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The Global Financial Crisis and Its Impact on Developing Countries

The deepening global recession, rising unemployment, and high volatility of commodity prices in 2008 and 2009 have severely affected progress toward poverty reduction (Millennium Development Goal [MDG] 1). The steady increases in food prices in recent years, culminating in exceptional price shocks around mid-2008, have thrown millions into extreme poverty, and the deteriorating growth prospects in developing countries will further slow progress in poverty reduction. The prospects for an economic recovery, essential for alleviating poverty, are highly dependent on effective policy actions to restore confidence in the financial system and to counter falling international demand. While much of the responsibility for restoring global growth lies with policy makers in advanced economies, emerging and developing countries have a key role to play in improving the growth outlook, maintaining macroeconomic stability, and strengthening the international financial system.

The main messages in this chapter can be summarized as follows:

- The world faces the severest credit crunch and recession since the Great Depression. Developing countries' growth prospects and access to external financing are subject to unusually large downside risks.
- Though originating in advanced countries, the crisis is hitting developing countries hard.
- While transmission channels may differ, both emerging market and low-income countries will be severely impacted.
- Economic policy responses should be adapted to country circumstances: countries with strong fundamentals may have room for monetary and fiscal stimulus, while those in weaker macroeconomic positions and with limited access to external financing will have less room for policy maneuver; some may need to undertake fiscal consolidation.
- Advanced, emerging, and developing countries should take comprehensive action to resolve liquidity and solvency problems in the banking system and strengthen prudential supervision.
- Development aid must be increased to help countries cope with the crisis.
- It is crucial to maintain an open trade and exchange system.

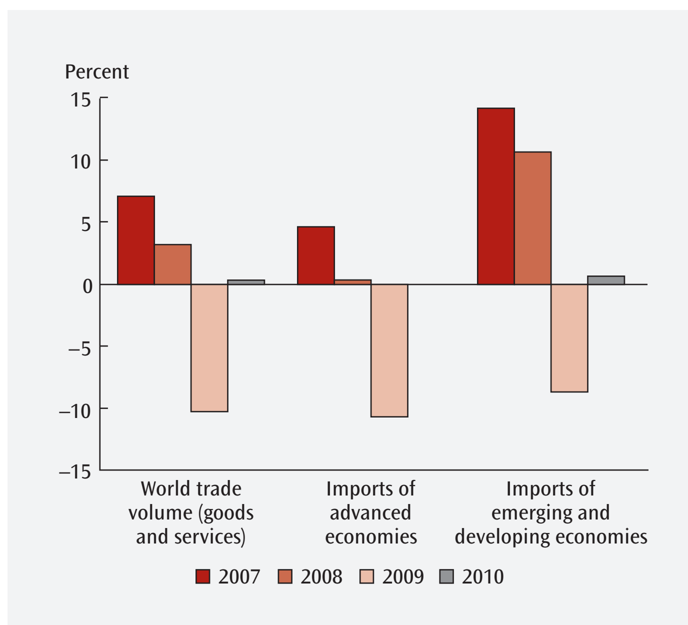
Emerging and Developing Countries and the Weakening Global Economic Environment

The global economic downturn is much deeper than expected, and the recovery will be gradual and uncertain. During the second

half of 2008, the global economy came to a halt: on an annualized basis, global GDP growth slowed to 2 percent after an average growth rate of 5 percent over 2003–07. International trade flows collapsed in the last quarter of 2008, with world exports projected to decline in 2009 for the first time since 1982 (figure 1.1). The contraction in economic activity is most sharply felt in advanced economies, which have decidedly entered the severest recession since the Great Depression, with consumer and investor confidence indicators at historic lows following the dramatic broadening of the confidence crisis in financial markets in October 2008. While bold actions by governments and central banks in advanced economies have helped to mitigate strains in the interbank money markets (box 1.1), they have been insufficient to address reduced access to private sector credit and wide interest spreads in advanced economies. While relatively strong balance sheets in the U.S. corporate sector and the western European household sector initially eased the drag from liquidity and credit strains in financial markets, advanced economies are now experiencing rapidly rising default rates, with a damaging feedback loop further undermining the solvency of the banking sector. As a result, advanced economies are expected to contract in 2009 by 3.8 percent, compared with 0.9 percent growth in 2008.

Emerging and developing countries are increasingly affected by the recession in advanced economies through trade and financial market channels; earlier expectations that these countries would be able to

FIGURE 1.1 World trade in goods and services



Source: IMF.

BOX 1.1 The financial crisis

Financial conditions will remain difficult in 2009 and could deteriorate further if the adverse feedback loop between the slowdown in the real economy and financial markets intensifies.

- Systemic financial risks again appear elevated and policy measures, although aggressive and unprecedented, have failed to restore confidence in banks. Bank equity prices and credit premiums reflect serious solvency concerns, and in the absence of private sector willingness to provide bank capital, the policy debate has shifted toward the form and degree of public intervention. Recent borrowings have been confined to those that bear government guarantees.
- Even with significant public capital injections, the pressure for banks in advanced economies to delever will remain high as loan losses continue to accumulate, limiting the supply of credit into 2010. Other sources of financing also appear limited in the short term, apart from those supported by government programs.
- Firms will be under increasing stress in 2009, as earnings deteriorate. Conditions will be especially difficult for firms with lower credit ratings, which will face significantly higher financing costs, if they can borrow at all.
- One risk is that an increase in the supply of government debt will lead to a rise in long-term rates, choking off demand for financing by creditworthy borrowers.

- There has been a structural reassessment of credit risk as a result of the crisis. The amount of financial leverage that markets are allowing will be reduced for a sustained period. In addition, counterparty risks that were once deemed trivial are now foremost in traders' minds, and this will be one factor contributing to keeping risk premiums elevated.

The widespread process of deleveraging and risk retrenchment is continuing to weaken a broad range of financial markets and institutions.

- Funding markets continue to be dominated by central bank operations and, despite measures to alleviate credit risk, residual counterparty concerns are limiting interbank activity.
- Cross-border bank financing has contracted sharply. This has placed significant pressure on some European banking systems reliant on cross-border flows to meet dollar refinancing needs, especially in emerging Europe.
- Securitization markets remain severely hampered but are being supported by government guarantees or asset purchases that are being extended to a widening range of securities.
- Institutional investors have faced significant redemptions from retail clients while hedge funds' assets under management have fallen substantially due to losses and redemptions, and their access to financing has declined markedly. These have led to a sharp unwinding of risk positions and falls in asset prices in both advanced and emerging economies.
- Declining asset prices are spreading strains to other nonbank financial institutions such as insurance companies and pension funds. Although liquidity pressures on such institutions are less than on banks and hedge funds, they may face solvency risks that force them into asset sales that further add to adverse feedback loops.

Market volatility has dropped from the levels of late 2008, but equity markets remain near multiyear lows and credit spreads near multiyear highs. In fact, corporate credit spreads have started to widen further, reflecting severe credit deterioration stemming from the global economic downturn.

- Coordinated interventions and swap arrangements by global central banks have eased short-term liquidity conditions and offshore dollar shortages, but conditions have not normalized and liquidity remains very limited at longer maturities.
- Asset purchase programs have led to some tightening of spreads in several markets (for instance, U.S. agency securities, commercial paper, and consumer asset-backed securities), but spreads are rising further for corporate debt and commercial mortgages for which no government support is in place, and reflect a serious decline in credit quality and a rise in defaults stemming from the global economic downturn.

Emerging markets are coming under serious pressure from the global credit and economic crisis, particularly in emerging Europe.

- Emerging market financing costs remain significantly higher than precrisis levels, and bond issuance, which was extremely low in the fourth quarter of 2008, has recovered only marginally, largely confined to higher-quality borrowers. Emerging market corporates are facing extremely serious financing constraints, and some will almost certainly be unable to meet rollover needs.

Advanced economy banks undergoing severe pressures to shrink balance sheets are likely to scale back lending to emerging markets, particularly in Europe. Local banks, facing their own pressures to deleverage, will be hard-pressed to substitute for the drop in financing of corporate clients from international banks and credit markets.

"decouple" and weather the storm through rising domestic demand have turned out to be overly optimistic. With contracting world trade, slowing domestic demand, and sharply reduced access to external financing, emerging market growth is expected to decline sharply to 1.5 percent in 2009, from 6.1 percent in 2008, which would be the weakest growth rate since the 1990s. In general, low-income countries have been less affected by the financial contagion, but slowing exports and deteriorating terms of trade for commodity exporters will increasingly hit growth prospects in 2009: growth in Sub-Saharan Africa, for instance, will drop to 1.7 percent, from 5.5 percent in 2008.

Commodity and food prices have come down considerably from their peaks in mid-2008 (figure 1.2), reflecting the sharp downturn in global demand for nonfood commodities,[1] the resolution of weather-related supply disruptions in agriculture, and the removal of export restrictions on food products. Overall, however, commodity and food prices are projected to rise again once global growth picks up, because demand pressures from rapidly industrializing emerging economies will continue to have their effects on world markets.

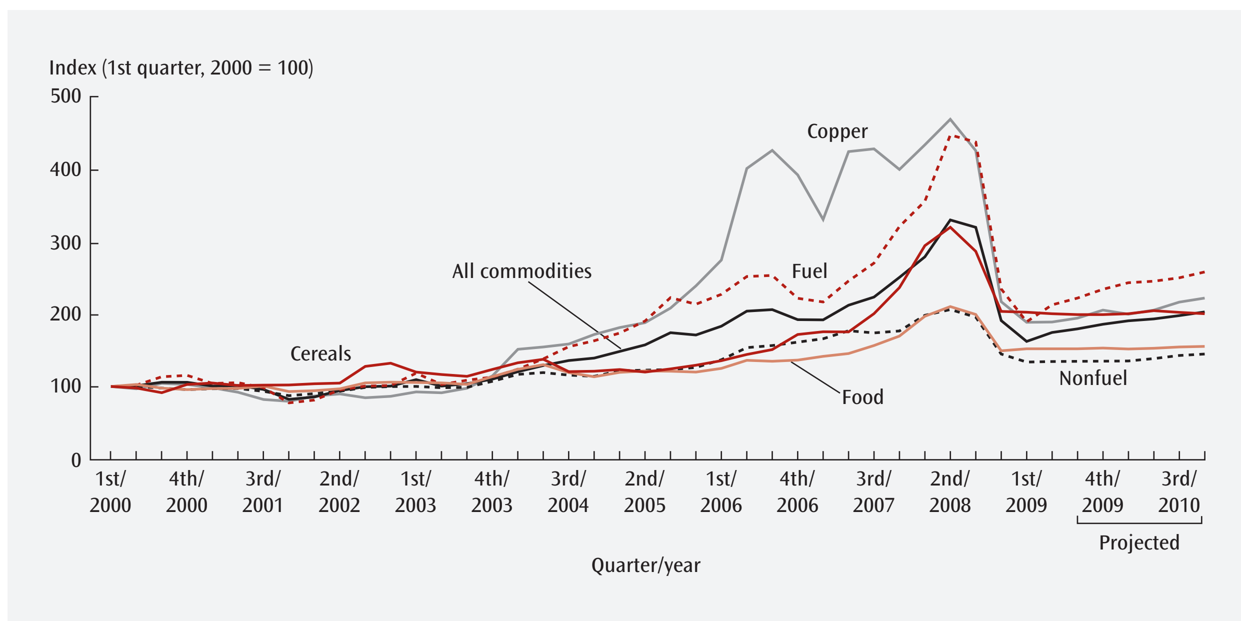
Headline inflation rates have come down from their peaks in mid-2008 as the sharp drop in economic activity and the declines in commodity prices affect consumer prices. In the advanced economies, headline inflation receded to around 3.5 percent in December 2008 (12-month rate), down from 4.5 percent in mid-2008. With rapidly rising unemployment and output gaps, risks of deflation have become a concern in some countries. Developments in emerging and developing countries show a mixed picture. While inflation has declined in most countries, price pressures in some countries remain strong, reflecting price stickiness in markets for food products and the lagged effects of rising wages and input cost.

