

**WORLD VIEW**

**T**he world seems to be entering an economic crisis unlike any seen since the founding of the Bretton Woods institutions. Indeed, simultaneous crises. The bursting of a real estate bubble. The liquidity and solvency problems for major banks. The liquidity trap as consumers and businesses prefer holding cash to spending on consumption or investment. The disruptions in international capital flows. And for some countries a currency crisis.

Plummeting global output and trade in the last quarter of 2008 brought the global economy to a standstill after years of remarkable growth, throwing millions out of work. The United States, as the epicenter, has seen unemployment rising to more than 11 million, an unemployment rate of 7.2 percent. Most forecasts show world GDP growth slowing to near zero or negative values, after a 3.4 percent increase in 2008.

What brought about the crisis? Why is it so severe? How quickly has it spread? In this introduction, and in the introductions to sections four (*Economy*) and six (*Global links*), the data describe the events that have brought us to this point. Could the crisis have been anticipated by looking more closely at the same data? Perhaps. Perhaps not. But there is still much we can learn about how these events unfolded.

The crisis must be seen in the context of dramatic changes in the global economy. First, record export-led economic growth in emerging market economies shifted the balance of global economic power, evidenced by their growing share in world output, trade, and international reserves. High savings rates outstripped their capacity to invest in their own economies while policies to sterilize large inflows and protect against financial shocks led to a large build up in international reserves. So poorer economies were financing the current account deficits of high-income economies. Second, financial integration has accompanied expanding trade, spurred by remarkable developments in information technology and financial innovation. This extended the reach of global markets, lowering costs and increasing their efficiency, but also spreading systemic shocks farther and faster.

The financial crisis had its origins in a U.S. real estate asset bubble fed by a boom in sub-prime mortgage lending. The availability of cheap credit fed asset bubbles in other developed economies and among major emerging market economies. The rapid and massive growth of long-term, illiquid, and risky assets financed by short-term liabilities contributed to the speed with which the crisis spread across the world economy and to its severity.

Global growth will be negative in 2009, and growth in developing economies will fall sharply from the 6 percent or higher rates of 2008. This reflects both a sharp decline in export demand from high-income economies and a major reduction in access to commercial finance and an increase in its cost. Slower growth will inevitably affect the ability of low-income economies to reach the Millennium Development Goals. How far the global recession extends and how long it lasts will depend on the effectiveness of policies adopted by rich and poor economies alike in the months ahead.

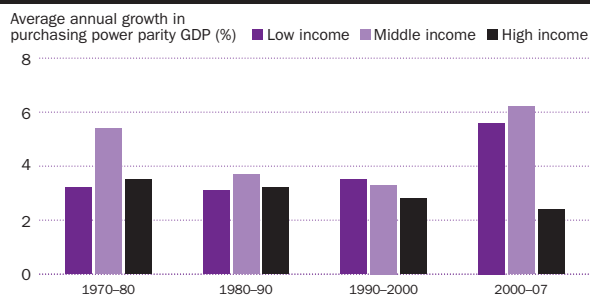
## Growth accelerated in the 2000s

The years preceding the 2008 global crisis saw the strongest economic growth in decades (figure 1a). Global economic output grew 4 percent a year from 2000 to 2007, led by record growth in low- and middle-income economies. Developing economies averaged 6.5 percent annual growth of GDP from 2000 to 2007, and growth in every region was the highest in three decades (figure 1b). Europe and Central Asia had their best decade in the most recent period (2000–07). East Asia and Pacific almost equaled its previous peak, reached before the 1997 crisis. For others the peak was in 1976—before the oil price shocks of the late 1970s and the debt crisis of the 1980s. But growth rates in high-income economies have been on a downward path since the 1970s.

China and India have emerged in recent years as drivers of global economic growth, accounting for 2.9 percentage points of the 5 percent growth in global output in 2007. Low- and middle-income economies now contribute 43 percent of global output, up from 36 percent in 2000. China and India account for 5 percentage points of that increased share.

### Developing economies had their best decade of growth in 2000–07

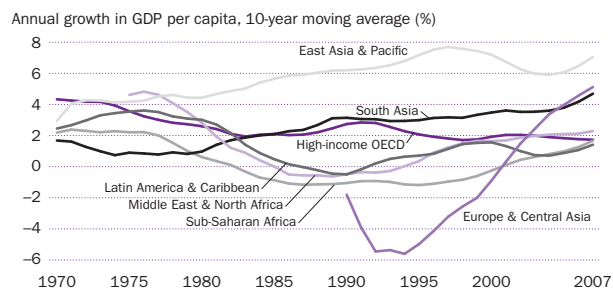
1a



Note: Data for 1970–80 are based on GDP in constant 2000 U.S. dollars converted using market exchange rates.  
Source: World Development Indicators data files.

### Long-term trends reached new heights

1b



Source: World Development Indicators data files.

