external assets, and net transactions underlying the errors and omissions (not infrequently reflecting capital flight).
[6]Including other transactions on the capital account.
[7]Debt-creating foreign direct investment liabilities are not included.
[8]Net disbursement of long- and short-term credits, including exceptional financing, by both official and private creditors.
[9]Changes in liabilities.
[10]Credit and loans from the IMF can be found at www.imf.org/external/np/fin/tad/extrep1.aspx.
[11]This is often referred to as the resource balance and, with opposite sign, the net resource transfer.
[12]Net external financing plus amortization due to external debt.
[13]Net external borrowing plus amortization due to external debt.

Table B20. Emerging Market and Developing Economies by Region: Balance of Payments and External Financing[1]

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Central and Eastern Europe										
Balance of Payments										
Balance on Current Account	–60.5	–88.5	–136.1	–159.0	–48.1	–82.6	–119.3	–79.4	–84.8	–90.1
Balance on Capital Account	3.7	4.7	7.2	10.6	12.3	13.4	16.8	19.5	23.3	25.1
Balance on Financial Account	61.4	90.4	140.3	170.3	46.7	81.3	104.2	55.1	70.7	69.1
Change in Reserves (– = increase)	–43.6	–30.7	–37.4	–7.0	–33.8	–37.1	–12.5	–23.7	–11.9	2.2
Official Flows, Net	1.4	5.2	–6.7	20.1	49.5	35.3	22.4	16.6	–0.6	1.4
Private Flows, Net	103.6	116.0	184.4	157.2	31.1	83.0	94.2	62.2	83.2	65.5
External Financing										
Net External Financing	126.4	182.1	227.4	205.2	90.2	139.7	125.2	106.0	120.6	96.2
Non-Debt-Creating Inflows	54.0	78.3	89.2	81.2	52.6	49.0	67.4	52.9	66.1	79.9
Net External Borrowing	72.4	104.3	139.1	124.8	39.0	91.5	58.3	53.7	55.1	17.0
From Official Creditors[2]	–8.5	–6.2	–5.1	15.4	37.8	17.4	6.4	–9.6	–14.5	–11.8
From Banks	22.5	30.5	37.2	35.2	–5.0	10.4	8.6	10.6	5.6	3.5
From Other Private Creditors	58.3	79.9	107.0	74.2	6.2	63.6	43.2	52.7	64.0	25.3
Memorandum										
Exceptional Financing	–4.7	–3.4	–2.8	4.1	12.0	5.0	–1.5	–3.5	–0.9	–1.3
Commonwealth of Independent States[3]										
Balance of Payments										
Balance on Current Account	87.5	94.0	65.6	108.7	42.9	69.0	109.4	76.7	59.0	47.6
Balance on Capital Account	–12.1	0.7	–10.1	0.5	–11.2	8.5	0.7	–4.2	–0.9	–1.0
Balance on Financial Account	–66.2	–101.4	–44.1	–90.3	–28.2	–76.1	–105.2	–74.0	–56.4	–45.3
Change in Reserves (– = increase)	–77.0	–127.5	–167.7	26.7	–7.2	–52.1	–23.8	–33.6	10.4	–13.6
Official Flows, Net	–18.6	–25.4	–6.5	–19.3	42.4	1.4	–17.5	0.7	1.0	0.7
Private Flows, Net	29.3	51.5	130.2	–97.6	–63.4	–25.4	–63.9	–41.1	–67.9	–32.4
External Financing										
Net External Financing	81.5	119.8	275.5	166.1	31.8	109.5	110.3	133.9	102.4	133.4
Non-Debt-Creating Inflows	9.5	40.1	76.4	77.7	34.0	51.7	57.4	54.4	62.8	72.3
Net External Borrowing	72.1	79.8	199.4	89.1	–2.0	58.0	53.1	79.7	40.0	61.5
From Official Creditors[2]	–18.6	–26.0	0.2	6.1	10.1	15.0	6.9	–0.1	1.8	–4.7
From Banks	33.8	28.9	119.0	48.8	–33.9	1.9	14.3	11.2	–5.7	13.5
From Other Private Creditors	56.9	77.0	80.1	34.3	21.8	41.1	31.9	68.7	43.9	52.7
Memorandum										
Exceptional Financing	0.7	–1.2	0.2	0.1	–0.4	0.5	0.7	0.8	0.1	0.1
Developing Asia										
Balance of Payments										
Balance on Current Account	142.7	271.0	394.9	429.4	276.8	238.8	97.6	108.7	138.5	182.9
Balance on Capital Account	6.0	6.5	5.8	5.4	7.3	8.6	10.3	9.3	8.2	7.7
Balance on Financial Account	–160.8	–271.1	–409.6	–447.8	–222.3	–149.3	–62.6	–4.4	–134.7	–182.3
Change in Reserves (– = increase)	–281.6	–368.3	–621.2	–479.6	–461.9	–571.2	–439.9	–134.2	–414.6	–400.0
Official Flows, Net	–4.1	7.1	7.2	–4.1	31.7	31.4	10.7	19.4	14.4	17.0
Private Flows, Net	124.8	90.1	204.4	35.9	207.9	390.5	366.5	110.4	265.5	200.7
External Financing										
Net External Financing	241.2	333.2	469.6	208.8	333.3	678.0	675.0	533.4	525.0	525.2
Non-Debt-Creating Inflows	177.0	252.7	296.9	199.8	260.1	398.5	410.3	426.2	301.5	333.5
Net External Borrowing	66.1	82.8	176.6	11.4	77.8	283.6	270.7	114.9	231.0	199.8
From Official Creditors[2]	–8.6	–4.2	8.1	11.7	19.5	15.6	9.6	10.6	15.1	13.8
From Banks	–3.5	22.1	13.6	6.4	7.9	39.9	41.7	45.6	174.6	150.7
From Other Private Creditors	78.1	65.0	154.9	–6.7	50.4	228.1	219.4	58.7	41.3	35.2
Memorandum										
Exceptional Financing	2.9	0.4	0.3	0.5	0.5	0.5	1.0	–6.0	–4.8	0.0

Table B20. Emerging Market and Developing Economies by Region: Balance of Payments and External Financing[1] *(continued)*