A gradual recovery will not become visible before the end of 2009: with advanced economies in recession and growth in emerging and developing economies rapidly declining, the April 2009 World Economic Outlook (WEO) projects a contraction of global output by 1.3 percent in 2009, compared with 3.2 percent growth in 2008 (table 1.1). This baseline scenario, however, is subject to unusually large downward risks, because weakening confidence and continuing solvency problems in the financial sector may cause a longer and deeper contraction of global economic activity than currently projected.

Financial Turmoil Spreading to Emerging Markets

The financial market turmoil is spreading to emerging markets, but thus far low-income countries have been less affected by the financial contagion. Weakening global

FIGURE 1.2 Commodity price indexes



Source: IMF.
Note: Indexes are in U.S. dollars.

TABLE 1.1 Summary of world output
annual percent change

	2002	2003	2004	2005	2006	2007	2008	Projections 2009	Projections 2010
World Output	**2.8**	**3.6**	**4.9**	**4.5**	**5.1**	**5.2**	**3.2**	**–1.3**	**1.9**
Advanced Economies	**1.6**	**1.9**	**3.2**	**2.6**	**3.0**	**2.7**	**0.9**	**–3.8**	**0.0**
of which									
United States	1.6	2.5	3.6	2.9	2.8	2.0	1.1	–2.8	0.0
Euro Area	0.9	0.8	2.2	1.7	2.9	2.7	0.9	–4.2	–0.4
Japan	0.3	1.4	2.7	1.9	2.0	2.4	–0.6	–6.2	0.5
Canada	2.9	1.9	3.1	2.9	3.1	2.7	0.5	–2.5	1.2
United Kingdom	2.1	2.8	2.8	2.1	2.8	3.0	0.7	–4.1	–0.4
Other advanced countries	3.9	2.5	4.8	4.0	4.6	4.7	1.6	–4.1	0.6
Emerging markets and developing countries	**4.8**	**6.3**	**7.5**	**7.1**	**8.0**	**8.3**	**6.1**	**1.6**	**4.0**
Emerging markets	4.6	6.3	7.5	7.1	8.0	8.3	6.1	1.5	3.9
Other developing countries	7.5	6.2	7.4	7.6	8.2	8.3	6.5	3.2	4.7
Africa	6.5	5.7	6.7	5.8	6.1	6.2	5.7	2.0	3.9
of which									
Sub-Saharan Africa	7.3	5.4	7.1	6.2	6.6	6.9	5.5	1.7	3.8
Central and Eastern Europe	4.4	4.9	7.3	6.0	6.6	5.4	2.9	–3.7	0.8
Commonwealth of Independent States	5.2	7.8	8.2	6.7	8.4	8.6	5.5	–5.1	1.2
Developing Asia	6.9	8.2	8.6	9.0	9.8	10.6	7.7	4.8	6.1
South Asia	4.4	6.5	7.6	8.7	9.1	8.7	7.0	4.3	5.3
East Asia	7.9	8.8	9.0	9.2	10.1	11.4	8.0	5.1	6.4
Middle East	3.8	7.0	6.0	5.8	5.7	6.3	5.9	2.5	3.5
Western Hemisphere	0.6	2.2	6.0	4.7	5.7	5.7	4.2	–1.5	1.6
Memorandum items:									
China	*9.1*	*10.0*	*10.1*	*10.4*	*11.6*	*13.0*	*9.0*	*6.5*	*7.5*
India	*4.6*	*6.9*	*7.9*	*9.2*	*9.8*	*9.3*	*7.3*	*4.5*	*5.6*

Source: IMF.

growth prospects, the financial deleveraging process in advanced economies, and the unintended effects of some of the recent policy measures taken by advanced economy governments have severely affected emerging economies in recent months.

Banks and investors in advanced economies have sharply reduced their exposure to emerging markets and developing countries. The global repricing of risk and the deleveraging process in advanced economies have led to sharp drops in the availability of funding for sovereigns and corporations and steep increases in interest margins. While external financing conditions remained relatively stable through most of 2008, especially in comparison with previous crises, market access for emerging and developing countries virtually collapsed in October 2008 with the intensification of the turmoil

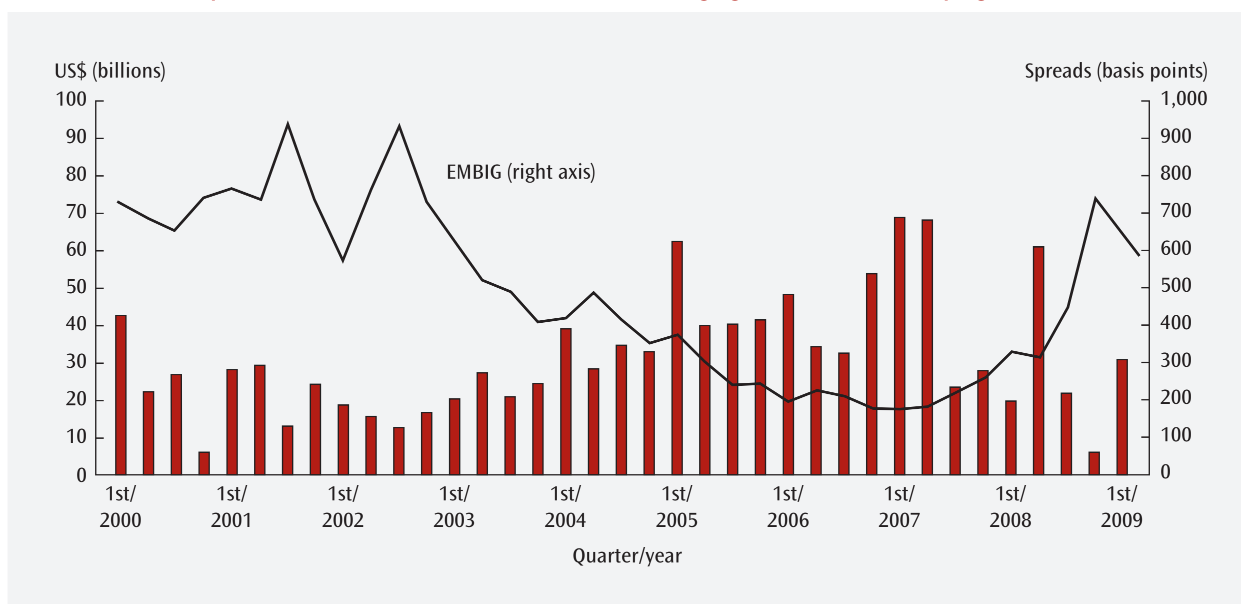
in advanced economies: the Emerging Markets Bond Index Global (EMBIG) sovereign spread jumped by around 200 basis points in October 2008 and remains well above the levels seen in 2007 (figure 1.3). Most affected are countries with large current account deficits and countries in which the banking sector relies heavily on foreign funding, such as emerging Europe. Countries with solid external and fiscal positions, such as Brazil, have seen increases in spreads as well but by much less than in the more vulnerable countries.

Corporate sectors in emerging and developing countries are particularly hard hit by increasing funding problems and, in some cases, foreign exchange losses. While some recovery of access for sovereign borrowers has become visible since early 2009, funding conditions for the corporate sector remain extremely difficult, especially in light of high refinancing needs this year. In addition, exporters and other firms in several countries have taken substantial open currency positions against the U.S. dollar. Many of these positions have given rise to liquidity and solvency problems in the nonfinancial sector following the appreciation of the U.S. dollar in the second half of 2008. Many companies have high refinancing needs in 2009 that may be hard to meet in the current environment.

The pernicious effects of reduced access to external financing are exacerbated by the sharp tightening in domestic credit conditions; banks are hoarding cash because of increasing concerns about counterparty risks. Overall, banking systems in emerging and developing countries are not facing the solvency problems affecting banks in advanced economies, but vulnerabilities are rising, especially for those banks dependent on foreign funding in the wholesale markets.

Policy measures in advanced economies aimed at stabilizing the financial sector may have had the unintended effect of contributing to the weakness in emerging markets. There are indications that the enhancement of deposit insurance schemes and government actions to strengthen financial institutions' capital, aimed at restoring confidence in advanced economies, have had the side

FIGURE 1.3 Bond spreads and issues of international bonds in emerging markets and developing countries



Source: Dealogic; Bloomberg.

effect of generating a flight to banks benefiting from state guarantees.

It is expected that the full effect of reduced market access will become visible in deteriorating capital account balances in 2009, and the risks are firmly on the downside. For the year 2008 as a whole, private financial flows to emerging markets declined by about 2 percentage points of GDP in comparison with 2007, while flows to other developing countries continued to rise (table 1.2). As the deleveraging process in advanced economies

TABLE 1.2 Net capital flows
% of GDP

	Average 1991–2001	2002	2003	2004	2005	2006	2007	2008	2009
Emerging market economies	**7.1**	**6.4**	**7.9**	**7.5**	**8.6**	**9.0**	**10.8**	**8.4**	**3.8**
Private capital flows, net	3.5	2.4	4.1	4.0	5.5	5.7	7.3	4.9	–0.6
of which									
private direct investment	2.6	3.0	2.6	3.3	3.5	4.5	4.3	3.8	2.4
private portfolio flows	0.5	–0.1	0.1	0.7	0.7	0.7	0.8	–0.8	–0.6
Private current transfers	2.2	3.1	3.4	3.5	3.5	3.5	3.4	3.2	2.9
Official capital flows and transfers (net)	1.3	1.0	0.3	0.0	–0.4	–0.3	0.1	0.3	1.4
Memorandum item:									
Reserve assets	*–1.4*	*–1.1*	*–3.3*	*–2.5*	*–3.0*	*–4.1*	*–4.3*	*–1.8*	*1.3*
Other developing countries[a]	**13.7**	**14.4**	**14.9**	**14.2**	**17.0**	**15.6**	**16.8**	**18.3**	**16.2**
Private capital flows, net	2.6	2.7	3.0	2.2	3.6	3.5	5.1	6.8	4.9
of which									
private direct investment	3.0	4.0	4.6	4.4	4.5	5.6	6.0	5.7	5.2
private portfolio flows	0.1	0.1	–0.2	–0.2	–0.1	0.0	–0.1	–0.1	–0.2
Private current transfers	3.3	4.3	4.9	5.7	6.2	6.0	5.9	5.8	5.3
Official capital flows and transfers (net)	7.8	7.4	6.9	6.3	7.2	6.2	5.9	5.7	6.0
Memorandum item:									
Reserve assets	*–1.1*	*–1.6*	*–1.4*	*–1.8*	*–2.5*	*–4.1*	*–3.9*	*–2.3*	*0.4*
Memorandum items (US$ billions):									
Private capital flows, net	*112*	*94*	*171*	*257*	*312*	*280*	*647*	*307*	*–82*
of which									
private direct investment:	*106*	*152*	*142*	*186*	*231*	*238*	*392*	*467*	*311*
private portfolio flows	*33*	*–22*	*27*	*63*	*60*	*–7*	*136*	*–55*	*–136*
liabilities to foreign banks	*5*	*–16*	*23*	*32*	*25*	*73*	*190*	*177*	*142*
Private current transfers	*60*	*106*	*135*	*156*	*187*	*217*	*250*	*279*	*262*
Total net private financial flows including current transfers	*172*	*200*	*306*	*413*	*499*	*497*	*898*	*586*	*180*