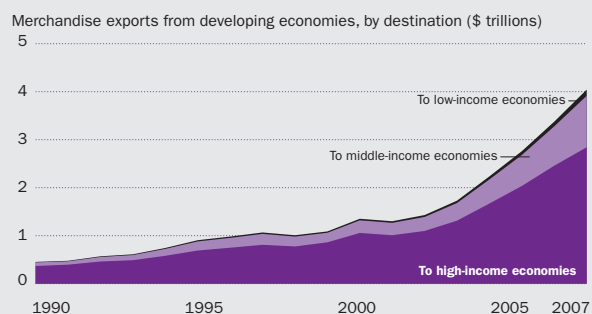
## Exports led growth

Integration of the global economy was marked by a rapid increase in trade. Growth in low- and middle-income economies was led by exports, which grew at an average annual rate of 12 percent over 2000–07. China and India were among the fastest-growing exporters. Export growth was led by manufactures in China and by services in India. Some smaller economies with exports of oil, gas, metals, minerals, or manufactures were also among the fastest growing. Exports from low- and middle-income economies in 2007 made up 29 percent of the world total, up from 21 percent in 2000. Although trade between low- and middle-income economies has been growing, 70 percent of low- and middle-income economies' exports still went to high-income economies in 2007 (figure 1c).

Fast-growing, export-oriented economies attracted new investment (figure 1d). Some of it came from domestic saving. In low- and middle-income economies savings rose from 25 percent of GDP in 2000 to 32 percent in 2007. But growth also attracted foreign direct investment. The contribution of investment to GDP growth in these economies averaged less than 1 percentage point before 2000 but rose to 2.4 percentage points over 2000–07.

### Most developing economy exports go to high-income economies

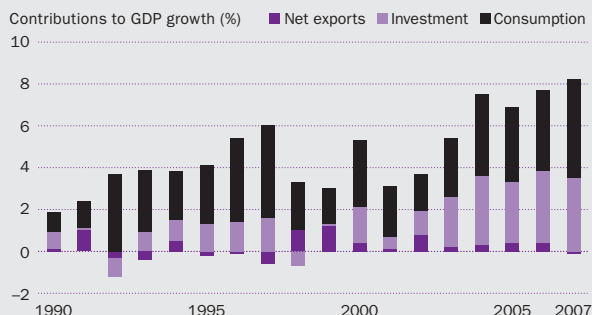
1c



Source: International Monetary Fund's Direction of Trade database.

### Increased investment led to faster growth in low- and middle-income economies

1d



Source: World Development Indicators data files.

## Structural imbalances emerged

Countries with trade surpluses accumulated capital beyond their capacity to absorb it. Many ran large current account surpluses and accumulated record reserves. Countries with trade deficits financed their current account by increased borrowing abroad. From 2005 to 2007 the five largest surplus economies accounted for 71 percent of total current account surpluses, and the five largest deficit economies, for 79 percent of total current account deficits (table 1e).

China's current account surplus rose from 2 percent of GDP in 2000 to an average of 10 percent during 2005–07 (figure 1f). Oil and gas exporters such as the Russian Federation and Saudi Arabia also saw surpluses balloon. Unlike many high-income economies, Germany went from a deficit of 1.5 percent of GDP in 2000 to a surplus of 6 percent over 2000–07. But some countries with strong export growth had equally strong import growth, with India and Mexico maintaining small current account deficits.

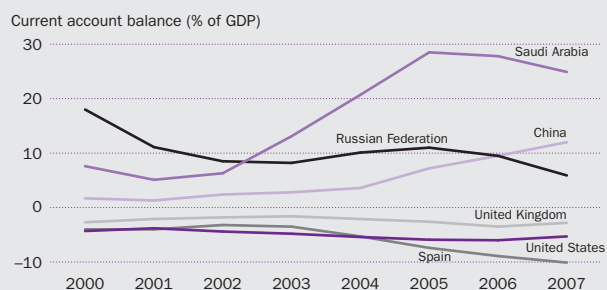
The largest deficits were in high-income economies, with the United States accounting for more than half the world's current account deficits. The U.S. current account deficit increased from 4.3 percent of GDP in 2000 to an average of 6 percent in 2005–07. Spain's rose from 4 percent to 9 percent of GDP.

**Large current account surpluses and deficits were concentrated in a few economies during 2005–07** 1e

Economy	2005–07 average (\$ billions)	Share of all deficit/surplus economies (%)	Percent of GDP
<b>All deficit economies</b>	<b>-1,303</b>		
United States	-749	57	-6
Spain	-113	9	-9
United Kingdom	-74	6	-3
Australia	-47	4	-6
Italy	-43	3	-2
<b>All surplus economies</b>	<b>1,428</b>		
China	372	26	10
Germany	256	18	6
Japan	210	15	4
Saudi Arabia	95	7	27
Russian Federation	76	5	8

Source: International Monetary Fund balance of payments data files and *World Development Indicators* data files.

**Current account surpluses and deficits increased** 1f



Source: *World Development Indicators* data files.