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Excluding China and India										
Balance of Payments										
Balance on Current Account	20.3	48.8	57.5	36.7	71.7	47.0	39.6	3.7	–7.7	–9.9
Balance on Capital Account	1.9	2.4	2.7	2.3	3.4	4.0	4.9	5.0	4.5	4.1
Balance on Financial Account	–11.7	–40.2	–54.5	–32.8	–54.8	–5.5	–12.7	25.4	15.1	14.2
Change in Reserves (– = increase)	–15.9	–47.0	–68.4	–20.6	–48.6	–83.4	–62.5	–36.5	–7.2	–24.5
Official Flows, Net	–1.8	5.0	5.2	–4.9	25.8	24.3	9.6	19.4	11.4	14.0
Private Flows, Net	5.9	1.8	8.8	–7.3	–32.0	53.6	40.2	42.5	10.8	24.7
External Financing										
Net External Financing	30.1	56.5	73.5	13.3	40.4	131.0	105.4	153.9	108.1	110.2
Non-Debt-Creating Inflows	26.8	51.9	56.9	–11.0	30.4	62.7	69.4	84.7	69.1	72.4
Net External Borrowing	5.1	6.9	20.5	26.6	14.5	72.4	42.1	76.8	46.5	45.9
From Official Creditors[2]	–6.9	–7.4	3.1	8.7	8.3	11.5	6.9	7.4	9.5	8.6
From Banks	–7.6	4.4	5.3	8.9	6.2	20.1	17.4	32.6	11.5	10.8
From Other Private Creditors	19.6	10.0	12.1	9.0	0.1	40.8	17.7	36.8	25.5	26.6
Memorandum										
Exceptional Financing	2.9	0.4	0.3	0.5	0.5	0.5	1.0	–6.0	–4.8	0.0
Latin America and the Caribbean										
Balance of Payments										
Balance on Current Account	32.8	46.6	6.7	–39.0	–30.3	–62.8	–77.9	–104.5	–140.6	–142.0
Balance on Capital Account	2.0	5.6	4.8	2.4	2.5	9.3	3.0	2.8	2.5	2.3
Balance on Financial Account	4.5	–25.6	–15.9	84.0	81.1	112.7	139.2	166.9	172.7	163.5
Change in Reserves (– = increase)	0.0	–10.9	–106.3	–0.2	–24.9	–66.2	–85.9	–31.4	1.6	6.6
Official Flows, Net	–36.6	–44.6	–0.1	3.7	44.7	48.3	24.7	62.0	53.6	46.3
Private Flows, Net	41.1	29.8	90.5	80.5	61.3	130.5	200.4	136.2	117.4	110.6
External Financing										
Net External Financing	69.0	94.6	225.7	174.4	209.1	364.1	374.6	356.9	278.1	256.5
Non-Debt-Creating Inflows	80.6	79.5	133.1	101.5	111.5	156.6	153.4	176.6	174.2	173.2
Net External Borrowing	–10.5	16.9	95.3	76.2	99.3	210.6	223.9	182.3	106.1	85.7
From Official Creditors[2]	–26.1	–23.1	1.7	11.7	15.3	15.6	12.5	10.8	7.7	8.6
From Banks	3.3	20.8	25.5	25.3	3.7	45.5	34.7	9.0	–23.6	–1.7
From Other Private Creditors	12.4	19.2	68.1	39.2	80.3	149.6	176.7	162.5	122.0	78.8
Memorandum										
Exceptional Financing	–21.5	1.3	1.3	4.3	6.2	3.2	2.4	2.1	1.8	1.6
Middle East, North Africa, Afghanistan, and Pakistan										
Balance of Payments										
Balance on Current Account	206.2	276.4	256.5	333.2	40.0	176.2	418.1	417.2	315.9	299.6
Balance on Capital Account	1.2	2.7	1.5	1.6	–0.8	7.6	1.2	–1.0	30.3	0.4
Balance on Financial Account	–157.2	–223.1	–223.3	–272.1	37.8	–136.0	–311.1	–344.1	–309.7	–261.5
Change in Reserves (– = increase)	–131.7	–153.7	–234.3	–186.6	23.3	–96.4	–132.0	–166.5	–113.2	–101.4
Official Flows, Net	–25.6	–84.9	–61.6	–89.7	–16.1	–49.1	–83.6	–132.1	–166.4	–134.5
Private Flows, Net	0.1	15.5	72.5	4.2	30.6	9.5	–95.5	–45.5	–30.1	–25.5
External Financing										
Net External Financing	68.2	125.2	295.9	21.0	64.8	103.6	31.3	32.0	38.4	68.1
Non-Debt-Creating Inflows	57.5	81.4	102.0	127.8	88.1	118.3	60.1	51.1	82.2	58.1
Net External Borrowing	10.7	43.8	193.9	–106.8	–23.2	–14.7	–28.8	–19.1	–43.8	10.0
From Official Creditors[2]	2.4	–6.4	7.0	3.3	14.2	5.4	0.3	0.8	–26.5	10.3
From Banks	2.3	14.8	22.2	1.8	–1.8	9.8	–4.0	–4.3	–2.4	–3.7
From Other Private Creditors	6.0	35.3	164.7	–112.0	–35.7	–29.9	–25.1	–15.6	–14.9	3.4
Memorandum										
Exceptional Financing	4.7	1.6	3.4	2.5	4.2	12.5	1.9	3.5	34.6	2.1

Table B20. Emerging Market and Developing Economies by Region: Balance of Payments and External Financing[1] *(concluded)*

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	2014
Sub-Saharan Africa										
Balance of Payments										
Balance on Current Account	–1.7	27.7	9.3	–4.0	–27.6	–15.4	–17.3	–38.3	–52.0	–57.3
Balance on Capital Account	11.4	42.5	8.0	6.3	13.1	11.3	7.4	6.6	7.2	7.7
Balance on Financial Account	–9.1	–59.5	–3.9	17.6	42.0	15.3	7.4	29.4	45.7	56.7
Change in Reserves (– = increase)	–22.7	–31.2	–28.6	–14.8	8.1	–1.7	–21.0	–19.1	–16.8	–20.8
Official Flows, Net	–3.7	–36.2	8.6	11.3	19.6	33.2	30.8	33.6	32.3	29.8
Private Flows, Net	17.2	7.9	16.1	21.0	14.4	–16.3	–2.5	14.9	30.2	47.7
External Financing										
Net External Financing	37.0	42.4	57.5	44.7	50.1	46.5	53.0	62.5	71.1	94.4
Non-Debt-Creating Inflows	38.9	72.0	40.2	36.7	55.9	43.3	51.6	53.8	63.4	69.2
Net External Borrowing	–1.6	–28.0	17.6	8.5	–4.9	4.1	2.6	10.2	9.5	27.0
From Official Creditors[2]	–15.4	–38.3	–0.4	8.1	6.4	–2.9	11.1	12.2	19.5	18.9
From Banks	0.0	–2.7	2.4	3.9	2.3	–2.4	2.1	2.2	1.5	4.3
From Other Private Creditors	13.8	13.0	15.7	–3.5	–13.7	9.5	–10.6	–4.3	–11.6	3.9
Memorandum										
Exceptional Financing	6.6	23.0	4.4	–0.3	1.8	5.5	1.6	7.9	0.1	0.1

[1]For definitions, see footnotes to Table B19.
[2]Credit and loans from the IMF can be found at www.imf.org/external/np/fin/tad/extrep1.aspx.
[3]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table B21. Emerging Market and Developing Economies by Analytical Criteria: Balance of Payments and External Financing[1]