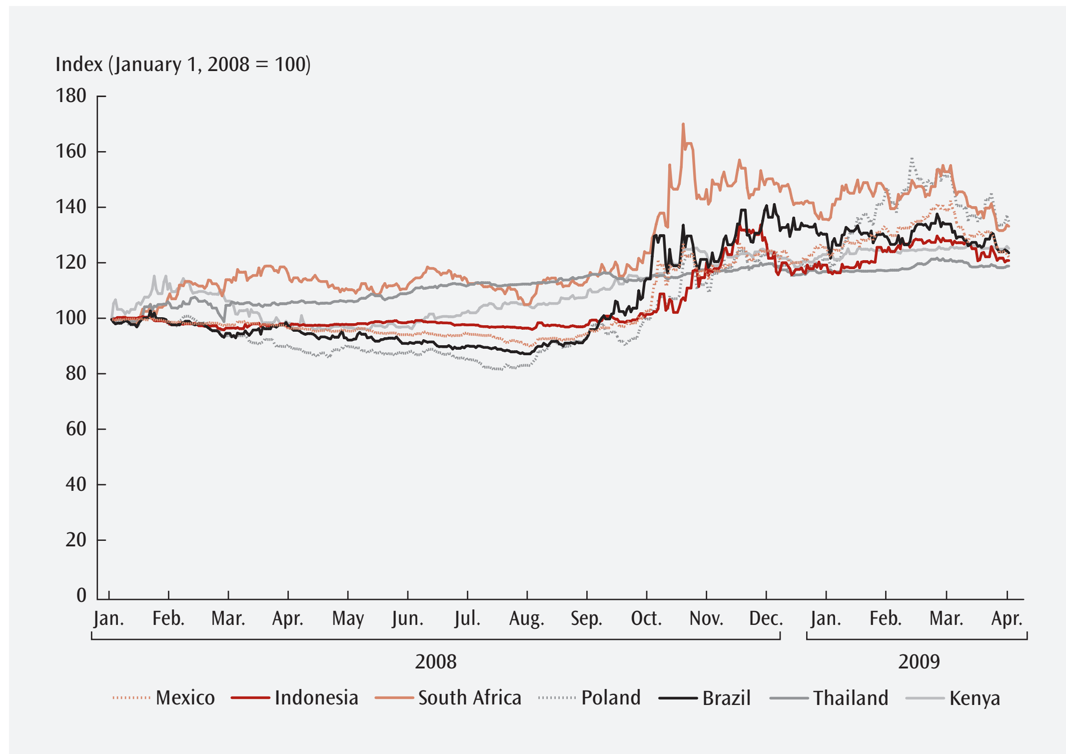
Source: IMF.
Note: Percentage numbers represent unweighted averages.
a. Includes fragile states, but excludes Timor-Leste, Zimbabwe, Sierra Leone, Liberia, and the Solomon Islands.

is continuing and as private investment plans are being scaled back, all groups of countries will be faced with sharply reduced syndicated bank lending, portfolio flows, and foreign direct investment this year.

Emerging market currencies have seen sharp declines in recent months (figure 1.4), while some other countries have lost large amounts of reserves in attempts to stabilize exchange rates. Countries with highly liquid markets that in the past experienced short-term capital inflows from carry trades, such as Brazil and South Africa, and countries with external vulnerabilities have been hit hardest (most recently in eastern Europe). Market volatilities have risen to levels not seen after the Asian crisis of the 1990s, a reflection in some cases of extremely illiquid and dysfunctional market conditions (box 1.2).

Financial systems in low-income countries are less affected by the turmoil in advanced economies, although financial sector vulnerabilities are rising as a result of weakening domestic economic activity. Domestic banks in low-income countries usually fund their lending activities in relatively stable domestic savings markets and often have ample liquidity reserves parked at the central bank. Domestic interbank money markets and derivatives markets are in general small or nonexistent, while capital controls and the limited size of other financial markets (such as treasury bill markets) have often limited participation by foreign market operators. Credit markets have therefore not witnessed the instabilities seen in some advanced economies, although foreign parent banks have withdrawn capital from subsidiaries in some countries, stock markets have dropped sharply, and nonperforming loan portfolios may rise if economic activity weakens further. Some low-income countries have shown signals of sagging confidence in the banking system, but this appears to be

FIGURE 1.4 Daily spot exchange rates, national currency per U.S. dollar



Source: Bloomberg.

BOX 1.2 Increasing exchange rate volatility and the financial market crisis

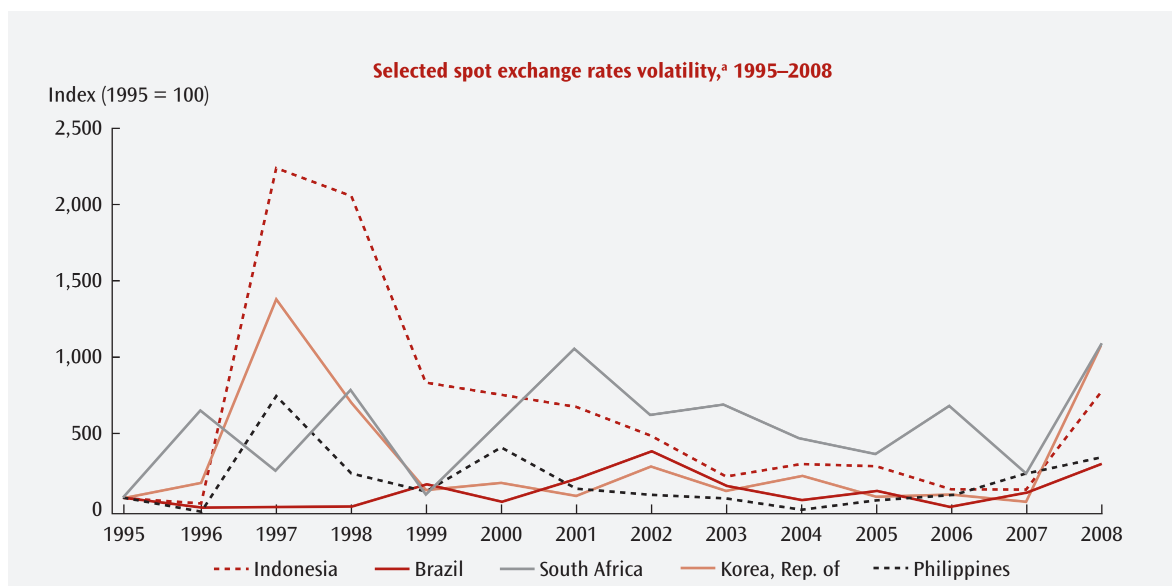
Following several years of relatively stable currency market developments, exchange rate volatility in some emerging and developing countries has increased recently, approaching levels not seen since the Asian crisis of the 1990s. As measured by the normalized standard deviation of daily exchange rates, volatility of the Indonesian rupee, for instance, increased almost fivefold in 2008 in comparison with 2007.

Several factors may explain this phenomenon. Perceptions of increased external vulnerabilities in an environment of slowing global growth and weakening commodity prices certainly play a role. Technical market factors related to the financial crisis in advanced economies may have an impact as well.

First, the overall risk budget of international banks acting as market makers on emerging market currencies has been shrunk, because banks have generally scaled down their risk appetite and lowered their stop-loss thresholds across trading books. Some large market makers, including Lehman Brothers and Bear Stearns, have also withdrawn from the market. The recent bank mergers have also in general resulted in lower aggregated risk budgets, because banks taking over usually slim down the risk budget of the entity taken over.

Another factor that might have depressed market makers' trading turnover, and therefore their cushioning impact on daily volatility, is the U.S. dollar liquidity squeeze on offshore markets. Although a large part of the turnover does not result in overnight exposure, all positions taken beyond the horizon of a trading session involve the need to access some overnight (or longer-term) funding. In principle higher funding costs should simply affect forward rates. But this assumes that funding is available without restriction. In the current circumstances, however, some individual banks have been deprived of any access to U.S. dollar lending from their correspondent banks. This disruption has been mitigated by the recent swap arrangements between the Federal Reserve and Brazil, the Republic of Korea, Mexico, and Singapore. In the context of a dollar funding squeeze, most emerging market currency trading is affected, because most emerging market currencies are traded against the U.S. dollar. It is also likely that foreign exchange activities on emerging market currencies involving some U.S. dollar funding needs have been curtailed to lower the overall funding needs of market makers. Investment banks, which were among the main liquidity providers on the foreign exchange market, have been hit very hard because of their lack of a deposit base and reliance on the interbank market. In this context, the higher volatility could be the consequence of the withdrawal of key market makers, resulting in a smaller cushion of risk capital available in the market to absorb the price impact of the normal commercial order book.

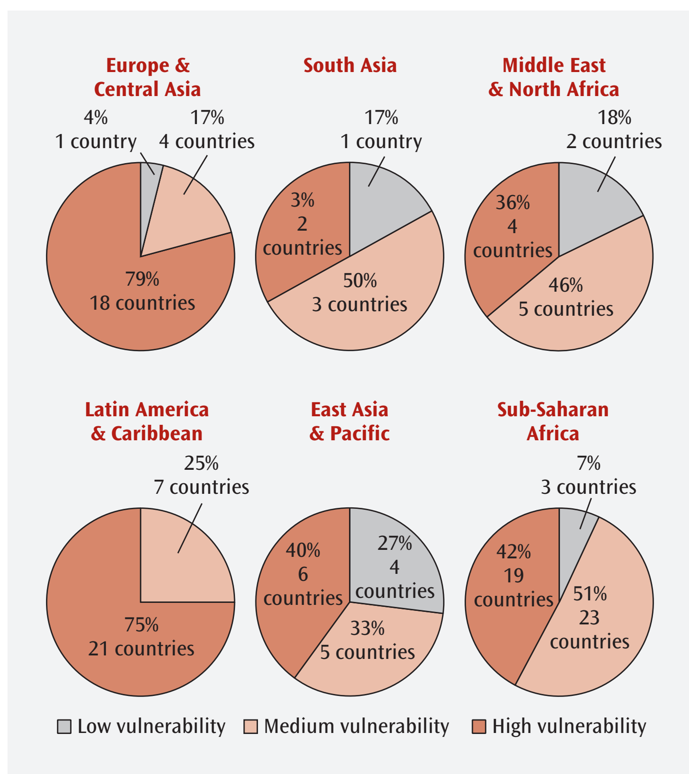
Selected spot exchange rates volatility,[a] 1995–2008



Source: Bloomberg and IMF staff calculations.

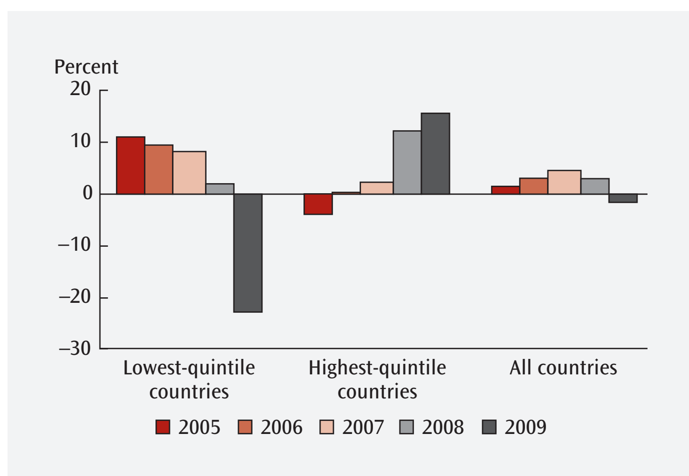
a. Volatility is calculated as the index of the annual coefficients of variation (standard deviation/mean) of daily spot exchange rates.

FIGURE 1.5 Vulnerabilities in emerging and developing countries



Source: IMF.
Note: Vulnerabilities are measured on the basis of developments in exports, foreign direct investment, remittances flows, external debt ratios (emerging markets), and aid flows (low-income countries). For a detailed explanation of the methodology, see IMF 2009.

FIGURE 1.6 Terms-of-trade changes per quintile group



Source: IMF.
Note: Quintile groups are based on the average of terms-of-trade changes in 2007–08 and 2008–09.

related to domestic factors rather than the international crisis.

Increasing Vulnerabilities in Emerging and Developing Countries

The confluence of weak economic activity, sharp swings in commodity prices, and financial market instability is causing increasing vulnerabilities in emerging and developing countries. The sharp downturn in advanced economies and the fluctuations in commodity prices are affecting current account and fiscal balances in emerging and developing economies. Countries that entered the global crisis with weak macroeconomic fundamentals are most severely hit, but other countries are affected as well (figure 1.5). Several factors are contributing to increased vulnerabilities.