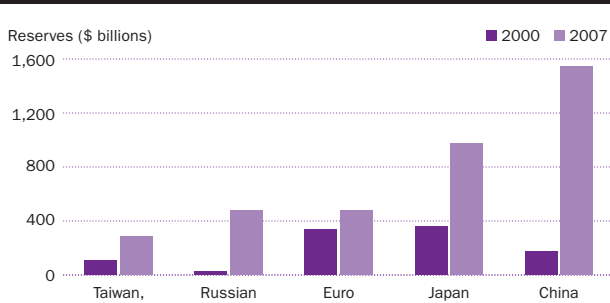
## Countries became more interdependent

As the global imbalance between savings and investment grew, countries with large deficits borrowed from countries with surpluses, while fast-growing exporters depended on expanding markets in deficit countries. China and other surplus economies accumulated record reserves (figure 1g) and sent capital overseas. The United States and other deficit countries consumed more and financed their deficits by issuing more debt and equity (figure 1h).

Savings and investment trends for China, the largest surplus country, and the United States, the largest deficit country, illustrate the growing imbalances. China's savings rate increased, exceeding investment by 11.5 percent of GDP in 2007. In the United States private savings almost disappeared, and investment exceeded savings by 4.6 percent of GDP.

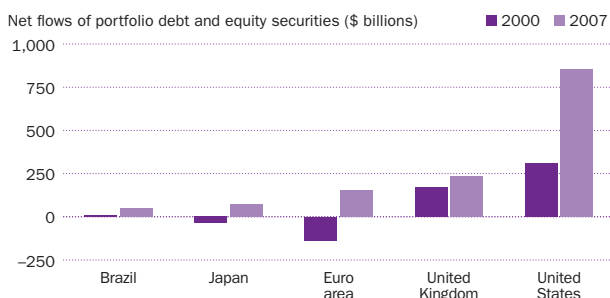
Countries with large reserves invested large portions of their holdings in U.S. Treasury securities, widely regarded as very low risk. At the end of 2008 China was the largest foreign holder of U.S. Treasury securities, at \$696 billion, followed by Japan, at \$578 billion. Total foreign holdings of U.S. Treasury securities were \$3.1 trillion, up from \$2.4 trillion in 2007.

**Trade surpluses led to large build-ups in reserves** 1g



Source: International Monetary Fund balance of payments data files.

**Trade deficits were financed by foreign investors** 1h



Source: International Monetary Fund balance of payments data files.

## Foreign investments grew

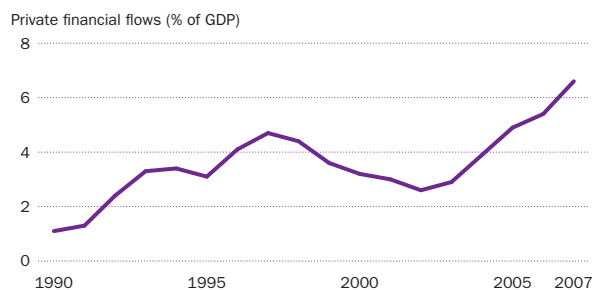
Private capital flows to low- and middle-income economies more than quadrupled from \$200 billion in 2000 to over \$900 billion in 2007, reaching 6.6 percent of the economies' collective GDP (figure 1i). Foreign domestic investment accounts for most of those flows, as multinational corporations established footholds in new markets, shifted production sites to take advantage of lower costs, or sought access to supplies of natural resources.

Portfolio investment in bond and equity markets also grew. Foreign investors were drawn to emerging equity markets as the prospects for these economies improved substantially and the returns outpaced those in more developed markets. Net inflows from bonds and commercial bank lending grew from \$12 billion in 2000 to \$269 billion in 2007 as globalization of the banking industry continued and perceived risk in many low- and middle-income economies dropped to all-time lows (figure 1j).

Brazil, China, India, and the Russian Federation attracted the largest shares of capital flows among developing economies. But foreign domestic investment flows to low-income economies also increased in recent years—some of them coming from developing economies with large current account surpluses—drawn by rising commodity prices into the oil, mineral, and other commodity sectors and into infrastructure projects.

**Private capital flows to developing economies took off in 2002 . . .**

**1i**



Source: Global Development Finance data files and World Development Indicators data files.

**. . . And investors perceived less risk**

**1j**



Source: JPMorgan-Chase.

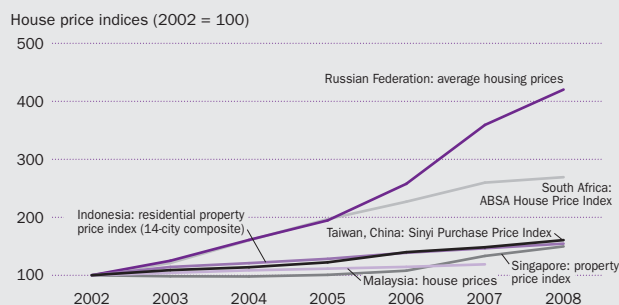
## Asset prices rose rapidly as well

Stock market capitalization in low- and middle-income economies increased nearly eightfold, rising from \$2 trillion in 2000 to \$15 trillion in 2007, or from 35 percent of GDP to 114 percent. Stock markets in Brazil, China, India, and the Russian Federation accounted for \$11 trillion. Foreign investors increased their stakes in these markets, which outperformed more developed markets. Foreign holdings of portfolio equity securities increased from \$37 billion in 2001 to \$364 billion in 2007 in Brazil, from \$11 billion in 2000 to \$292 billion in 2007 in the Russian Federation and from \$17 billion to \$103 billion in India, and from \$43 billion in 2004 to \$125 billion in 2007 in China. Other classes of assets such as housing also appreciated rapidly (figure 1k).