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
By Source of Export Earnings										
Fuel										
Balance of Payments										
Balance on Current Account	348.7	472.8	416.4	582.6	138.8	316.9	629.5	615.1	474.4	433.2
Balance on Capital Account	–4.7	10.9	–10.2	1.7	–13.0	17.1	1.0	–6.4	28.8	–2.1
Balance on Financial Account	–236.3	–370.0	–307.6	–401.3	11.6	–241.9	–475.1	–500.6	–432.3	–355.8
Change in Reserves (– = increase)	–175.2	–250.6	–355.0	–112.1	80.5	–89.1	–148.9	–216.6	–97.7	–103.8
Official Flows, Net	–62.1	–141.2	–75.1	–106.1	28.7	–59.7	–103.4	–129.6	–156.2	–134.5
Private Flows, Net	1.0	21.8	122.5	–183.1	–97.6	–93.1	–222.8	–154.4	–178.5	–117.6
External Financing										
Net External Financing	122.2	187.4	477.2	108.4	45.0	129.9	95.3	119.2	107.1	161.6
Non-Debt-Creating Inflows	61.5	119.6	134.1	173.9	105.0	135.9	103.4	92.5	126.7	108.7
Net External Borrowing	60.7	67.8	343.1	–65.5	–60.0	–5.9	–8.2	26.7	–19.6	52.9
From Official Creditors[2]	–31.5	–49.5	1.4	4.6	5.7	–2.0	6.4	5.8	–21.1	5.5
From Banks	33.7	31.9	127.5	43.5	–28.0	7.2	11.6	9.6	–9.4	8.1
From Other Private Creditors	58.5	85.5	214.2	–113.6	–37.7	–11.2	–26.1	11.2	10.9	39.3
Memorandum										
Exceptional Financing	6.2	8.1	1.4	–1.2	2.5	7.0	0.6	0.8	32.1	0.5
Nonfuel										
Balance of Payments										
Balance on Current Account	58.3	154.4	180.5	86.7	115.0	6.4	–222.4	–231.7	–236.8	–193.7
Balance on Capital Account	16.8	51.7	27.5	25.1	36.3	41.6	38.4	39.1	41.5	44.1
Balance on Financial Account	–91.3	–220.5	–248.9	–136.9	–54.5	89.8	248.4	328.7	217.9	158.0
Change in Reserves (– = increase)	–381.4	–471.7	–840.5	–549.3	–576.9	–735.5	–564.7	–192.7	–447.2	–422.6
Official Flows, Net	–25.0	–37.7	16.0	28.1	143.0	160.3	91.0	129.7	89.1	95.3
Private Flows, Net	315.2	288.9	575.6	384.2	379.4	665.1	722.1	391.7	575.9	485.4
External Financing										
Net External Financing	501.1	709.8	1,074.5	711.7	734.3	1,311.5	1,274.0	1,105.5	1,028.6	1,012.3
Non-Debt-Creating Inflows	356.1	484.5	603.7	450.8	497.2	681.5	696.7	722.2	623.3	677.2
Net External Borrowing	148.5	231.9	478.7	268.7	245.9	638.9	588.0	395.1	417.6	348.1
From Official Creditors[2]	–43.2	–54.6	10.1	51.6	97.7	68.0	40.5	18.8	24.2	29.5
From Banks	24.7	82.5	92.3	78.0	1.2	97.8	85.8	64.7	159.5	158.4
From Other Private Creditors	167.0	204.0	376.3	139.1	147.1	473.1	461.7	311.5	233.9	160.2
Memorandum										
Exceptional Financing	–17.5	13.6	5.2	12.3	21.8	20.3	5.6	3.9	–1.1	2.0
By External Financing Source										
Net Debtor Economies										
Balance of Payments										
Balance on Current Account	–100.5	–114.4	–223.2	–374.4	–178.5	–273.9	–391.6	–447.4	–473.6	–469.2
Balance on Capital Account	12.9	46.0	23.4	22.1	32.4	47.8	33.2	35.0	37.9	40.5
Balance on Financial Account	87.2	52.9	170.6	343.7	194.6	285.7	403.7	460.9	457.9	436.1
Change in Reserves (– = increase)	–122.7	–185.5	–349.9	–71.9	–160.7	–248.1	–129.7	–84.4	–21.3	–47.1
Official Flows, Net	–24.5	–40.0	14.4	42.7	148.9	157.3	90.2	126.9	84.9	91.1
Private Flows, Net	234.4	278.5	506.1	373.0	206.4	376.5	443.1	418.4	394.3	392.2
External Financing										
Net External Financing	339.4	530.0	809.8	576.6	511.4	828.7	763.2	802.5	660.3	666.5
Non-Debt-Creating Inflows	230.2	310.8	412.8	312.2	330.3	390.9	386.8	409.6	387.8	448.4
Net External Borrowing	112.7	225.8	404.9	272.3	189.9	446.7	387.0	404.8	284.6	231.1
From Official Creditors[2]	–40.2	–53.9	9.6	49.4	90.6	69.3	41.5	17.1	22.3	28.0
From Banks	23.5	80.0	103.1	82.2	11.3	85.6	73.0	65.8	13.4	28.7
From Other Private Creditors	129.4	199.7	292.3	140.7	88.0	291.8	272.5	321.8	248.9	174.5
Memorandum										
Exceptional Financing	–16.9	13.9	6.1	11.7	23.9	20.5	5.7	3.8	–1.1	2.0

Table B21. Emerging Market and Developing Economies by Analytical Criteria: Balance of Payments and External Financing[1] *(concluded)*

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Official Financing										
Balance of Payments										
Balance on Current Account	–17.0	–18.3	–21.3	–36.2	–20.0	–13.8	–12.5	–23.3	–19.9	–20.7
Balance on Capital Account	4.1	8.9	5.6	5.0	7.7	12.4	10.7	11.2	11.5	11.1
Balance on Financial Account	15.9	14.1	21.1	30.7	12.8	5.1	9.7	11.8	10.6	9.1
Change in Reserves (– = increase)	–7.8	–3.4	–9.8	–16.9	–20.0	–15.4	–7.7	8.0	8.3	–10.9
Official Flows, Net	5.7	–2.9	5.7	24.4	40.1	9.6	3.6	–0.3	1.1	7.2
Private Flows, Net	18.1	20.4	25.2	23.3	–7.3	11.0	13.8	4.1	1.3	12.7
External Financing										
Net External Financing	31.3	35.0	41.9	50.8	30.7	26.8	21.0	9.5	6.8	25.9
Non-Debt-Creating Inflows	20.5	26.0	22.4	28.0	25.8	21.8	31.8	28.3	31.8	32.9
Net External Borrowing	12.3	11.4	22.0	25.7	8.0	9.2	–5.8	–13.5	–20.2	–2.8
From Official Creditors[2]	1.8	–2.2	5.9	17.0	24.2	2.5	5.3	2.1	0.9	6.7
From Banks	5.4	6.2	10.6	17.8	–1.7	–5.1	–5.5	–6.5	–8.9	–3.0
From Other Private Creditors	5.1	7.3	5.5	–9.1	–14.5	11.9	–5.7	–9.0	–12.2	–6.5
Memorandum										
Exceptional Financing	2.9	4.7	2.5	0.3	5.1	11.2	2.0	1.9	1.6	1.6
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11										
Balance of Payments										
Balance on Current Account	–6.1	–4.3	–13.7	–27.0	–20.8	–33.7	–41.2	–52.2	–56.1	–58.0
Balance on Capital Account	2.8	9.6	7.2	4.6	10.6	11.5	5.8	5.2	5.1	6.0
Balance on Financial Account	3.0	–5.8	7.6	15.9	0.9	22.3	31.0	41.4	48.2	48.0
Change in Reserves (– = increase)	–14.1	–10.5	–25.3	–4.5	–14.3	–13.1	–3.8	1.2	3.5	–3.0
Official Flows, Net	1.5	–8.7	9.5	–9.3	7.5	7.8	14.0	11.3	14.1	14.7
Private Flows, Net	15.6	13.5	23.3	29.7	7.8	27.6	20.8	28.9	30.6	36.2
External Financing										
Net External Financing	19.7	26.0	56.4	41.4	30.0	56.5	63.9	56.8	49.7	56.9
Non-Debt-Creating Inflows	21.8	33.9	38.6	41.6	35.9	44.6	50.3	52.6	48.2	55.1
Net External Borrowing	–1.3	–6.9	19.2	1.6	–4.3	14.6	15.9	6.0	3.3	3.8
From Official Creditors[2]	1.1	–12.9	1.7	5.3	10.7	–2.8	17.7	6.9	9.8	5.8
From Banks	–1.1	–0.3	3.2	1.9	0.2	–1.4	1.3	1.4	1.0	2.2
From Other Private Creditors	–1.4	6.3	14.4	–5.7	–15.1	18.8	–3.1	–2.3	–7.5	–4.2
Memorandum										
Exceptional Financing	6.4	7.1	7.2	6.6	10.8	14.1	6.4	5.6	–1.2	2.5
Other Groups										
Heavily Indebted Poor Countries										
Balance of Payments										
Balance on Current Account	–13.9	–12.0	–16.1	–24.7	–22.2	–19.8	–23.3	–42.1	–48.0	–51.3
Balance on Capital Account	4.8	36.5	10.9	6.3	12.0	12.1	7.4	6.4	6.4	7.7
Balance on Financial Account	8.3	–26.5	7.9	18.6	12.3	8.3	17.0	33.6	41.3	43.0
Change in Reserves (– = increase)	–3.7	–6.6	–8.2	–5.6	–5.8	–8.7	–8.2	–3.5	–2.5	–6.4
Official Flows, Net	3.9	–26.0	0.2	2.2	8.9	6.0	11.1	15.7	20.5	18.5
Private Flows, Net	8.1	6.0	15.9	22.0	9.2	11.0	14.1	21.5	23.3	30.9
External Financing										
Net External Financing	17.5	20.1	27.5	31.1	28.0	33.2	34.8	40.2	46.5	53.9
Non-Debt-Creating Inflows	14.9	49.5	27.8	26.9	31.8	34.4	35.6	37.6	37.5	42.4
Net External Borrowing	3.3	–27.1	1.0	6.1	–2.6	1.3	1.0	3.8	10.4	13.1
From Official Creditors[2]	0.0	–23.8	–0.3	6.6	7.0	–2.1	10.7	12.5	14.0	13.6
From Banks	–0.3	0.1	0.4	0.9	2.5	–4.1	–0.2	0.6	0.5	2.4
From Other Private Creditors	3.6	–3.3	0.9	–1.4	–12.0	7.5	–9.5	–9.3	–4.1	–2.9
Memorandum										
Exceptional Financing	5.8	14.7	6.4	1.0	3.8	11.1	3.6	9.7	1.7	0.7