Recent movements in commodity prices are having strong—and often divergent—effects on emerging and developing countries' terms of trade. Notwithstanding the sharp movements in commodity prices, the terms of trade for emerging and developing countries as a group have not changed much in recent years, but these averages conceal sharp contrasts dependent on countries' composition of imports and exports (figure 1.6). While commodity-importing emerging markets with large manufacturing industries and net fuel importers are benefiting from lower commodity input prices, countries highly dependent on exports of fuels, metals, and some other commodities are experiencing a weakening of their terms of trade.

Reflecting rising unemployment and weak earnings growth among migrant workers in advanced economies, remittance flows to developing countries began to slow down in the third quarter of 2008. Although in U.S. dollar terms they are still up for 2008 as a whole, overall flows are projected to fall by 5 percent to 8 percent in 2009 (table 1.3). Migration from developing countries may slow as a result of the global growth downturn, but the number of foreign workers living in destination countries is unlikely to

TABLE 1.3 Inflows of international remittances[a]
US$ (billions)

	Annual average 1992–2002	2003	2004	2005	2006	2007	2008[b]	2009[c]	2010[c]
Emerging market economies	56.8	114.4	128.0	153.5	179.1	218.9	240.5	229.1	227.5
Other developing countries	16.8	27.5	33.8	39.2	47.3	59.2	62.0	58.1	66.0
Fragile states	1.2	2.7	3.1	2.7	3.1	4.1	4.3	4.2	5.2

Source: World Bank remittances data.
a. Remittances include workers' remittances, compensation of employees, and migrant transfers.
b. Estimate.
c. Base case scenario forecast.

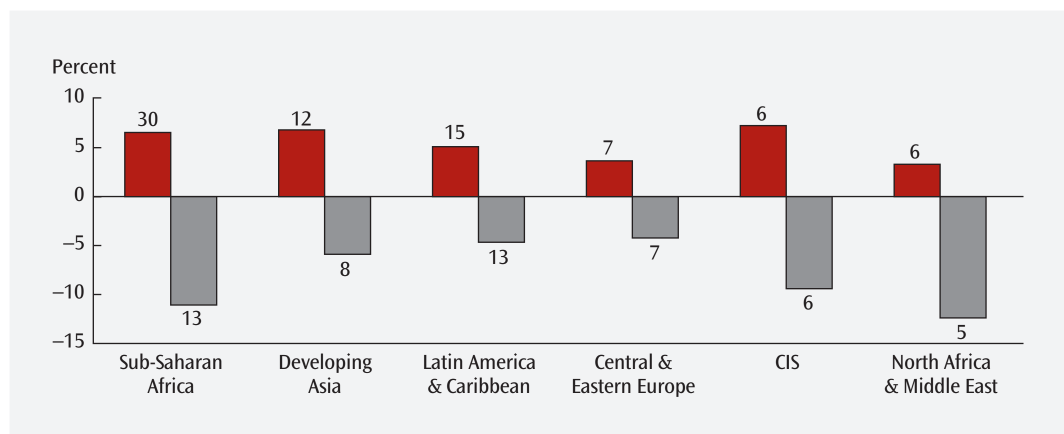
decrease. Countries in Latin America, the Middle East and North Africa, and South Asia that rely on remttance flows are most affected.[2]

Per capita income adjusted for terms of trade will decline in 2009 in a number of countries (figure 1.7). As a group, Sub-Saharan African countries are particularly affected: 13 countries will experience decline in per capita income in 2009 on the order of 11 percent on average. The situation is comparable in North Africa and the Middle East, but other regions are less affected.

Official transfers are expected to either remain broadly unchanged or decline in 2009, at a time when the flow of private capital is slowing rapidly (figure 1.8). On current trends, official aid will not play a countercyclical role in developing countries as it should. To prevent a reversal of years of development progress, official aid should be increased substantially in 2009 and later years.

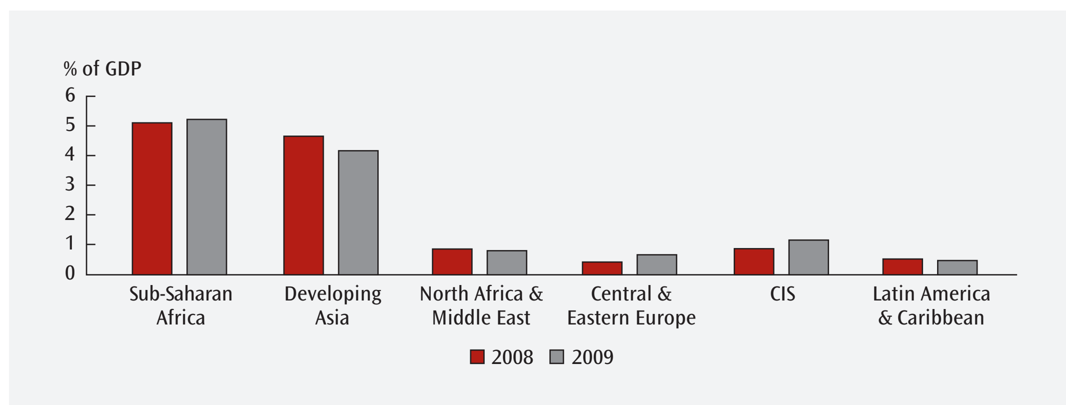
As a result of these factors, weak export markets, and the divergent terms-of-trade effects of recent commodity price declines,

FIGURE 1.7 Real 2009 per capita growth rate adjusted for terms-of-trade changes



Source: IMF.
Note: Simple average percentage change for developing country regional groups.

FIGURE 1.8 Official current transfers, 2008–09

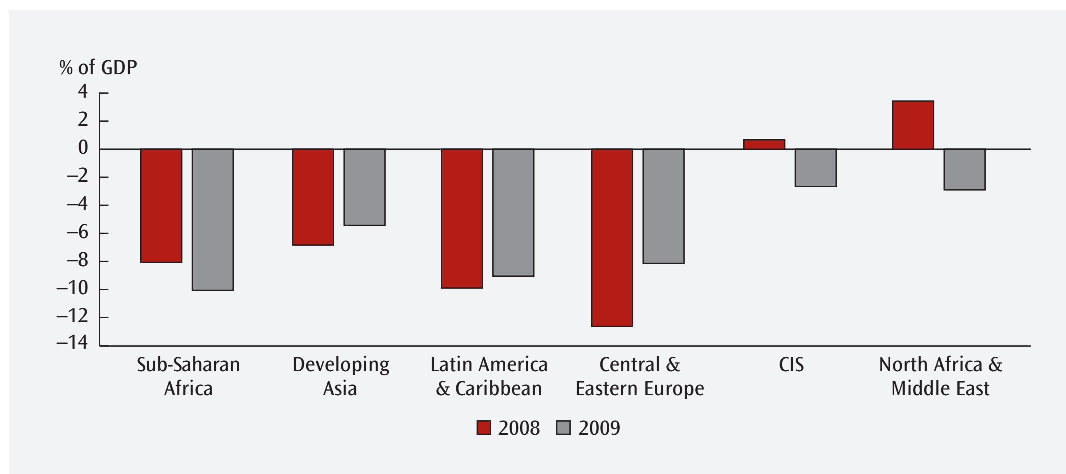


Source: IMF.

the current accounts of many emerging and developing countries are deteriorating. Oil exporters in the Middle East and North Africa are hardest hit, with a weakening in current account balances by 6 percentage points of GDP in 2009, followed by Europe and the Commonwealth of Independent States (CIS) of about 3.5 percentage points (figure 1.9). In other regions, the net balance-of-payments effects are projected to remain limited, although some countries are strongly affected: 14 countries are projected to see a deterioration in the current balance of more than 10 percent of GDP. Overall, more than half of the emerging and developing countries can expect a weakening of current account balances in 2009.

The sharp declines in capital flows to emerging and developing countries will exacerbate the strains and vulnerabilities caused by deteriorating current accounts. Many countries will find themselves in situations where it will be impossible to square the circle of deteriorating current account balances, reversing capital flows, and declining aid. As a result, following years of steady

FIGURE 1.9 Current account balances, 2008–09



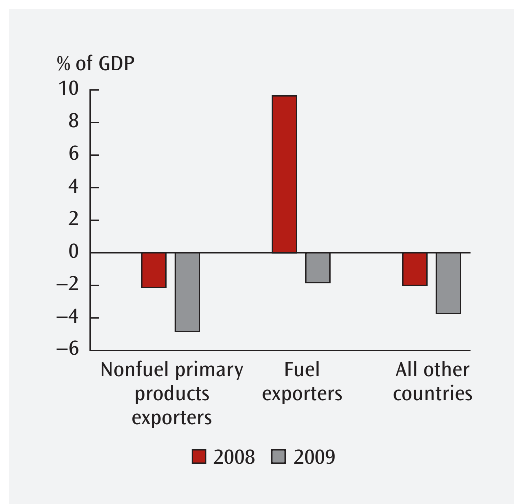
Source: IMF.

reserve accumulation, many countries will experience steep declines in foreign exchange reserves in 2009, especially in Europe and Sub-Saharan Africa, and the risks of debt defaults are rising.

Overall, fiscal positions in emerging and developing countries are weakening in 2009. Several factors are contributing to this outcome, including slowing domestic revenue growth, increased spending on social programs in response to the crisis, and deteriorating terms of trade in commodity exporters (figure 1.10). Fuel-exporting economies are hardest hit, with an average deterioration in the overall government balance of just over 10 percentage points in 2009, but they are often well positioned to mitigate the domestic effects. Overall, fiscal balances in nonfuel commodity exporters will deteriorate as well, but less than in fuel exporters, because sources of government revenue in nonfuel commodity producers are often more diversified.

The rise in demand for raw materials from emerging markets in recent years and supply bottlenecks have led to marked increases in price volatility for a number of commodities, complicating macroeconomic and fiscal management in countries highly dependent on commodity exports (box 1.3).

FIGURE 1.10 Government balances, 2008–09



Source: IMF.

Macroeconomic and Social Policy Choices in Emerging and Developing Countries

Emerging and developing countries are facing difficult macroeconomic policy choices in the current environment. Because economic circumstances and developments differ from country to country, the optimal policy responses are not uniform across emerging and developing countries. The World Bank and the International Monetary Fund (IMF) stand ready to assist countries in addressing these policy challenges.[3]

Macroeconomic Policies

Macroeconomic policies should be adapted to the specific circumstances of countries. The most pressing need is to address in a comprehensive way the continuing confidence crisis in financial markets and stop its fallout in the real economy. Although this is primarily a responsibility of policy makers in advanced economies, the authorities in emerging and developing countries have a key role to play in restoring confidence and preventing a more serious downturn in global economic activity. In particular, they should adapt economic policies to support economic growth while keeping inflation under control; strengthen the liquidity of the banking system; ensure that an efficient framework is in place allowing the prompt resolution of liquidity and solvency problems, especially for systemically important financial institutions; clarify to what extent further strengthening of domestic prudential supervision and market regulation is needed to set their domestic financial systems on a firm footing; and dress up contingency plans to deal with sudden stops in capital flows and shocks in the domestic banking system. These issues are discussed in more detail in the next section.