Asset prices rose in part due to more optimistic expectations for future earnings. Price-earnings ratios, a measure of valuation for equities, rose rapidly in low- and middle-income economy stock markets (figure 1l). From 2000 to 2007 ratios rose from 11.5 to 16.6 in Brazil, from 21.6 to 50.5 in China, from 16.8 to 31.6 in India, and from 3.8 to 18.4 in the Russian Federation. And rising housing prices reflected expectations for continuing appreciation.

**Prices of assets, especially in real estate, were rising rapidly in some countries . . .**

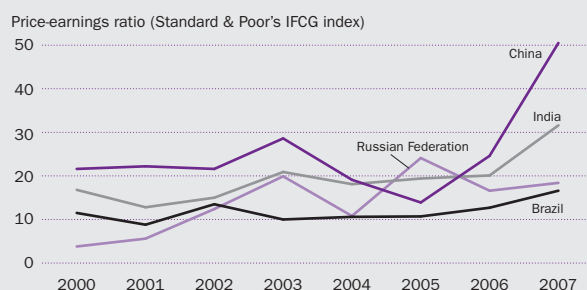
**1k**



Source: Haver Analytics.

**. . . And so were equity asset valuations**

**1l**



Source: Standard & Poor's 2008.

## External debt declined and changed composition

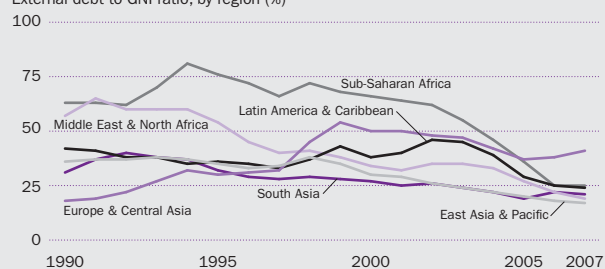
The Debt Initiative for Heavily Indebted Poor Countries and the Multilateral Debt Relief Initiative have helped some of the poorest and most indebted countries, especially in Sub-Saharan Africa, significantly reduce their outstanding debt. External debt to GNI ratios for Sub-Saharan Africa went from more than 80 percent in the mid-1990s to less than 30 percent today (figure 1m). Elsewhere, especially in Europe and Central Asia, debt increased in recent years. For Croatia, Kazakhstan, Latvia, Romania, and a few small island economies external debt to GNI ratios reached all-time highs in 2007.

As debt ratios fell, many countries gained access to private financing. Private nonguaranteed debt of low- and middle-income economies rose from 24 percent of total debt in 2000 to 37 percent in 2007. In Europe and Central Asia private nonguaranteed debt made up 55 percent of total external debt in 2007. Short-term debt in low- and middle-income economies rose from 13 percent of total debt in 2000 to 24 percent in 2007. In 2007 in East Asia and Pacific short-term debt made up 39 percent of total debt and 55 percent in China. But growing international reserves helped offset the risk of short-term financing in foreign currencies (figure 1n).

### Indebtedness ratios have improved for most economies

1m

External debt to GNI ratio, by region (%)

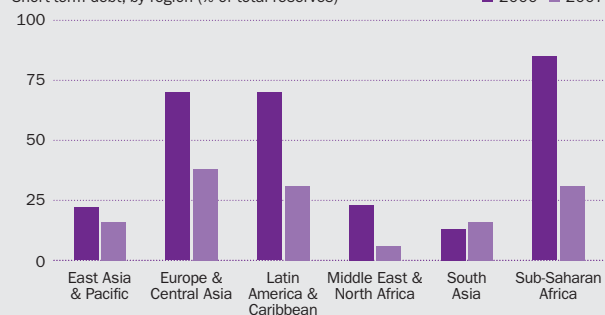


Source: Global Development Finance data files and World Development Indicators data files.

### Growing reserves comfortably covered short-term debt liabilities

1n

Short-term debt, by region (% of total reserves)



Source: World Development Indicators data files.

## Demand for primary commodities increased

Rapid global economic growth drove demand for commodities, boosting prices, especially for oil, metals, and minerals used as inputs to manufacturing. After increasing gradually from 2000 to 2006, prices rose more rapidly in 2007 and into 2008. Food prices also rose, due in part to the production of ethanol from corn and other food crops (figure 1o).

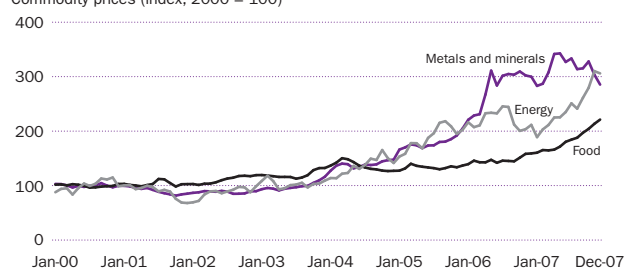
Rising commodity prices benefited exporters, especially in Latin America and the Caribbean and Sub-Saharan Africa. Aside from the terms of trade gains, the higher commodity prices increased government revenues from taxes on commodity exports and attracted foreign domestic investment into commodity exports and supporting infrastructure projects.