[1]For definitions, see footnotes to Table B19.
[2]Credit and loans from the IMF can be found at www.imf.org/external/np/fin/tad/extrep1.aspx.

Table B22. Summary of External Debt and Debt Service

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
					Billions of U.S. Dollars					
External Debt										
Emerging Market and Developing Economies	**3,133.6**	**3,527.7**	**4,378.7**	**4,635.3**	**4,900.9**	**5,448.0**	**5,987.4**	**6,531.0**	**6,978.9**	**7,357.9**
Regional Groups										
Central and Eastern Europe	527.6	688.3	923.7	1,022.9	1,118.2	1,146.7	1,163.5	1,234.9	1,280.1	1,306.0
Commonwealth of Independent States[1]	361.0	465.5	682.0	731.8	737.1	789.3	873.9	939.2	961.0	999.9
Developing Asia	819.6	907.5	1,041.1	1,077.2	1,186.8	1,440.0	1,687.6	1,870.1	2,148.8	2,354.4
Latin America and the Caribbean	746.5	750.2	839.0	866.0	880.5	1,040.0	1,181.0	1,332.8	1,415.6	1,477.3
Middle East, North Africa, Afghanistan, and Pakistan	457.6	530.8	687.9	721.8	747.3	777.1	799.8	840.4	852.7	867.9
Middle East and North Africa	410.2	481.6	645.6	673.6	693.8	714.2	732.2	773.5	787.4	804.5
Sub-Saharan Africa	221.3	185.5	204.9	215.7	231.0	255.0	281.6	313.7	320.6	352.4
Analytical Groups										
By External Financing Source										
Net Debtor Economies	2,115.3	2,375.3	2,847.8	3,066.9	3,283.2	3,645.1	3,936.4	4,341.6	4,621.3	4,822.7
Of Which, Official Financing	262.2	293.5	330.8	358.4	398.4	390.1	395.6	399.9	397.6	405.3
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	326.1	329.9	352.1	361.3	361.9	363.6	401.4	413.3	440.4	465.9
Debt-Service Payments[2]										
Emerging Market and Developing Economies	**1,101.4**	**1,270.5**	**1,412.5**	**1,730.9**	**1,679.9**	**1,721.4**	**2,018.9**	**2,239.2**	**2,357.9**	**2,541.8**
Regional Groups										
Central and Eastern Europe	186.1	227.7	287.3	400.2	400.7	392.9	430.8	444.7	438.3	457.0
Commonwealth of Independent States[1]	125.9	174.2	228.7	314.0	250.6	241.4	254.7	280.1	288.3	277.6
Developing Asia	326.5	358.3	414.4	471.1	484.0	545.0	728.7	881.6	972.7	1,129.1
Latin America and the Caribbean	288.5	297.7	289.8	295.8	311.0	296.2	345.8	363.1	357.2	346.4
Middle East, North Africa, Afghanistan, and Pakistan	117.2	137.5	144.7	190.5	180.6	200.8	209.9	213.9	240.2	265.3
Middle East and North Africa	113.8	134.2	141.3	186.5	175.1	195.5	205.8	209.1	233.7	258.4
Sub-Saharan Africa	57.2	75.1	47.5	59.3	53.0	45.0	49.0	55.8	61.2	66.5
Analytical Groups										
By External Financing Source										
Net Debtor Economies	706.2	786.7	868.6	1,036.0	1,053.0	1,044.3	1,191.3	1,264.3	1,308.3	1,359.3
Of Which, Official Financing	46.1	54.4	60.4	71.7	75.2	73.4	80.6	76.7	67.6	63.2
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	80.0	67.7	65.2	72.4	79.7	77.7	84.6	88.1	85.3	83.8

Table B22. Summary of External Debt and Debt Service *(concluded)*

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
	Percent of Exports of Goods and Services									
External Debt[3]										
Emerging Market and Developing Economies	**80.2**	**74.5**	**77.2**	**67.2**	**90.1**	**79.4**	**71.1**	**74.4**	**77.2**	**77.2**
Regional Groups										
Central and Eastern Europe	132.0	145.8	156.8	143.0	196.8	178.5	152.4	161.6	160.1	155.9
Commonwealth of Independent States[1]	93.1	96.4	116.7	92.6	140.7	117.9	98.6	102.2	105.7	108.2
Developing Asia	54.3	48.9	45.7	40.6	52.2	48.5	47.7	50.1	54.2	54.7
Latin America and the Caribbean	113.9	96.5	95.7	85.4	109.7	102.1	96.1	106.5	111.2	113.0
Middle East, North Africa, Afghanistan, and Pakistan	63.1	60.5	66.9	54.0	76.7	65.3	52.1	51.0	52.7	52.2
Middle East and North Africa	58.1	56.3	64.3	51.4	73.2	61.5	48.8	47.9	49.7	49.5
Sub-Saharan Africa	97.3	68.8	64.0	55.5	78.8	68.2	60.9	67.6	68.0	72.0
Analytical Groups										
By External Financing Source										
Net Debtor Economies	116.7	110.5	111.3	101.1	131.0	117.6	105.9	115.5	119.0	118.1
Of Which, Official Financing	163.7	156.2	144.5	133.4	179.9	147.2	136.4	144.2	138.1	131.8
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	202.7	172.3	154.3	129.4	158.0	128.0	114.5	118.0	122.6	123.5
Debt-Service Payments										
Emerging Market and Developing Economies	**28.7**	**27.2**	**25.2**	**25.5**	**31.3**	**25.4**	**24.3**	**25.8**	**26.4**	**27.0**
Regional Groups										
Central and Eastern Europe	46.7	48.3	48.9	56.1	70.7	61.3	56.6	58.3	54.9	54.7
Commonwealth of Independent States[1]	32.5	36.1	39.1	39.7	47.8	36.0	28.7	30.5	31.7	30.0
Developing Asia	21.6	19.3	18.2	17.8	21.3	18.4	20.6	23.6	24.5	26.2
Latin America and the Caribbean	48.3	41.9	36.0	32.3	41.8	31.7	30.5	31.5	30.3	28.5
Middle East, North Africa, Afghanistan, and Pakistan	16.2	15.7	14.1	14.2	18.6	16.9	13.7	13.0	14.8	16.0
Middle East and North Africa	16.1	15.7	14.1	14.2	18.5	16.8	13.7	13.0	14.8	15.9
Sub-Saharan Africa	25.4	28.1	14.9	15.3	18.2	12.2	10.7	12.1	13.1	13.7
Analytical Groups										
By External Financing Source										
Net Debtor Economies	39.1	36.7	34.0	34.2	42.1	33.8	32.1	33.7	33.8	33.3
Of Which, Official Financing	28.8	29.0	26.4	26.7	34.0	27.7	27.8	27.6	23.5	20.5
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	50.4	35.7	28.8	26.1	35.1	27.7	24.5	25.5	24.0	22.5