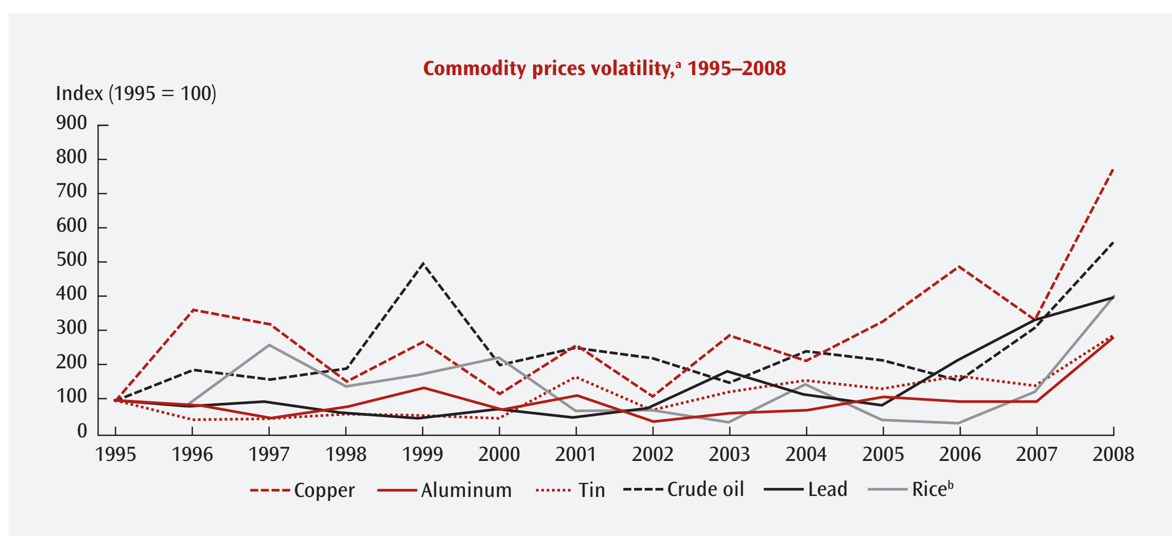
In most emerging and developing countries, the balance of risks has firmly shifted from inflation to financial instability and deteriorating growth prospects. In light of this, several countries, especially emerging markets, have taken steps to stimulate economic

BOX 1.3 Commodity exporters: how to deal with increased price volatility?

The past year has witnessed significant increases in market volatility in emerging and developing countries. As a result of the deleveraging process in advanced economies and concerns about growth prospects and vulnerabilities, emerging market currencies have shown wide swings since October 2008. In many commodity-exporting countries, the macroeconomic policy challenges posed by currency instability are compounded by increased volatility in U.S. dollar prices for commodities. The chart below shows that price volatility (as measured by the normalized standard deviation of daily prices) jumped in 2008 for several key commodities. For example, the standard deviation of rice prices in 2008 more than tripled in comparison with 2007, and medium-term price projections are more uncertain than usual.

Because many of the underlying causes of higher volatility are still at work, volatility could remain elevated in the coming years. In the commodity markets, supply constraints and short-term demand inelasticities may cause new price fluctuations once global demand picks up.

Commodity prices volatility,[a] 1995–2008



Source: Bloomberg and IMF staff calculations.
a. Volatility is calculated as the index of the annual coefficients of variation (standard deviation/mean) of daily commodity prices.
b. Due to the lack of data for rice, calculations use monthly commodity prices (for rice, the index is 1996 = 100).

The increased uncertainties surrounding commodity prices have implications for fiscal policy formulation and the size of foreign exchange reserves in countries highly dependent on revenue from commodity exports. In principle, a commodity exporter will maximize its social welfare if primary government spending is based on an estimate of "permanent income" derived from the exploitation of commodity wealth.[a] The practical implementation of this principle, however, is not straightforward because of the many uncertainties related to, among other things, long-term price projections, extraction costs, and estimates of the volume of exploitable commodity reserves. In many commodity-exporting countries, therefore, governments have based their fiscal policies on price projections linked to actual spot prices, or to a combination of spot and forward market prices, which may lead to sizable over- or underspending in relation to permanent income. In addition, intra-annual price fluctuations may lead to the need for sizable unexpected adjustments in government spending and borrowing, with negative effects on macroeconomic stability and the poverty reduction effort. To avoid this type of stop-and-go policy, relatively simple rules of thumb have been proposed to smooth primary government spending over time based on conservative price projections.[b] In a recent IMF working paper on Nigeria, Bartsch (2006) proposes to base annual government spending on moving averages of past oil prices in combination with a stabilization fund that

is fed in good times and used as a source of financing for government spending in times of low prices. Building on this approach, the following conclusions can be drawn:

- The recent increase in price volatility strengthens the case for establishing stabilization funds in countries highly dependent on commodity exports. To accumulate assets in such a fund, governments would initially need to base fiscal policy on a prudent, relatively low projection of export prices. As assets grow to the targeted level, the export price projection could move closer to a path linked to a moving average. Simulation results for Nigeria show that with a three-year moving average price, a stabilization fund asset level of about 75 percent of 2004 government revenue from oil production would reduce the probability of a forced adjustment of government spending to below 20 percent.
- The optimal size of a stabilization fund is sensitive to export price variability. In light of the higher volatility seen in recent years, countries with a stabilization fund should consider an increase in its average size to deal with potentially larger revenue shortfalls in the future.
- The timing of the buildup or increase of the stabilization fund should be consistent with macroeconomic policies: to avoid procyclical polices, the shift to larger buffers should take place during periods of rising commodity prices and economic growth and not during periods of distress.
- Commodity exporters should consider a more extensive use of the forward markets and long-term contracts to reduce short-term price risks. The liquidity of forward markets for major fuel and nonfuel commodities has grown considerably over the past decade, especially for crude oil (with hedging possible for periods up to seven years) and precious metals, but also for some base metals and agricultural commodities.[c]

Higher price volatility also has implications for the optimal size of foreign exchange reserves.[d] Sharp fluctuations in export prices will affect not only the central government but also the broader economy, with potentially large effects in terms of lost output. Foreign exchange reserves allow the monetary authorities to smooth the effects of export price fluctuations on the economy similar to the role of stabilization funds in smoothing government spending; optimal reserves levels will be higher if export prices fluctuate more sharply. On the basis of a two-good model, Drummond and Dhasmana (2008) concluded that foreign exchange reserves in almost one-half of 44 commodity-exporting countries in Sub-Saharan Africa faced with large terms-of-trade shocks were, on average, roughly one-third below optimal levels at the end of 2007. The recent increases in commodity price fluctuations, therefore, have underlined the need to strengthen foreign exchange reserves in many countries.

a. The optimal noncommodity primary budget deficit is equivalent to the sum of the projected permanent income stream from extraction and the income from foreign assets acquired from the receipts of commodity exports. For a discussion of the permanent income approach, see Davis, Ossowsky and Fedelino (2003).
b. See, for instance, box 1.4 in the *Global Monitoring Report 2008*.
c. See also The World Bank 2008, chapter 3.
d. As foreign exchange reserves constitute self insurance against various external shocks to the economy, their optimal size is determined by factors such as terms-of-trade fluctations; unexpected changes in the volumes of exports and imports; sudden reversals in capital flows and official aid; and developments in remittances, etc.

activity through expansionary monetary and fiscal policies this year, and further stimulus may be needed in 2010. Notwithstanding the deterioration in financial market conditions since October 2008, a number of economies with rapidly declining inflation, sustainable fiscal balances, strong international reserve positions, and limited external vulnerabilities have scope for monetary easing and discretionary fiscal policies to support domestic demand. Fiscal measures should be selected in a way that allows a gradual withdrawal of stimulus once domestic activity picks up. Temporary tax measures or quick-disbursing public expenditure of a nonrecurrent nature that can be relatively quickly reversed (such as increased spending on infrastructure maintenance) would therefore be preferable to measures leading to sizable future liabilities that may eventually undermine fiscal sustainability (such as large increases in the public wage bill through new hires or pay awards).

Countries facing unsustainable fiscal and current account deficits, reduced access to

international financing, and vulnerable external debt positions have no choice but to give priority to improving the fiscal and external accounts, while seeking to mitigate negative effects on domestic growth prospects. The optimal policy mix in these cases will depend on the circumstances but could include tighter monetary policy and fiscal deficit reduction, accompanied by a depreciation of the exchange rate to support economic growth and external viability. Increasing fiscal constraints heighten the need for improved expenditure management to protect core spending, including infrastructure spending for growth and better social safety nets.

Many countries with sound macroeconomic fundamentals may also be better off continuing a medium-term policy aimed at maintaining stable economic conditions, even if they are facing slowing domestic and external demand. Notwithstanding good policies, many governments, especially in low-income countries, face external financing constraints limiting the scope for using monetary and fiscal instruments to stimulate domestic demand. While the quality of fiscal policies in most low-income countries has improved somewhat in recent years (box 1.4), many lack the administrative capacity to implement a successful domestic demand management policy, because economic data are insufficiently comprehensive and up-to-date to assess accurately the most recent developments in economic activity. Governments in these countries often do not have the capacity or sufficient policy credibility to implement effective short-term stimulus measures that can be easily reversed. In these circumstances, policies that give priority to maintaining fiscal and debt sustainability while allowing automatic stabilizers to work are likely to have more positive growth effects than short-term stimulus measures.

Support from the International Community

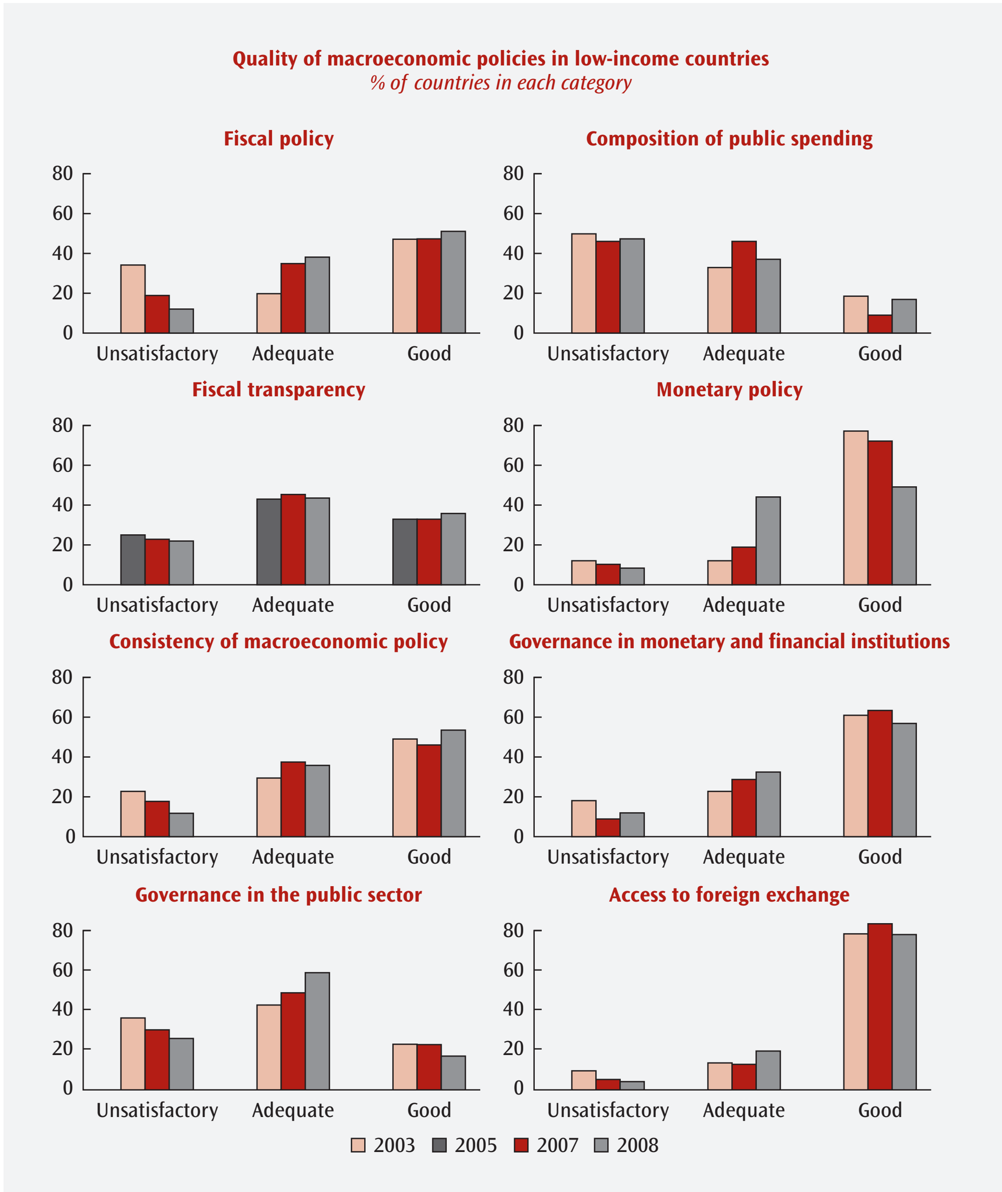
The international community must act decisively to support low-income countries. Most low-income countries, will not be able to address the effects of the international crisis through adjustment alone without laying unacceptable burdens on the poorest in society. While adjustment to the realities of contracting world trade and the sharp declines in financial flows may be unavoidable, donor countries must step up their efforts to help developing countries mitigate the effects on the poor and protect spending critical for future growth, such as on essential infrastructure. On current indications, total foreign exchange receipts by low-income countries will drop sharply in 2009 (box 1.5), causing an additional financing need of at least $25 billion,[4] which may increase significantly if the downside risks to the growth projections materialize. This underscores the urgency of increasing official development aid.