But for food and fuel importers the spike in prices has been costly. Current account balances of most oil-importing low- and middle-income economies worsened (figure 1p). Price increases have also pushed up inflation and interest rates, with the impacts especially severe for poor people. In eight countries higher food prices between 2005 and 2007 increased poverty rates by 3 percentage points on average (Ivanic and Martin 2008). Globally, the number of people living on less than \$1.25 a day may have risen by more than 100 million before commodity prices began to fall in the latter half of 2008.

### Commodity price rises accelerated in recent years

1o

Commodity prices (index, 2000 = 100)

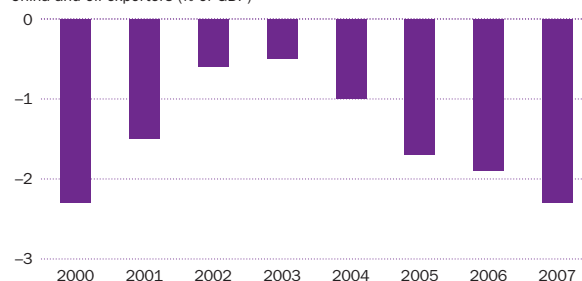


Source: World Development Indicators data files.

### Food and fuel importers were hurt by rising prices

1p

Current account balance of low- and middle-income economies, excluding China and oil exporters (% of GDP)



Source: World Development Indicators data files.

## A perfect storm?

The current global financial and economic crisis is unlike anything the world has seen since the Great Depression nearly eight decades ago. It embraces simultaneous crises in the housing, equity, and financial markets, triggering what could become a global recession. Output and trade declined sharply in the last quarter of 2008 (figure 1q). Projections for 2009 suggest global growth close to zero percent, with strong downside risks. Unemployment is rising sharply in both developed and emerging market economies. The International Labour Organization estimates job losses of up to 50 million in 2009. The United States lost as many as 3.6 million jobs in 2008.

The crisis had its superficial roots in the rise in U.S. household debt (figure 1r), financed largely by home mortgages, many of which did not meet prime underwriting guidelines. When home prices began to fall from their peak in 2006 (figure 1s), mortgage default rates rose sharply and triggered a collapse in mortgage-backed securities. Subprime lending came to an abrupt halt, further driving down the prices of U.S. homes. Investors, their confidence undermined, withdrew funds from other illiquid markets (figure 1t), and investment banks had to liquidate assets or withdraw financing from customers, forcing further deleveraging. Thus,

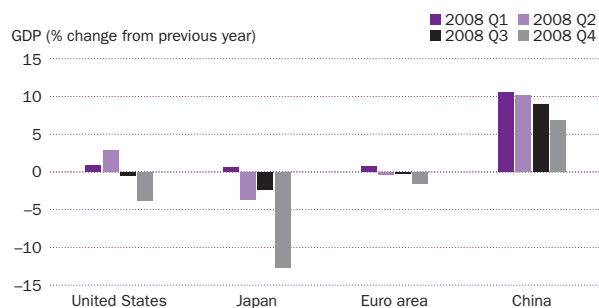
the subprime mortgage crisis became a fully fledged financial crisis (Lin 2009).

The impacts were felt throughout the increasingly integrated global financial markets, attacking stock markets globally and reducing credit availability. Global stock markets lost an estimated \$30 trillion in market capitalization in 2008 over their inflated 2007 levels. Rising unemployment and the wealth effects of falling asset prices contributed to a sharp decline in consumer spending. Developing countries suddenly faced a sharp decline in demand for their exports and a drop in commodity prices. As recessionary trends developed, remittances from migrant workers declined, and migrants began returning home.

Three major factors account for the scale of the crisis. Underlying the bubbles in global real estate and stock markets were growing macroeconomic imbalances that fed liquidity into the system, lowering real interest rates and fueling the asset price bubbles. Financial innovations pioneered by major global investment banks turned out to be transmission mechanisms for instability (Lin 2009). And the failure of national financial regulators to effectively regulate global financial markets encouraged investors to take exorbitant risk.

**Output in the largest economies slowed or declined in the 4th quarter of 2008**

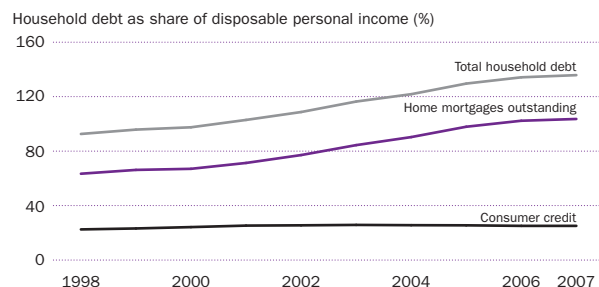
1q



Source: U.S. Department of Commerce, Japan Cabinet Office, Eurostat, China National Bureau of Statistics, Haver Analytics, and World Bank staff calculations.