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[2]Apart from interest, debt service for a particular year includes amortization of short-term debt on an original maturity basis outstanding at the end of the previous year, plus the portion of long-term debt outstanding at the end of the previous year maturing during the current year. The projections incorporate the impact of exceptional financing items.
[3]Total debt at the end of the year in percent of exports of goods and services in the year indicated.

Table B23. Emerging Market and Developing Economies by Region: External Debt by Maturity and Type of Creditor

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Emerging Market and Developing Economies										
Total Debt	**3,133.6**	**3,527.7**	**4,378.7**	**4,635.3**	**4,900.9**	**5,448.0**	**5,987.4**	**6,531.0**	**6,978.9**	**7,357.9**
By Maturity										
Short-Term	691.5	822.4	1,136.7	1,130.9	1,149.7	1,431.1	1,607.6	1,729.7	1,888.5	1,997.3
Long-Term	2,442.1	2,705.4	3,242.0	3,504.4	3,751.1	4,016.9	4,379.8	4,801.3	5,090.3	5,360.6
By Type of Creditor										
Official	960.3	873.1	895.6	939.5	1,029.2	1,075.1	1,124.2	1,141.1	1,157.0	1,184.1
Banks	799.1	957.3	1,300.7	1,447.7	1,439.9	1,555.4	1,658.4	1,807.3	2,031.5	2,238.3
Other Private	1,374.2	1,697.4	2,182.4	2,248.2	2,431.8	2,817.6	3,204.8	3,582.6	3,790.4	3,935.5
Regional Groups										
Central and Eastern Europe										
Total Debt	**527.6**	**688.3**	**923.7**	**1,022.9**	**1,118.2**	**1,146.7**	**1,163.5**	**1,234.9**	**1,280.1**	**1,306.0**
By Maturity										
Short-Term	115.7	149.5	213.3	228.0	217.0	258.3	260.4	265.3	286.5	289.6
Long-Term	411.9	538.8	710.4	794.9	901.2	888.4	903.0	969.6	993.6	1,016.3
By Type of Creditor										
Official	72.9	74.7	75.6	86.8	127.2	139.3	146.0	138.1	127.0	116.4
Banks	215.9	290.4	379.1	433.8	429.2	431.3	435.5	469.0	510.2	535.2
Other Private	238.8	323.2	469.0	502.3	561.8	576.0	581.9	627.8	642.9	654.4
Commonwealth of Independent States[1]										
Total Debt	**361.0**	**465.5**	**682.0**	**731.8**	**737.1**	**789.3**	**873.9**	**939.2**	**961.0**	**999.9**
By Maturity										
Short-Term	60.4	87.9	147.0	111.7	93.3	107.3	129.1	113.7	117.9	124.6
Long-Term	300.6	377.6	535.0	620.1	643.9	682.0	744.9	825.5	843.1	875.3
By Type of Creditor										
Official	53.2	30.0	31.0	37.1	46.3	60.5	66.4	67.1	69.2	65.0
Banks	93.6	123.4	242.1	285.4	254.5	260.0	275.6	295.6	294.7	313.3
Other Private	214.2	312.0	408.9	409.3	436.3	468.8	531.9	576.5	597.1	621.7
Developing Asia										
Total Debt	**819.6**	**907.5**	**1,041.1**	**1,077.2**	**1,186.8**	**1,440.0**	**1,687.6**	**1,870.1**	**2,148.8**	**2,354.4**
By Maturity										
Short-Term	250.4	290.4	365.1	363.4	409.3	574.0	726.8	810.9	951.2	1,045.1
Long-Term	569.2	617.1	676.1	713.8	777.5	866.0	960.8	1,059.2	1,197.6	1,309.3
By Type of Creditor										
Official	274.9	270.1	278.8	294.0	311.1	326.4	336.2	341.8	364.4	380.0
Banks	185.0	204.5	218.0	223.1	228.1	270.3	313.4	358.3	533.3	684.5
Other Private	359.7	432.8	544.3	560.1	647.7	843.2	1,038.0	1,170.0	1,251.2	1,289.9
Latin America and the Caribbean										
Total Debt	**746.5**	**750.2**	**839.0**	**866.0**	**880.5**	**1,040.0**	**1,181.0**	**1,332.8**	**1,415.6**	**1,477.3**
By Maturity										
Short-Term	138.2	139.7	175.1	195.6	180.9	218.1	223.1	248.6	221.2	227.1
Long-Term	608.2	610.5	663.9	670.4	699.5	821.8	957.8	1,084.2	1,194.3	1,250.2
By Type of Creditor										
Official	161.1	136.2	140.3	149.8	158.7	173.7	184.2	194.4	202.1	208.9
Banks	174.8	178.8	227.9	255.6	262.0	297.8	330.4	359.1	366.3	374.3
Other Private	410.5	435.2	470.8	460.6	459.8	568.4	666.4	779.2	847.1	894.1

Table B23. Emerging Market and Developing Economies by Region: External Debt by Maturity and Type of Creditor *(concluded)*

(Billions of U.S. dollars)

									Projections	
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Middle East, North Africa, Afghanistan, and Pakistan										
Total Debt	**457.6**	**530.8**	**687.9**	**721.8**	**747.3**	**777.1**	**799.8**	**840.4**	**852.7**	**867.9**
By Maturity										
Short-Term	101.8	130.4	200.6	202.2	227.0	246.4	243.8	266.6	286.7	285.4
Long-Term	355.8	400.5	487.3	519.6	520.3	530.7	556.0	573.7	566.0	582.5
By Type of Creditor										
Official	255.6	262.7	269.8	268.8	279.4	269.2	271.6	277.1	254.4	257.0
Banks	89.1	118.2	183.6	196.3	207.8	227.8	227.6	237.3	242.2	238.5
Other Private	112.9	149.9	234.5	256.7	260.0	280.1	300.6	325.9	356.1	372.3
Sub-Saharan Africa										
Total Debt	221.3	185.5	204.9	215.7	231.0	255.0	281.6	313.7	320.6	352.4
By Maturity										
Short-Term	24.8	24.5	35.6	30.0	22.2	27.1	24.4	24.5	25.0	25.5
Long-Term	196.4	161.0	169.3	185.7	208.7	228.0	257.2	289.2	295.7	326.9
By Type of Creditor										
Official	142.5	99.3	100.0	103.1	106.5	105.9	119.7	122.6	139.9	156.7
Banks	40.7	42.0	50.1	53.4	58.3	68.1	75.9	87.9	84.8	92.5
Other Private	38.0	44.1	54.8	59.2	66.1	81.0	86.0	103.1	96.0	103.1