The Importance of an Open International Trade and Exchange System

Maintaining an open international trade and exchange system remains crucial. In 2008 many countries responded to the food crisis by imposing export restrictions.[5] These restrictions aggravated the sharp increases in world market food prices in 2008 and undermined confidence in the international trade system. More recently, some countries have introduced, or are considering, trade and exchange measures in an attempt to raise tax revenue or protect domestic industries from the effects of the global downturn. Also, there are widespread concerns that government intervention in advanced country financial systems is associated with pressures to curtail cross-border bank lending. If followed on a larger scale, these restrictions could deepen the current global recession and undermine the prospects for a global recovery—reminiscent of the vicious cycle of trade protection and production declines during the Great Depression. Rapid and substantial progress in opening markets at the multilateral level remains a priority. All parties involved should therefore make strong efforts to reinvigorate the Doha Round (see chapter 5).

BOX 1.4 The quality of macroeconomic policies in low-income countries

Since 2003 IMF staff have conducted surveys among mission chiefs to gauge their assessments of the quality of macroeconomic policies in low-income countries. While substantial progress has been made in many areas of economic policy since 2003, the quality of policies in two areas (monetary policy and governance in monetary and financial institution) declined in 2008. At the same time, progress was made in the areas of fiscal policy and fiscal transparency.



Source: IMF.

Maintaining Longer-Term Priorities

The financial crisis should not distract policy makers from longer-term priorities. The food crisis is not over. Even though commodity prices may weaken further in 2009, food prices remain relatively high in comparison to levels seen in the first half of the decade, and upward price pressures may reappear once the global economy picks

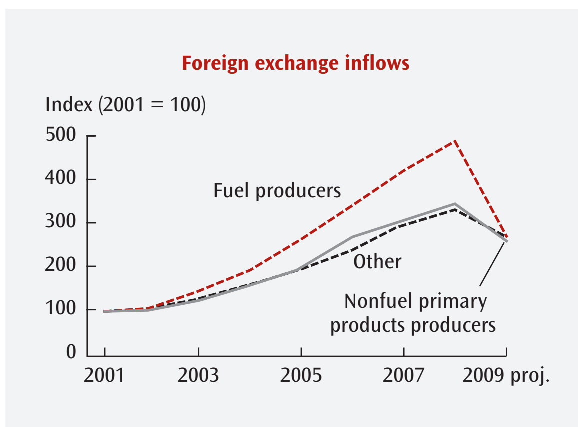
BOX 1.5 The impact of the crisis on selected countries

The economic downturn in advanced economies has decidely spread to emerging markets and other developing countries. The collapse of world trade and declining net capital flows have led to sharp declines in the availability of foreign exchange resources in emerging and developing countries, causing dismal growth, deteriorating fiscal balances, and sharp declines in private demand (see the left figure).

To combat the downturn, many governments have announced fiscal packages to boost their economies. But only countries that have created fiscal space in recent years through debt reduction and strong policies have scope for fiscal stimulus. In others, this scope is limited by debt sustainability or financing constraints. Hence, many emerging and developing countries are facing the need to adjust. While the impact of the crisis is felt around the globe, some economies are especially hard hit.

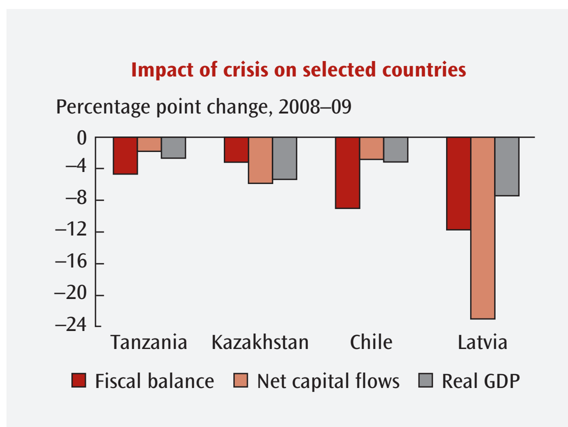
Examples of negatively impacted countries grappling with seemingly unrelated challenges in the context of the crisis, include Tanzania, Kazakhstan, Chile, and Latvia (see the figure to the right). A worldwide recession impacts negatively on Tanzania's fast-growing tourism and export sectors, while cutbacks in foreign financing pose a threat to business investment. Lower growth dampens government revenues, suggesting that the current path of spending may lead to widening fiscal deficits and financing gaps. The year 2009 will likely be very difficult for Kazakhstan's economy. Lower oil and commodity prices, adverse conditions in international financial markets, and developments in neighboring countries are negatively affecting confidence, credit availability, and foreign exchange inflows. In response, substantial fiscal easing has provided important support to growth over the past year. However, with the outlook for oil prices uncertain, some scaling-back of nonessential expenditures may be called for, notwithstanding the need to protect social safety net spending. While the Chilean economy enters the crisis from a position of fiscal and external stability, and its GDP growth has become increasingly resilient to copper price booms and busts, its fiscal and current account balances are nonetheless expected to deteriorate significantly in 2009 as a result of the crisis. In Latvia, years of unsustainably high growth and large current account deficits have coalesced into a financial and balance-of-payments crisis, brought to a head by the current international financial turmoil. Declines in private sector deposits have sparked severe liquidity problems. The Latvian authorities have launched a decisive economic reform program and sought substantial international financial assistance to quell this crisis.

Foreign exchange inflows



Source: IMF.

Impact of crisis on selected countries



Source: IMF.
Note: For Latvia, the fiscal balance includes estimated bank restructuring costs, 12.4 percent of GDP in 2009.

up pace. Food demand, particularly from emerging and developing economies, is likely to remain robust over the medium term, while continued strong demand for corn for ethanol use will also bolster price pressures. In light of these factors, policy makers in emerging and developing countries should continue to plan for enhancing food security through increased investment in the agricultural sector and domestic reforms aimed at developing commercial farming and increasing small holder productivity.

Governments in emerging and developing economies are also faced with difficult choices when addressing the social effects of high food prices. Countries have responded in different ways, including reductions in fuel and food taxes and tariffs, increases in universal subsidies, expansions in transfer programs, and public sector wage increases.

Some of these measures, however, are often cost ineffective and may even be counterproductive over the medium term. About one-third of developing countries have increased fuel price subsidies in 2008. These subsidies may create unsustainable fiscal positions, even at current lower oil prices, and are inconsistent with longer-term objectives to mitigate climate change. Governments should therefore give high priority to phasing out these subsidies and replacing them with more finely tuned social protection schemes to protect the poor. Well-targeted and flexible measures, such as direct income support, workfare, and food-for-work programs, that help the poorest while keeping a cap on government spending are highly preferable to measures that also benefit those who do not need government support (box 1.6).

Prudential Supervision and Market Regulation in Emerging and Developing Countries

The financial crisis has exposed a number of shortcomings in countries' supervisory frameworks that need to be addressed to restore confidence in the financial system and reduce the likelihood of financial instability in the future. While many of the lessons of the crisis focus on the more mature financial markets, where the problems began, most of them are also relevant for emerging and developing countries.

The globalization of financial institutions has complex implications for financial stability.[6] From the perspective of individual institutions, globalization helps diversify risks and may well have improved financial stability, particularly in the face of relatively small shocks. As recent events have shown, however, severe crises can be more easily transmitted across borders and therefore more difficult to deal with. To address wider systemic risk, a comprehensive approach to prudential supervision and market regulation is needed. Emerging and developing countries are thus presented with new challenges to strengthen institutions and improve coordination.

Drawing from recent reports under the Financial Sector Assessment Program (box 1.7) and the new lessons emerging from the current global financial turmoil, it appears that policies aimed at strengthening the robustness of financial systems should be tailored along four dimensions: policies that seek to strengthen the soundness of individual institutions; policies that solidify the contingency planning and crisis management framework; policies that mitigate the risks from cross-border exposures and spillover effects; and policies that adopt a broader macroeconomic orientation for financial surveillance.

Further Strengthening Prudential Frameworks

Supervisors must have adequate expertise and resources to monitor banks' risk management models and develop their own assessment tools. This recommendation applies to all supervisory regimes, from the emerging countries with the more developed banking systems that use the internal risk-based approach under the Basel II framework, to the developing countries where

banks continue to work under the more traditional Basel I regime. The financial crisis has highlighted the need for financial institutions and supervisors to contemplate low-probability risks in their stress test assumptions. Supervisors must have at their disposal the discretion to use a range of tools to reduce financial risks, including a gradual increase in overall capital requirements.

Supervisors must give equivalent weight to the supervision of liquidity risk and solvency risk. The current crisis has demonstrated that during times of extreme stress, there is little distinction between illiquidity and insolvency. While emerging countries that already have a sound systemic liquidity framework may focus more on monitoring banks' internal liquidity risks management processes (as Kazakhstan and Sri Lanka have done), low-income countries may need to focus their efforts on strengthening their broader systemic liquidity framework, including the role of the central bank as a lender of last resort and the degree of cooperation between the fiscal and monetary authorities to ensure a coherent debt management policy.

In countries where nonbank financial institutions (such as pension funds and insurance companies) pose systemic risks, nonbank regulatory regimes should be strengthened. For example, risks can build up and go unrecognized where there is insufficient information on exposures through nonbank subsidiaries, such as leasing companies, and opaque ownership linkages (such as Botswana and Haiti).

National authorities must actively encourage improvements in the resilience of financial infrastructure. Strengthening the resilience and efficiency of domestic clearing and settlement systems, including those for retail electronic payments and foreign exchange

BOX 1.6 Bailing out the world's poorest

As the financial crisis spills over to the developing world in 2008–09, many governments and citizens are asking what can be done to help protect the poorest.

The starting point for many developing countries will be a weak safety net, with limited potential for protecting the poor from an economywide crisis. There will also be limited information concerning the likely profile of welfare impacts, although an effort should still be made to anticipate the types of households and places that will be most vulnerable, using the best available data and analytic tools. Crises have often presented opportunities for setting up better information systems for monitoring progress and for future preparedness.

Expanding the coverage and increasing the benefit levels on conditional cash transfer programs (CCTs) has been one response to crises, particularly in Latin America. There are several examples of effective CCTs in developing countries. The Food-for-Education Program in Bangladesh, Mexico's PROGRESA program (now called Oportunidades) and Bolsa Escola in Brazil require the children of the recipient family to demonstrate adequate school attendance (and health care in some cases). Impact evaluations show evidence that such programs bring non-negligible benefits to poor households in terms of both current and future incomes, through higher investments in child schooling and health care. Mexico was able to help redress the adverse welfare impacts of the recent rise in food prices by implementing a one-time top-up payment to Oportunidades participants.

There has been some evaluative research on specific programs introduced during past crises. One example studied a CCT program in Indonesia, the Jaring Pengamanan Sosial, and found that it appreciably reduced school dropout rates among beneficiaries during the 1998 financial crisis; the program had the greatest impact at the lower secondary school level where children are most susceptible to dropping out.