**U.S. household debt rose rapidly after 2000**

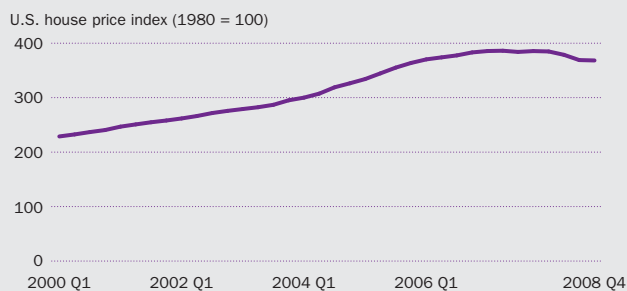
1r



Source: Board of Governors of the Federal Reserve System data files.

**U.S. house prices peaked in 2006**

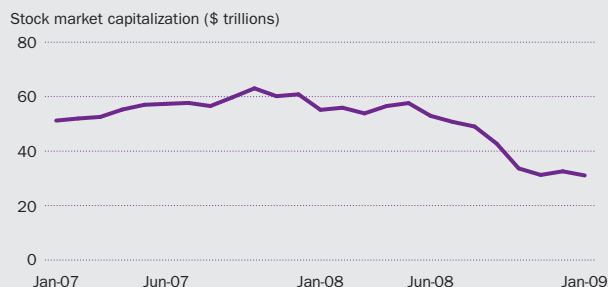
1s



Source: U.S. Office of Federal Housing Enterprise Oversight.

**As housing bubbles burst, investors lost confidence**

1t



Source: World Federation of Exchanges data files.



## Macroeconomic imbalances

Global savings and investment rates have been fairly stable in recent years at 20–22 percent. But these global rates masked a significant shift in the source of savings. In developing economies savings rates rose 7 percentage points of aggregate GDP between 2000 and 2007, exceeding investment rates, while in high-income, Organisation for Economic Co-operation and Development countries, savings rates fell by about 2 percentage points of aggregate GDP.

The growing pool of savings in part of the world reflected the rising new incomes of oil exporters, boosted by record prices, deliberate policies to build up foreign exchange reserves by Asian countries wishing to avoid repeating the experience of the late 1990s, and the excess household and corporate savings in China (figure 1u). Surpluses in Germany, Japan, and some Asian countries were matched by substantial savings deficits, mainly in the United States (figures 1v and 1w). U.S. savings rates fell nearly 4 percentage points between 2000 and 2007, producing a savings-investment imbalance of close to 5 percentage points of GDP.

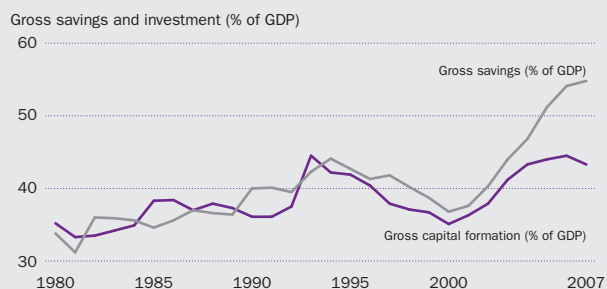
The rest of the world's savings surpluses left the United States awash in liquidity. U.S.-owned assets abroad doubled between 2000 and 2007 to 128 percent of GDP, reflecting the importance of the United States as a source of both foreign

direct investment and portfolio flows (figure 1x). U.S. liabilities rose from 77 percent of GDP to 145 percent over the same period, increasing the negative net liabilities to 17 percent of 2007 GDP. Foreign official assets held in the United States more than tripled, to \$3.3 trillion, or 24 percent of GDP, the bulk of it in U.S. government securities, the counterpart to the buildup in reserves in developing and high-income Asia. This kept U.S. interest rates low and stimulated a global “search for yield.” It also led investors to underprice risk and shift to risky assets, stimulating a boom in real estate and stock markets globally.

Some see the savings surpluses in developing economies as policy driven, ascribing a passive role to policymakers in industrial economies who benefited from these surpluses. Others see U.S. structural deficits as reflecting profligate spending. Indeed, personal savings in the United States were a mere 1.7 percent of GDP in 2000, falling further to 0.4 percent by 2007 reflecting consumption growth in “substantial excess of income growth” (Summers 2006). But until the crisis rudely interrupted the party, both surplus and deficit countries benefited: the first from high export-led growth; the second from low interest rates and cheap consumer goods, which held inflation down despite large fiscal deficits.

**Savings and investment in China . . .**

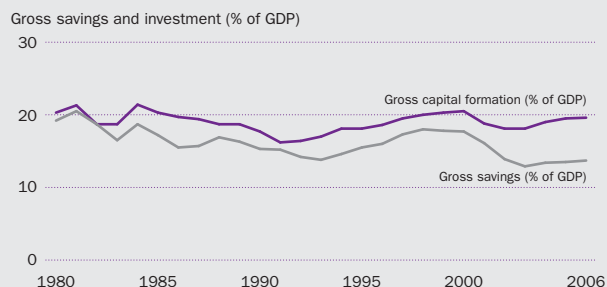
**1u**



Source: World Development Indicators data files.