[1]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table B24. Emerging Market and Developing Economies by Analytical Criteria: External Debt by Maturity and Type of Creditor

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
By Source of Export Earnings										
Fuel										
Total Debt	**668.5**	**793.9**	**1,137.7**	**1,173.4**	**1,182.1**	**1,232.5**	**1,333.0**	**1,435.8**	**1,455.9**	**1,500.0**
By Maturity										
Short-Term	106.5	154.6	272.0	233.6	229.6	250.1	257.3	258.6	268.2	266.2
Long-Term	562.0	639.3	865.6	939.7	952.5	982.4	1,075.7	1,177.1	1,187.7	1,233.8
By Type of Creditor										
Official	197.8	163.3	171.4	157.6	157.1	139.5	146.8	155.1	132.1	130.8
Banks	164.9	208.9	377.4	426.5	411.5	431.4	450.5	481.7	483.4	495.5
Other Private	305.8	421.7	588.9	589.3	613.5	661.6	735.7	798.9	840.5	873.8
Nonfuel										
Total Debt	**2,465.1**	**2,733.9**	**3,241.0**	**3,462.0**	**3,718.8**	**4,215.6**	**4,654.4**	**5,095.2**	**5,522.9**	**5,857.9**
By Maturity										
Short-Term	585.0	667.8	864.6	897.3	920.2	1,181.1	1,350.3	1,471.0	1,620.3	1,731.1
Long-Term	1,880.1	2,066.1	2,376.4	2,564.7	2,798.6	3,034.5	3,304.0	3,624.2	3,902.6	4,126.8
By Type of Creditor										
Official	762.5	709.8	724.2	781.9	872.1	935.6	977.4	985.9	1,024.9	1,053.3
Banks	634.2	748.4	923.3	1,021.1	1,028.4	1,124.0	1,208.0	1,325.6	1,548.1	1,742.8
Other Private	1,068.3	1,275.7	1,593.5	1,658.9	1,818.3	2,156.0	2,469.1	2,783.7	2,949.9	3,061.7
Nonfuel Primary Products										
Total Debt	**199.8**	**193.0**	**206.6**	**230.4**	**252.3**	**271.8**	**306.1**	**351.5**	**366.7**	**385.3**
By Maturity										
Short-Term	14.8	14.9	19.2	25.3	26.9	29.5	32.2	39.5	39.3	40.6
Long-Term	185.0	178.1	187.3	205.0	225.4	242.3	273.9	312.0	327.4	344.7
By Type of Creditor										
Official	108.0	94.8	95.8	100.6	104.7	99.8	105.6	106.8	111.2	116.0
Banks	48.7	52.3	61.4	69.0	76.7	84.3	91.7	109.7	111.2	116.5
Other Private	43.1	45.9	49.4	60.7	70.8	87.7	108.8	135.0	144.4	152.8
By External Financing Source										
Net Debtor Economies										
Total Debt	**2,115.3**	**2,375.3**	**2,847.8**	**3,066.9**	**3,283.2**	**3,645.1**	**3,936.4**	**4,341.6**	**4,621.3**	**4,822.7**
By Maturity										
Short-Term	398.1	459.6	613.7	647.3	641.3	777.0	812.3	892.1	934.5	951.0
Long-Term	1,717.2	1,915.7	2,234.1	2,419.6	2,641.9	2,868.1	3,124.2	3,449.5	3,686.9	3,871.6
By Type of Creditor										
Official	691.6	643.0	656.0	708.1	786.6	853.5	896.9	904.3	941.9	966.9
Banks	569.5	682.1	868.0	970.9	987.9	1,069.0	1,138.5	1,257.8	1,333.4	1,397.3
Other Private	854.2	1,050.2	1,323.8	1,387.9	1,508.6	1,722.6	1,901.0	2,179.5	2,346.0	2,458.4
Official Financing										
Total Debt	**262.2**	**293.5**	**330.8**	**358.4**	**398.4**	**390.1**	**395.6**	**399.9**	**397.6**	**405.3**
By Maturity										
Short-Term	24.7	29.0	40.1	34.7	38.6	43.4	41.6	34.5	25.4	22.1
Long-Term	237.6	264.5	290.7	323.8	359.8	346.7	354.0	365.4	372.1	383.1
By Type of Creditor										
Official	150.3	152.9	148.7	166.8	185.8	191.6	195.0	198.3	202.7	206.6
Banks	38.9	47.7	62.5	76.0	75.2	65.4	57.2	51.2	43.2	41.5
Other Private	73.1	92.9	119.7	115.6	137.4	133.1	143.4	150.5	151.7	157.2

Table B24. Emerging Market and Developing Economies by Analytical Criteria: External Debt by Maturity and Type of Creditor *(concluded)*

(Billions of U.S. dollars)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11										
Total Debt	**326.1**	**329.9**	**352.1**	**361.3**	**361.9**	**363.6**	**401.4**	**413.3**	**440.4**	**465.9**
By Maturity										
Short-Term	74.8	72.0	83.5	98.3	92.1	82.3	94.2	93.7	91.5	93.2
Long-Term	251.3	258.0	268.6	263.0	269.7	281.3	307.2	319.6	348.9	372.6
By Type of Creditor										
Official	182.5	170.7	167.3	173.7	180.4	179.7	198.3	201.2	209.1	215.0
Banks	27.8	27.3	30.9	33.0	30.0	29.3	32.5	35.3	37.9	40.8
Other Private	115.8	131.8	153.9	154.5	151.5	154.6	170.6	176.8	193.4	210.2
Other Groups										
Heavily Indebted Poor Countries										
Total Debt	**180.4**	**151.2**	**140.7**	**153.3**	**158.4**	**156.7**	**169.4**	**176.2**	**192.8**	**211.2**
By Maturity										
Short-Term	2.2	1.8	2.1	2.9	3.3	3.9	3.6	3.7	3.6	3.6
Long-Term	178.2	149.4	138.6	150.4	155.1	152.7	165.8	172.6	189.1	207.6
By Type of Creditor										
Official	151.3	122.0	109.5	115.0	115.1	113.6	124.6	128.3	140.6	152.4
Banks	17.1	17.4	18.4	19.1	21.7	19.4	21.1	22.2	24.4	28.5
Other Private	12.1	11.7	12.8	19.2	21.6	23.7	23.7	25.8	27.8	30.3

Table B25. Emerging Market and Developing Economies: Ratio of External Debt to GDP[1]