A common drawback of targeted cash transfer schemes in practice is that they tend to be relatively unresponsive to changes in the need for assistance. A previously ineligible household that is hit by, say, unemployment of the main breadwinner may not find it easy to get help from such schemes. Temporary expansion in the transfer payments to existing beneficiaries can help in a crisis, though a temporary expansion in coverage will probably also be needed and this can be harder to achieve.

markets, should become a key priority for countries with less developed financial systems (such as Haiti and Moldova).

Governments must be fully cognizant of the risks inherent in direct intervention. The breadth of public responses to address troubled institutions witnessed during the current crisis has no historic parallel (table 1.4). Policy makers must ensure that these interventions are credible, both in terms of their funding and implementation, and that they do not aggravate market distortions. For example, encouraging banks to lend in the face of a credit crunch could weaken the prospects of a return to normalcy when the financial turmoil recedes. Similarly, the use of government guarantees and expenditures on fiscal deficits and public debt markets need to be carefully monitored.

Off-balance-sheet items and derivatives should also be monitored. Even though the originate-to-distribute model had flaws that led to overexpansion in credit in mature markets, emerging markets have used some forms of securitization to expand credit. Emerging market securitization should also incorporate appropriate safety nets to avoid problems similar to those in mature markets.

Strengthening Contingency Planning

The current crisis has demonstrated that existing contingency planning and crisis preparedness arrangements have been

One way to ensure that the safety net provides effective insurance—a genuine safety net—is to build in design features that only encourage those in need of help to seek out the program and encourage them to drop out of it when help is no longer needed given better options in the rest of the economy.

The classic example of such self-targeting is a workfare program (variously called relief work or public works programs; food-for-work programs also fall under this heading). Workfare has been widely used in crises and by countries at all stages of development. Famously, workfare programs were a key element of the New Deal introduced in the United States in 1933 in response to the Great Depression. They were also a key element of the Famine Codes introduced in India around 1880 and have continued to play an important role to this day in the subcontinent. Relief work programs have helped in responding to, and preventing, famines in Sub-Saharan Africa. During the East Asian financial crisis of the late 1990s, both Indonesia and the Republic of Korea introduced large workfare programs, as did Mexico in the 1995 “Peso crisis,” Peru during its recession of 1998–2001, and Argentina in the 2002 financial crisis. These programs can be responsive to differences in need—both between people at one date and over time for a given person—provided the program is designed and implemented well.

The Employment Guarantee Scheme in Maharashtra, India, which started in the early 1970s, aims to ensure income support in rural areas by providing unskilled manual labor at low wages to anyone who wants it. The scheme is financed domestically, largely from taxes on the relatively well-off segments of Maharashtra’s urban population. In 2004 India introduced an ambitious national version of this scheme under the National Rural Employment Guarantee Act. This program promises to provide up to 100 days of unskilled manual labor per family per year, at the statutory minimum wage rate for agricultural labor, to anyone who wants it in rural India.

An ideal workfare scheme guarantees low-wage work on community-initiated projects. The low-wage rate ensures that the scheme is self-targeted in that the nonpoor will rarely want to participate. The federal or state government announces that it is willing to finance up to, say, 15 days a month of work on community projects for any adult at a wage rate no higher than the market wage rate for unskilled manual labor in a normal year. The work is available to any adult at any time, crisis or not. This would extend the coverage of the public works schemes often found in current relief efforts to include normal times at which demand would be much lower, but almost certainly not zero. It would also relax the eligibility restrictions often found on relief work. Access to the program would rely very little on administrative discretion (either in turning it on and off, or determining who gets help.) As long as the guarantee is credible, it will also help reduce the longer-term costs of risks facing the poor. Thus it can help in fighting chronic poverty as well as transient poverty in a crisis.

Source: Ravallion 2008.

BOX 1.7 The Financial Sector Assessment Program

The FSAP is a joint IMF–World Bank program that aims at synthesizing a relatively comprehensive and detailed view of a country's financial sector risks, vulnerabilities, and development needs in an overall report. With over two-thirds of the countries having been covered by a first-round FSAP or FSAP update, the FSAP is now recognized as an essential cornerstone of the World Bank and the IMF's financial sector surveillance work, and demand for this voluntary program by member countries remains strong. The FSAP coverage remains uneven across regions and levels of development, with mainly developing countries covered by an FSAP. Nonetheless, the coverage of developing countries is rising, reflecting the initial emphasis on systemically important countries and the greater capacity of high-income countries to undertake the exercise.

A sound and well-functioning financial system rests on three pillars, which constitute the basis of the assessment framework:

- Macroprudential surveillance and financial stability analysis by the authorities to monitor the impact of potential macroeconomic and institutional factors (both domestic and external) on the risks, vulnerabilities, and stability of financial systems.
- Financial system supervision and regulation to help manage the risks and vulnerabilities, protect market integrity, and provide incentives for strong risk management and good governance for financial institutions.
- Financial system infrastructure, including the legal infrastructure for finance; the systemic liquidity infrastructure (monetary and exchange operations; payments and securities settlement systems; and the structure of money, exchange, and securities markets); and issues related to governance and transparency (such as the accounting and auditing framework, market monitoring arrangements, and credit reporting systems).

The FSAP assessments carefully consider the complementarities and trade-offs between financial stability and development. Policies to foster financial stability also support orderly financial development. Nevertheless, in specific contexts, the benefits of stability policies in terms of increased soundness and containment of risks have to be weighed against the costs of regulatory compliance and the possible side effects of prudential regulations on market functioning and access. Similarly, policies to foster financial development necessarily involve some increase in both macroeconomic and financial risks, which need to be managed. Thus, promoting an orderly process of financial development alongside stability necessarily involves a proper sequencing and coordination of a range of financial policies.

The FSAP assessments have also proven to be a powerful tool in helping shape policy advice on prudential supervision and market regulation during the financial market crisis. Since August 2007, 21 FSAPs (mostly updates) have taken place, including in advanced and emerging market countries that could be expected to be susceptible to the turmoil. In these assessments, particular attention was paid to crisis management frameworks and cross-border supervisory cooperation, as well as to exposures to subprime-related financial instruments and tighter funding conditions.

inadequate in responding to systemic risk and has underscored the need to strengthen these arrangements.

The roles and responsibilities between relevant authorities must be clear. Certain conditions are of critical importance during a financial crisis: a clear hierarchy in the decision-making structure, up-to-date supervisory information, and a true ability to act swiftly. As events have demonstrated, these conditions are not in place in many countries. Greater coordination among central banks, financial regulators, and their respective governments, both domestically and on a cross-border basis, would contribute to better monitoring of liquidity and solvency risks.

National authorities must ensure that a robust legal process exists for early intervention in, and resolution of, failing financial institutions. Recent FSAP reports found prompt corrective action and bank resolution systems to be weak in a broad range of countries (box 1.8). Regulatory authorities need to have the power to close or restructure a troubled financial institution. For this, the authorities must be clear about the main

TABLE 1.4 Measures implemented during financial turmoil, by country

Country	Higher deposit insurance coverage	Other debt guarantee provision	Bank recapitalization	Foreign exchange liquidity support	Domestic liquidity support	Capital controls
Argentina	...	...	...	✔	✔	...
Brazil	...	...	...	✔	✔	...
Bulgaria	✔	...	...	...	✔	...
China	...	...	...	✔	✔	✔
Colombia	...	...	...	...	✔	✔
Croatia	✔	...	...	...	...	...
Czech Republic	✔	...	...	...	✔	...
Ecuador	...	...	...	...	...	✔
Estonia	✔	...	...	...	...	...
Hong Kong, China[a]	✔	...	✔	...	...	...
Hungary	...	✔	...	✔	✔	...
India[a]	...	...	✔	✔	✔	...
Indonesia	✔	✔	✔	✔	...	✔
Kazakhstan	✔	✔	✔	...	✔	...
Korea, Rep. of	✔	✔	...	✔	✔	...
Latvia	✔	...	...	...	...	...
Lithuania	✔	...	...	...	...	...
Malaysia[a]	✔	✔	✔	...	✔	...
Mexico	...	...	...	✔	✔	...
Mongolia	✔	...	...	...	...	...
Nigeria	...	...	...	...	✔	...
Peru	...	...	...	✔	✔	...
Poland	✔	...	...	✔	✔	...
Philippines	✔	...	...	✔	✔	...
Romania	✔	...	...	...	✔	...
Russian Federation	✔	✔	✔	✔	✔	✔
Singapore	✔	...	...	✔	...	...
Slovakia	✔	...	...	...	...	...
Slovenia	✔	...	...	...	...	...
Turkey	✔	...	...	✔	...	...
Ukraine	✔	...	...	✔	✔	✔
Total	**21**	**6**	**6**	**15**	**19**	**6**

Source: IMF.
Note: This is a summary of key measures taken by authorities.
a. Bank recapitalization not yet implemented, possibly only as contingency.

BOX 1.8 Common regulatory and supervisory shortcomings identified in recent FSAP reports

Publicly available information drawn from a sample of 16 FSAPs and FSAP updates conducted in emerging and developing countries in 2007–08, shows common shortcomings emerging across different levels of development and/or geographical regions. For illustration purposes, in what follows, each of the common shortcomings identified during an FSAP is associated with some of the sample countries. This does not suggest, however, that these shortcomings were particularly severe in the cited country, but only that they were discussed in the FSAP. The economies included are Algeria, Botswana, Costa Rica, Croatia, Arab Republic of Egypt, Haiti, Kazakhstan, Lithuania, Moldova, Mongolia, Morocco, Namibia, Sri Lanka, Thailand, Ukraine, and the Western African Economic Monetary Union (WAEMU).

- *Insufficient independence and enforcement powers of supervisory agencies*. Many FSAP reports highlighted the need to strengthen supervisors' powers to enforce prudential requirements, including through stronger bank licensing frameworks and "fit and proper" rules (Haiti, Mongolia, WAEMU) and through more resources to attract and retain high-skilled staff (Lithuania, Namibia) and achieve operational independence (Costa Rica, Kazakhstan).
- *Insufficient tools to assess borrower's creditworthiness and quality of collateral*. Weak auditing, reporting, and accounting standards (WAEMU), lack or incomplete credit registries (Egypt, Haiti), and limited judicial capacity to enforce foreclosure rules (Haiti, Thailand) were found to substantially hamper banks' ability to assess borrowers' creditworthiness.
- *Weak risk management*. Key recommendations in this area focused on strengthening supervisors' ability to ensure the quality of banks' assets, including through adequate provisioning rules and capital risk weights (Kazakhstan, Morocco, Ukraine), a proper connected-lending and concentration risk regulation (Haiti, Mongolia, WAEMU), and effective consolidated supervision for groups and their offshore subsidiaries (Botswana, Costa Rica, Kazakhstan, Namibia, Sri Lanka, Ukraine). Other shortcomings included weak internal controls (Haiti, Morocco) and limited liquidity risk management (Algeria, Kazakhstan, Mongolia).
- *Limited coordination between bank and nonbank supervisory authorities*. Key issues related to weak information exchange on risk exposures and ownership linkages (Croatia, Ukraine) and unequal level-playing field (Botswana, Egypt, Haiti, Namibia, Sri Lanka).
- *Distortionary role of the state in the financial system*. Some FSAP reports highlighted weak supervision of state-owned banks, including capital deficiencies and unresolved problem loans (Algeria, Sri Lanka, Thailand). Many reports pressed for scaling back government ownership and interference (Botswana, Egypt, Mongolia).
- *Weak payment infrastructure*. Many countries were found to have weak payment and settlements systems.
- *Insufficient contingency planning*. The FSAP recommended revamping early remedial actions and bank resolution systems (Costa Rica, Haiti, Kazakhstan, Sri Lanka, Ukraine); initiating formal cross-border crisis management arrangements with foreign supervisors (Lithuania); and clarifying the role of different agencies in contingency planning (Croatia).
- *Underdeveloped infrastructure in capital markets*. FSAP reports recommended increasing disclosure standards and transparency practices of nonfinancial and financial institutions (Algeria, Ukraine); simplifying legal procedures for equity share listings and bond issuances (Egypt, Namibia); and establishing a benchmark yield curve (Algeria, Botswana, Ukraine).
- *Limited capacity to assess financial stability*. Key recommendations focused on the need to improve financial sector data and analytical capacity to monitor systemwide risks and vulnerabilities, including through stress testing (Egypt, Namibia, Ukraine).

objectives to achieve (maintaining public confidence in the banking system, for example), the methods of bankruptcy prevention, and the crisis resolution tools (such as liquidation or merger).[7]

National authorities must ensure clarity over deposit insurance responsibility and coverage, including for cross-border institutions. In all countries, depositors must receive clear information on who is responsible for

safeguarding their claims and the coverage of their deposit insurance. The coverage must be credible, and the payouts in the event of a failure must be provided promptly to minimize disruptions in the payments system.