**. . . And the United States**

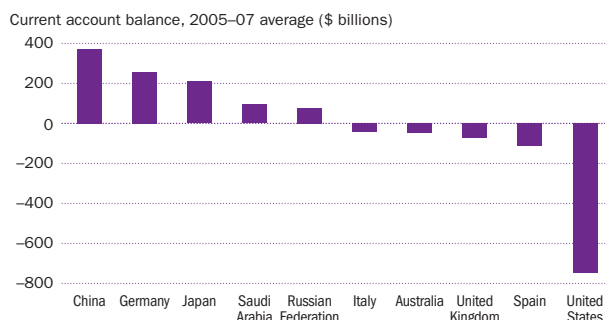
**1v**



Source: World Development Indicators data files.

**The five largest current account surpluses and deficits**

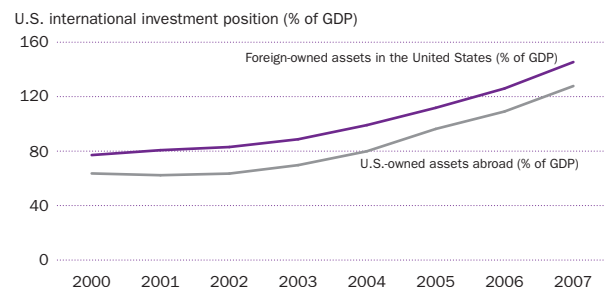
**1w**



Source: International Monetary Fund balance of payments data files.

**U.S. foreign assets and liabilities doubled**

**1x**



Source: Department of Commerce, Bureau of Economic Analysis data files.



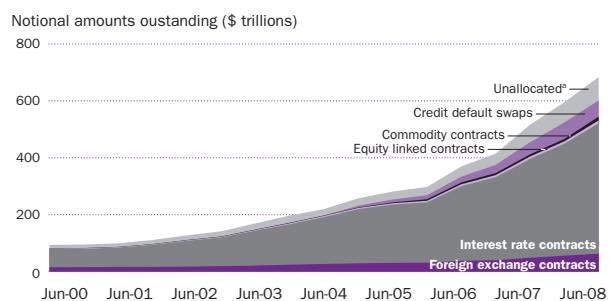
## The role of financial innovation

What distinguishes this crisis from previous crises is the speed and depth of the transmission channels, as a U.S.-based crisis turned global in a matter of months. This reflects the transformation of the financial system during this boom period by the dramatic growth in the share of assets held outside the traditional banking system. The mortgage market, for example, was transformed by an “originate and distribute” model. Mortgage loans, made by loan originators, were re-sold to financial institutions, which “sliced and diced” pools of mortgages and aggregated them into collateralized debt obligations resold in turn to investors all over the world.

Derivatives, or financial instruments whose value is derived from the value of an underlying asset (commodities, equities, stocks, mortgages, real estate, loans, bonds) or an index (of interest rates, stock prices, or consumer prices), enable those who trade in them to mitigate risk through hedging or to speculate. Derivatives can be bought and sold through over the counter trades between two parties, or they can be exchange traded. Over the counter derivatives had a notional value of some \$684 trillion in June 2008 (figure 1y), representing the value of the underlying assets against which the derivatives were issued. But the risk is better measured by the cost of replacing all such contracts at the prevailing market price: their gross global market value rose from \$2.5 trillion in June 2000 to a still astronomical \$20.4 trillion in June 2008 (figure 1z).

### Assets underlying over the counter derivatives rose sevenfold . . .

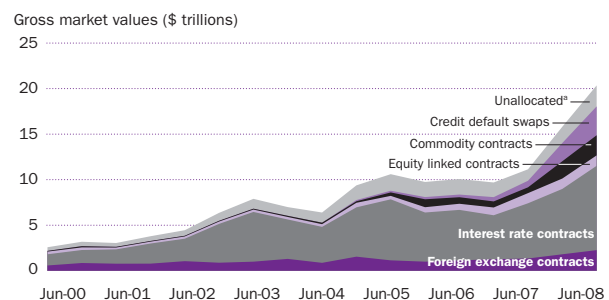
1y



a. Includes over the counter derivatives of nonreporting institutions, based on the latest Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in 2007. Source: Bank for International Settlements data files.

### . . . While the market value of derivatives rose ninefold

1z



a. Includes over the counter derivatives of nonreporting institutions, based on the latest Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity in 2007. Source: Bank for International Settlements data files.

Derivatives were pioneered globally by investment banks, stimulated by high fees. Financial sector profits in the U.S. averaged 29 percent of before-tax profits between 2000 and 2006 (figure 1aa). U.S. investment banks quickly grew to rival commercial banks but were not subject to the same regulation. “The scale of long-term risky and illiquid assets financed by very short-term liabilities made many of the vehicles and institutions in this parallel financial system vulnerable to a classic type of run, but without the protections, such as deposit insurance, that the banking system has in place to reduce such risks” (Geithner 2008). Following the collapse of the real estate market and the loss of confidence in mortgage-backed securities, investors began pulling out of these markets, creating liquidity and solvency crises for investment banks.