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Emerging Market and Developing Economies	**28.6**	**27.2**	**27.4**	**24.2**	**26.7**	**24.8**	**23.3**	**24.0**	**24.7**	**24.7**
Regional Groups										
Central and Eastern Europe	45.3	52.9	56.8	53.4	70.2	65.9	61.6	67.4	66.3	64.8
Commonwealth of Independent States[2]	36.1	35.9	40.0	33.7	45.0	39.2	35.0	35.1	34.2	33.6
Developing Asia	20.6	19.2	17.3	14.9	15.1	15.2	14.9	15.2	16.4	16.8
Latin America and the Caribbean	27.8	23.8	22.6	20.1	21.7	21.1	21.0	23.7	24.5	24.9
Middle East, North Africa, Afghanistan, and Pakistan	30.6	29.9	33.0	27.9	32.1	28.7	25.5	24.4	25.5	24.8
Middle East and North Africa	29.9	29.6	33.5	28.0	32.3	28.5	25.2	24.2	25.5	24.8
Sub-Saharan Africa	35.2	25.8	24.7	22.8	25.8	23.7	23.3	24.9	24.6	25.1
Analytical Groups										
By Source of Export Earnings										
Fuel	28.8	27.4	31.8	25.7	31.5	27.7	24.7	24.2	24.4	23.9
Nonfuel	28.5	27.1	26.2	23.7	25.5	24.1	22.9	24.0	24.8	24.9
Of Which, Primary Products	55.4	44.4	40.9	39.6	44.0	39.2	38.4	41.2	40.6	39.9
By External Financing Source										
Net Debtor Economies	33.9	33.0	32.7	31.0	34.9	32.2	31.0	34.1	35.5	35.9
Of Which, Official Financing	54.7	54.5	52.7	48.5	54.7	49.4	48.0	47.0	44.1	42.7
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	66.6	58.0	51.5	43.0	44.6	38.7	37.2	36.1	36.9	36.9
Other Groups										
Heavily Indebted Poor Countries	76.2	55.2	43.2	39.0	40.5	36.3	35.3	34.6	35.7	36.1

[1]Debt at the end of the year in percent of GDP in the year indicated.
[2]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.

Table B26. Emerging Market and Developing Economies: Debt-Service Ratios[1]

(Percent of exports of goods and services)

	2005	2006	2007	2008	2009	2010	2011	2012	Projections 2013	Projections 2014
Interest Payments[2]										
Emerging Market and Developing Economies	**3.9**	**3.8**	**3.5**	**3.1**	**3.3**	**2.6**	**2.5**	**2.4**	**2.5**	**2.4**
Regional Groups										
Central and Eastern Europe	4.1	4.6	4.6	5.6	5.3	4.5	4.3	4.2	3.9	3.9
Commonwealth of Independent States[3]	3.8	4.2	4.6	3.9	5.3	4.2	3.7	3.1	3.0	2.2
Developing Asia	2.9	2.0	2.0	1.7	1.9	1.7	1.8	1.6	1.9	2.0
Latin America and the Caribbean	7.3	6.4	6.2	5.3	5.7	4.6	4.4	4.6	4.3	4.1
Middle East, North Africa, Afghanistan, and Pakistan	3.1	4.1	3.4	2.4	2.8	1.8	1.4	1.3	1.4	1.4
Middle East and North Africa	3.0	4.1	3.3	2.3	2.7	1.7	1.3	1.3	1.3	1.4
Sub-Saharan Africa	3.9	4.3	2.7	2.1	2.1	1.6	1.7	2.0	2.7	2.7
Analytical Groups										
By Source of Export Earnings										
Fuel	3.1	3.8	3.5	2.6	3.2	2.2	1.8	1.5	1.5	1.3
Nonfuel	4.3	3.7	3.5	3.3	3.4	2.8	2.8	2.8	2.8	2.9
Of Which, Primary Products	5.2	5.6	3.9	3.4	3.4	2.7	2.5	3.4	3.1	2.9
By External Financing Source										
Net Debtor Economies	5.6	5.0	4.7	4.4	4.4	3.6	3.5	3.4	3.5	3.5
Of Which, Official Financing	4.2	5.0	4.2	5.0	5.2	4.0	4.4	4.7	3.3	3.2
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	7.2	5.4	4.9	4.0	4.0	3.3	3.1	3.4	3.5	3.9
Other Groups										
Heavily Indebted Poor Countries	3.3	8.2	2.9	2.4	2.1	1.7	1.5	1.8	2.4	2.1
Amortization[2]										
Emerging Market and Developing Economies	**24.3**	**23.1**	**21.5**	**22.1**	**27.6**	**22.5**	**21.5**	**23.2**	**23.7**	**24.3**
Regional Groups										
Central and Eastern Europe	42.5	43.7	44.3	50.5	65.4	56.8	52.3	54.1	51.0	50.7
Commonwealth of Independent States[3]	28.6	31.9	34.5	35.8	42.5	31.8	25.1	27.4	28.7	27.8
Developing Asia	18.8	17.3	16.2	16.0	19.4	16.7	18.8	22.0	22.7	24.2
Latin America and the Caribbean	37.0	32.1	27.0	24.0	33.2	24.6	23.9	24.6	23.9	22.5
Middle East, North Africa, Afghanistan, and Pakistan	13.1	11.5	10.7	11.8	15.8	15.1	12.3	11.7	13.5	14.5
Middle East and North Africa	13.1	11.6	10.7	11.9	15.8	15.1	12.4	11.7	13.4	14.5
Sub-Saharan Africa	21.5	23.8	12.3	13.2	16.1	10.5	9.0	10.1	10.4	11.0
Analytical Groups										
By Source of Export Earnings										
Fuel	15.1	15.5	15.3	16.6	19.2	15.5	11.8	11.5	12.9	13.2
Nonfuel	28.0	26.2	23.9	24.5	30.7	25.0	25.4	28.0	27.9	28.4
Of Which, Primary Products	28.0	26.6	20.3	20.7	28.9	23.3	19.9	26.7	25.9	20.9
By External Financing Source										
Net Debtor Economies	33.6	31.9	29.4	29.8	37.8	30.3	28.7	30.4	30.4	29.9
Of Which, Official Financing	24.6	24.0	22.1	21.7	28.8	23.7	23.4	22.9	20.2	17.4
Net Debtor Economies by Debt-Servicing Experience										
Economies with Arrears and/or Rescheduling during 2007–11	44.6	31.1	24.6	22.5	31.7	25.0	22.0	22.6	21.0	19.1
Other Groups										
Heavily Indebted Poor Countries	7.3	18.8	6.3	4.4	6.6	5.3	4.3	6.0	4.4	3.7

[1]Excludes service payments to the IMF.

[2]Interest payments and amortization on total debt. Estimates through 2012 reflect debt-service payments actually made. The estimates for 2013 and 2014 take into account projected exceptional financing items, including accumulation of arrears and rescheduling arrangements. In some cases, amortization on account of debt-reduction operations is included.

[3]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure. Data for Russia do not include part of commercial banks' amortization because of data limitations and issues of data consistency.

Table B27. Emerging Market and Developing Economies, Medium-Term Baseline Scenario: Selected Economic Indicators

(Annual percent change)