The Need for Greater International Cooperation

Reflecting the links between financial markets and institutions, the current crisis is calling for greater international policy cooperation among countries with international banks.

National authorities need to cultivate closer cooperation between home and host supervisors. A number of countries, particularly in Eastern and Central Europe and Sub-Saharan Africa, have banking systems dominated by foreign-owned banks. The behavior of foreign subsidiaries could depend largely on their parent groups, whose management and supervisory authorities are located abroad. This calls for coordinated inspections of international banks, joint risk assessments, and the preparation of plans to deal with a major bank failure. Going forward, the role of international supervisory colleges for cross-border financial institutions needs to be augmented to achieve a more effective information exchange.

Close cross-border coordination in crisis management is necessary to forestall beggar-thy-neighbor policies with damaging cross-border spillover effects and market distortions. This is particularly important in countries where large international banks are established. Recent unilateral increases in deposit insurance coverage are examples of how a lack of policy coordination can cause serious spillover effects.

Emphasis on Systemic Risks

Financial surveillance should have a greater emphasis on systemic risks and their wider implications for economic stability. Financial surveillance needs to pay closer attention to the sources of financing of domestic credit and their macroeconomic implications. Specifically, surveillance should consider the composition of private sector credit, its impact on a country's external position, and the ability of its banking system to absorb shocks from a sharp unwinding of external funding. This is particularly true for countries (such as the Baltics, Hungary, and some Sub-Saharan African countries) with a large foreign ownership component, because they could face the effects of a credit crunch in the event of a sharp capital flow reversal.

Central banks must have access to adequate institution-specific information to assess financial stability risks. Central banks should have access to all necessary supervisory information to assess systemic risks to their economy, including to the payments system and emergency liquidity operations.

Regulators must ensure that market participants are fully informed of the risks inherent in financial products, and financial supervisors must ensure that capital buffers are commensurate with the risks.[8]

Prudential regulations should explicitly counter cyclical tendencies, including through larger liquidity and capital buffer requirements and dynamic loan loss provisioning to account for the inherent underpricing of risk in upturns.

National authorities must counteract institutions' tendency to become "too big to fail" or "too connected to fail" to better internalize the economic costs of financial instability. Authorities need to protect taxpayers' interests by seeking to reduce risks posed by large and complex institutions. This can be promoted through competition policy, restrictions on activities, or prudential measures (such as capital requirement or deposit insurance premiums).

Capital Restrictions as a Last Resort

Capital restrictions might be unavoidable as a last resort to prevent or mitigate the crisis effects. A few emerging countries have introduced capital controls and other measures to better monitor and, in some cases, limit the conversion of domestic currency into foreign

exchange (see table 1.4). Capital controls, however, typically result in economic distortions that are harmful for longer-term growth and lose their effectiveness quickly, as market participants find ways to circumvent them and undermine investors' confidence. Nonetheless, capital controls might need to be imposed as a last resort to help mitigate a financial crisis and stabilize macroeconomic developments

The Poverty Effects of the Crisis

As a result of the food and financial crises, the pace of poverty reduction has slowed. The positive effects on poverty of the high global growth in recent years have been partly offset by the rise in food prices, which pushed an estimated 160 million to 200 million people into extreme poverty between 2005 and 2008. Although international food prices have declined since the middle of 2008, all of the benefits of the lower prices will not be felt immediately because local prices lag behind changes in international prices. As a result, no more than 90 million to 120 million people who had been pushed into poverty by the high food prices may emerge from poverty in 2009.

The slowdown in economic growth resulting from the global financial crisis will add to the poverty impact of high food prices. On current growth projections, there will be about 55 million more extreme poor (those living below the international poverty line of $1.25 a day in 2005 purchasing power parity terms) in developing countries in 2009 than expected before the financial crisis.[9] The poverty rate is still expected to decline in 2009, but at a much slower pace because of the sharply lower growth. Table 1.5 presents poverty projections for 2009 based on current growth projections.[10] The proportion of people living in extreme poverty is projected to decline in 2009 by 0.6 percentage point. This compares with an average annual decline of 1.3 percentage points in the three-year period preceding 2009. All regions of the developing world are affected, although to a varying degree. Sub-Saharan Africa will see a rise in the poverty count. Rising poverty is likely especially in the more fragile and low-growth economies. While poverty rates on average are much lower in Europe

TABLE 1.5 Short-term poverty outlook
people living below the international poverty line of $1.25/day (2005 PPP)

	Number of people (millions)		Change in number of people (millions)		% of population		Change (percentage points)	
	2008	2009	2005–08[a]	2009	2008	2009	2005–08[a]	2009
East Asia and the Pacific	222.5	203.0	–31.2	–19.5	11.5	10.4	–1.8	–1.1
Europe and Central Asia	15.1	15.5	–0.7	0.4	3.2	3.3	–0.2	0.1
Latin America and the Caribbean	37.6	40.3	–2.5	2.7	6.6	7.0	–0.5	0.4
Middle East and North Africa	8.6	8.3	–0.8	–0.3	2.7	2.5	–0.3	–0.2
South Asia	536.3	530.6	–19.8	–5.7	34.8	33.9	–1.8	–0.9
Sub-Saharan Africa	382.7	385.9	–1.9	3.2	46.7	46.0	–1.4	–0.7
Total	1,202.8	1,183.6	–56.9	–19.2	21.3	20.7	–1.3	–0.6
Low-income countries	952.3	947.8	–26.9	–4.5	38.0	37.2	–1.8	–0.8
Middle-income countries	262.1	247.2	–33.1	–14.9	8.3	7.8	–1.2	–0.5

Source: World Bank (model-based projections).
Note: PPP = purchasing power parity.
a. Simple annual average change for the three-year period 2005–08.

and Central Asia and in Latin America and the Caribbean, these regions could also see an increase in the number of poor in 2009. If the crisis deepens and growth in developing countries falters further, the impact on poverty would be still stronger. Overall, on current growth projections, more than half of all developing countries could experience a rise in the number of extreme poor in 2009; this proportion could be still higher among low-income countries and countries in Sub-Saharan Africa—two-thirds and three-fourths, respectively.

Estimates by the International Labour Organization (ILO), which focus on the impact of the growth slowdown on employment and wages, indicate a still stronger impact on poverty. The ILO estimates that some 30 million more people around the world may be unemployed in 2009, compared with 2007, of which 23 million could be in developing countries. The labor market impact is estimated to be associated with 93 million additional people classified as extreme poor.[11]

The MDG 1 for poverty reduction remains achievable at the global level, but the crisis adds new risks. Current growth projections envisage a gradual recovery of growth in developing countries starting in 2010. Per capita GDP growth in developing countries is expected to rebound to an average of about 4.5 percent per year during 2011–15. On the basis of these projections, the proportion of people living below $1.25 per day is expected to reach 15.1 percent by 2015, surpassing the MDG target of 20.8 percent (half of the 1990 level) for developing countries as a whole (table 1.6). These projections, however, are subject to considerable uncertainty and downside risks stemming from the crisis. Within this overall picture, there are major differences in performance among regions and countries. In Sub-Saharan Africa, the

TABLE 1.6 Longer-term poverty outlook
people living below the international poverty line of $1.25 (2005 PPP)

	Number of people (millions)			% of population			Over/under[a]
	1990	2005	2015	1990	2005	2015	MDG[b]
East Asia & Pacific	873.3	316.2	103.6	54.7	16.8	5.1	22.3
East Asia & Pacific, excluding China	190.1	108.5	43.5	41.3	18.7	6.7	14.0
Europe & Central Asia	9.1	17.3	12.8	2.0	3.7	2.7	–1.7
Latin America & the Caribbean	49.6	45.1	33.4	11.3	8.2	5.4	0.3
Middle East & North Africa	9.7	11.0	6.7	4.3	3.6	1.8	0.4
South Asia	579.2	595.6	416.1	51.7	40.3	24.5	1.4
South Asia, excluding India	143.7	139.8	97.7	53.1	36.6	21.2	5.4
Sub-Saharan Africa	295.7	388.4	352.6	57.6	50.9	36.6	–7.8
Total	1,816.6	1,373.5	925.2	41.7	25.2	15.1	5.7
Total, excluding China	1,133.5	1,165.8	865.1	35.2	28.1	18.2	–0.6
Low-income countries	920.4	1,032.9	789.3	52.8	43.5	28.0	–1.6
Middle-income countries	914.2	361.5	143.5	35.0	11.8	4.3	13.2

Source: World Bank (model-based projections).
Note: PPP = purchasing power parity.
a. The difference in percentage points between the MDG target and the projected poverty rate in 2015. Negative numbers indicate underperformance.
b. Relates to MDG 1, target 1.A, which calls for halving, between 1990 and 2015, the proportion of people living below the poverty line.

share of people living in extreme poverty will remain well above the MDG target of 28.8 percent in 2015. South Asia will barely meet the MDG target. In contrast, the East Asia and Pacific region has already surpassed the target. The Latin America and the Caribbean region is on track. The Middle East and North Africa and Europe and Central Asia regions are likely to miss the MDG target, but they started from much lower poverty levels.

Low-income countries as a group are likely to fall short of the MDG target. The poverty rate in these countries is projected to fall from 52.8 percent to 28.0 percent between 1990 and 2015. The middle-income countries do much better, with the poverty rate declining from 35 percent to 4.3 percent. Within these groupings, however, there is considerable variation in performance among individual countries.

The effects of growth volatility are not symmetric. Research shows that growth accelerations and decelerations have an asymmetric impact on poverty and human development outcomes. These outcomes tend to deteriorate more quickly during growth decelerations than they improve during growth accelerations. This finding suggests that preventing growth collapses is essential for a region such as Sub-Saharan Africa to attain the MDGs. Sub-Saharan Africa has had a number of growth acceleration episodes in the past 30 years, but also nearly a comparable number of growth collapses, offsetting much of the benefit of the bursts in growth. Had Africa avoided its growth collapses, its GDP per capita would have grown at 1.7 percent a year instead of 0.7 percent between 1975 and 2005, and it would have been more than 30 percent higher by the end of the period.[12]

Notes

1. Commodity prices are sensitive to growth prospects, because output in commodity-intensive sectors (manufacturing and construction) tends to contract more in recessions than output in other sectors.
2. World Bank 2008b.
3. Details of World Bank and IMF response to the crisis are discussed in chapter 6.
4. IMF 2009.
5. By August 2008, 35 countries had some form of export restriction on food items in place. The most distortionary measures have been removed since then.
6. For a detailed discussion on financial stability implications of globalization of financial institutions, see Chapter 3 of the 2007 Global Financial Stability Report (Washington, International Monetary Fund).
7. A good review of banking crises resolution can be found in Hoggarth and Reidhill (2003).
8. These issues are the focus of a Financial Stability Forum Working Group on enhancing market and institutional resilience, and of discussions within the Basel Committee.
9. World Bank 2009.
10. These poverty projections are based on projections of economic growth; they do not include the effects of food price changes.
11. ILO 2009. Geneva. The report also presents a worse-case scenario that projects an increase in the number of unemployed at 51 million globally and at 40 million in developing countries.
12. Arbache and Page 2007.