	Averages				Projections			
	1995–2002	2003–10	2011	2012	2013	2014	2011–2014	2015–2018
Emerging Market and Developing Economies								
Real GDP	4.3	6.8	6.2	4.9	4.5	5.1	5.2	5.4
Export Volume[1]	7.9	8.0	6.8	4.2	3.5	5.8	5.1	6.5
Terms of Trade[1]	0.6	1.8	3.2	0.5	–0.5	–0.4	0.7	–0.5
Import Volume[1]	6.8	9.7	8.8	5.5	5.0	5.9	6.3	6.6
Regional Groups								
Central and Eastern Europe								
Real GDP	3.6	4.2	5.4	1.4	2.3	2.7	3.0	3.6
Export Volume[1]	10.8	8.3	8.2	4.9	4.5	5.3	5.7	5.9
Terms of Trade[1]	–0.1	–0.5	–2.0	–0.3	–0.1	–0.2	–0.7	1.0
Import Volume[1]	11.1	7.7	8.3	0.1	3.9	4.6	4.2	7.7
Commonwealth of Independent States[2]								
Real GDP	1.7	5.4	4.8	3.4	2.1	3.4	3.4	3.7
Export Volume[1]	4.8	5.8	9.0	4.4	1.5	3.4	4.6	4.0
Terms of Trade[1]	2.1	5.7	10.3	0.7	–2.5	–1.6	1.6	–1.6
Import Volume[1]	4.5	11.8	16.6	10.4	1.5	5.7	8.4	5.3
Developing Asia								
Real GDP	6.7	9.2	7.8	6.4	6.3	6.5	6.8	6.7
Export Volume[1]	10.9	11.8	8.0	4.0	5.7	7.0	6.2	7.8
Terms of Trade[1]	–0.9	–0.6	–2.9	1.6	0.6	0.8	0.0	0.2
Import Volume[1]	7.9	11.1	9.2	5.5	6.1	6.9	6.9	7.0
Latin America and the Caribbean								
Real GDP	2.2	4.1	4.6	2.9	2.7	3.1	3.3	3.7
Export Volume[1]	7.5	4.2	5.8	1.7	2.2	4.9	3.6	5.8
Terms of Trade[1]	–0.4	2.7	7.1	–2.1	–1.7	–1.6	0.4	–0.6
Import Volume[1]	5.2	7.5	10.6	3.2	2.9	3.7	5.1	5.6
Middle East, North Africa, Afghanistan, and Pakistan								
Real GDP	3.9	5.8	3.9	4.6	2.3	3.6	3.6	4.2
Export Volume[1]	2.9	5.0	3.1	6.6	0.2	5.0	3.7	5.0
Terms of Trade[1]	4.9	5.0	13.8	0.0	–0.8	–1.9	2.6	–2.8
Import Volume[1]	5.4	9.6	1.2	9.4	6.3	6.2	5.7	6.5
Sub-Saharan Africa								
Real GDP	4.1	5.7	5.5	4.9	5.0	6.0	5.3	5.6
Export Volume[1]	5.4	4.5	4.4	3.5	3.4	6.2	4.4	5.9
Terms of Trade[1]	0.6	4.3	8.1	–0.2	–1.2	–1.3	1.3	–1.4
Import Volume[1]	6.1	8.5	9.4	6.1	7.0	6.6	7.3	5.9
Analytical Groups								
Net Debtor Economies by Debt-Servicing Experience								
Economies with Arrears and/or Rescheduling during 2007–11								
Real GDP	2.5	6.3	6.4	3.4	4.2	4.1	4.5	4.4
Export Volume[1]	7.0	4.9	7.0	0.0	4.9	7.0	4.7	6.0
Terms of Trade[1]	–0.9	2.3	4.8	0.0	–1.7	–1.0	0.5	–0.7
Import Volume[1]	2.1	9.9	10.3	3.1	4.0	5.6	5.7	4.7

Table B27. Emerging Market and Developing Economies, Medium-Term Baseline Scenario: Selected Economic Indicators *(concluded)*

(Percent of exports of goods and services)

						Projections		
	2002	2006	2010	2011	2012	2013	2014	2018
Emerging Market and Developing Economies								
Current Account Balance	4.1	13.2	4.7	4.9	4.3	2.6	2.5	1.3
Total External Debt	123.9	74.5	79.4	71.1	74.4	77.2	77.2	75.4
Debt-Service Payments[3]	39.0	27.2	25.4	24.3	25.8	26.4	27.0	26.9
Interest Payments	5.8	3.8	2.6	2.5	2.4	2.5	2.4	3.1
Amortization	32.7	23.1	22.5	21.5	23.2	23.7	24.3	23.6
Regional Groups								
Central and Eastern Europe								
Current Account Balance	–9.0	–18.7	–12.8	–15.6	–10.4	–10.6	–10.7	–14.6
Total External Debt	156.7	145.8	178.5	152.4	161.6	160.1	155.9	150.4
Debt-Service Payments[3]	46.8	48.3	61.3	56.6	58.3	54.9	54.7	49.9
Interest Payments	5.5	4.6	4.5	4.3	4.2	3.9	3.9	6.0
Amortization	41.3	43.7	56.8	52.3	54.1	51.0	50.7	44.0
Commonwealth of Independent States[2]								
Current Account Balance	17.1	19.5	10.3	12.4	8.4	6.5	5.1	–0.7
Total External Debt	118.8	96.4	117.9	98.6	102.2	105.7	108.2	118.1
Debt-Service Payments[3]	37.0	36.1	36.0	28.7	30.5	31.7	30.0	34.3
Interest Payments	5.8	4.2	4.2	3.7	3.1	3.0	2.2	4.3
Amortization	31.2	31.9	31.8	25.1	27.4	28.7	27.8	30.0
Developing Asia								
Current Account Balance	8.1	14.5	8.0	2.7	2.9	3.5	4.2	7.7
Total External Debt	86.4	48.9	48.5	47.7	50.1	54.2	54.7	52.4
Debt-Service Payments[3]	32.9	19.3	18.4	20.6	23.6	24.5	26.2	27.2
Interest Payments	3.3	2.0	1.7	1.8	1.6	1.9	2.0	2.3
Amortization	29.7	17.3	16.7	18.8	22.0	22.7	24.2	24.9
Latin America and the Caribbean								
Current Account Balance	–3.9	6.0	–6.2	–6.3	–8.3	–11.0	–10.9	–12.4
Total External Debt	191.3	96.5	102.1	96.1	106.5	111.2	113.0	108.9
Debt-Service Payments[3]	63.0	41.9	31.7	30.5	31.5	30.3	28.5	24.4
Interest Payments	11.8	6.4	4.6	4.4	4.6	4.3	4.1	5.0
Amortization	47.4	32.1	24.6	23.9	24.6	23.9	22.5	18.3
Middle East, North Africa, Afghanistan, and Pakistan								
Current Account Balance	11.3	31.5	14.8	27.2	25.3	19.5	18.0	7.8
Total External Debt	91.6	60.5	65.3	52.1	51.0	52.7	52.2	50.7
Debt-Service Payments[3]	24.3	15.7	16.9	13.7	13.0	14.8	16.0	14.4
Interest Payments	4.8	4.1	1.8	1.4	1.3	1.4	1.4	2.0
Amortization	19.4	11.5	15.1	12.3	11.7	13.5	14.5	12.4
Sub-Saharan Africa								
Current Account Balance	–11.4	10.3	–4.1	–3.7	–8.2	–11.0	–11.5	–16.4
Total External Debt	183.6	68.8	68.2	60.9	67.6	68.0	72.0	88.2
Debt-Service Payments[3]	30.6	28.1	12.2	10.7	12.1	13.1	13.7	14.1
Interest Payments	6.0	4.3	1.6	1.7	2.0	2.7	2.7	3.3
Amortization	24.6	23.8	10.5	9.0	10.1	10.4	11.0	10.8
Analytical Groups								
Net Debtor Economies by Debt-Servicing Experience								
Economies with Arrears and/or Rescheduling during 2007–11								
Current Account Balance	4.3	–2.3	–11.9	–11.7	–14.9	–15.6	–15.4	–12.8
Total External Debt	344.7	172.3	128.0	114.5	118.0	122.6	123.5	113.6
Debt-Service Payments[3]	50.7	35.7	27.7	24.5	25.5	24.0	22.5	19.8
Interest Payments	14.5	5.4	3.3	3.1	3.4	3.5	3.9	4.7
Amortization	38.0	31.1	25.0	22.0	22.6	21.0	19.1	15.4

[1]Data refer to trade in goods and services.
[2]Georgia, which is not a member of the Commonwealth of Independent States, is included in this group for reasons of geography and similarity in economic structure.
[3]Interest payments and amortization on total debt. Projections incorporate the impact of exceptional financing items. Excludes service payments to the IMF.

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