Underlying these developments lay the failure to properly regulate financial institutions, weaknesses in internal risk management systems, and the failure of credit rating agencies to correctly rate risk. At the end of 2007, there were reportedly 12 triple-A rated companies in the world, but as many as 64,000 structured finance instruments were rated triple-A (Blankfein 2009). Given the size of the market in these new instruments, it is questionable whether any single national authority can regulate cross-border transactions (figure 1bb).

### U.S. domestic financial sector profits averaged almost 30 percent of before-tax profits during 2000–06

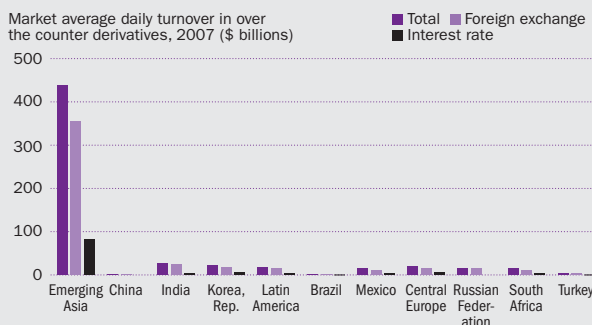
1aa



Source: Department of Commerce, Bureau of Economic Analysis data files.

### Derivatives can undermine capital controls, leading to linkages that make market dynamics difficult to predict

1bb



Source: Bank for International Settlements 2007.

## Why financial crises occur so often

Banking systems are inherently prone to crises. Banks borrow short (take in deposits) and lend long. They rely on depositors not to withdraw their deposits all at the same time. But depositor confidence in banks can be shaken by the rising threat of nonperforming loans or by political and economic developments. Even sound banks can be hurt by rumors and a general loss of confidence. When that happens, depositors may demand their deposits, causing a run on banks or a liquidity crisis. If banks sell their assets to maintain their ability to repay depositors, that may reduce the price of their assets and thus their equity base, a solvency crisis.

A recent study notes that banking crises “have long been an equal opportunity menace,” (Reinhart and Rogoff 2008, p. 2) affecting developed and developing economies alike. It examines crises beginning with Denmark’s financial panic during the Napoleonic war to the current global financial crisis in 66 economies. The Great Depression of the 1930s was the crisis that affected the greatest number of countries in the 109 years ending in 2008. The period immediately after World War II, between the late 1940s and the early 1970s, when financial markets were repressed and capital controls were extensive, was marked by relative calm. Banking crises recurred again after the 1970s following financial and international capital account liberalization (figure 1cc). Major crises in this period included the Latin American debt crisis of the 1980s, the U.S.

savings and loan crisis of 1984, Japan’s asset bust in 1992, and the Asian financial crisis of 1997–98 (figure 1dd).

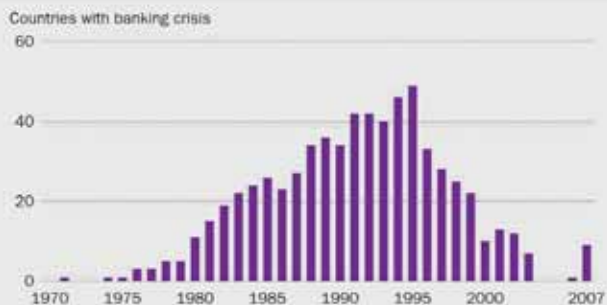
Some key characteristics of banking crises include:

- Periods of high international capital mobility, which have repeatedly produced international banking crises, possibly because they were accompanied by inadequate regulation and supervision (Caprio and Klingebiel 1996).
- Preceding period of sustained surges in capital inflows.
- Preceding boom in real housing prices, followed by a marked decline in the year of the crisis and beyond.
- Preceding expansion in the number of financial institutions.

The cost of bailing out banks following a systemic crisis (the exhaustion of much or all of banking capital) is often high (figure 1ee). A study of 117 systemic banking crises in 93 economies between the late 1970s and 2002 shows that the cost to countries of major crises could amount to as much as 55% of GDP (as with Indonesia in its 1997–2002 crisis; Caprio and Klingebiel 2003). This does not include the cost to depositors and borrowers of wider interest rate spreads from bad loans on balance sheets. The data need to be used with caution, however, because in some cases costs include corporate restructuring while in others they relate to restructuring and capitalization of banks.

**The number of banking crises rose after the 1970s**

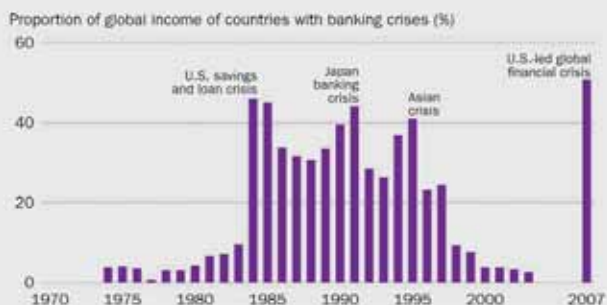
**1cc**



Source: Reinhart and Rogoff 2008.

**The latest crisis is affecting a large portion of global income**

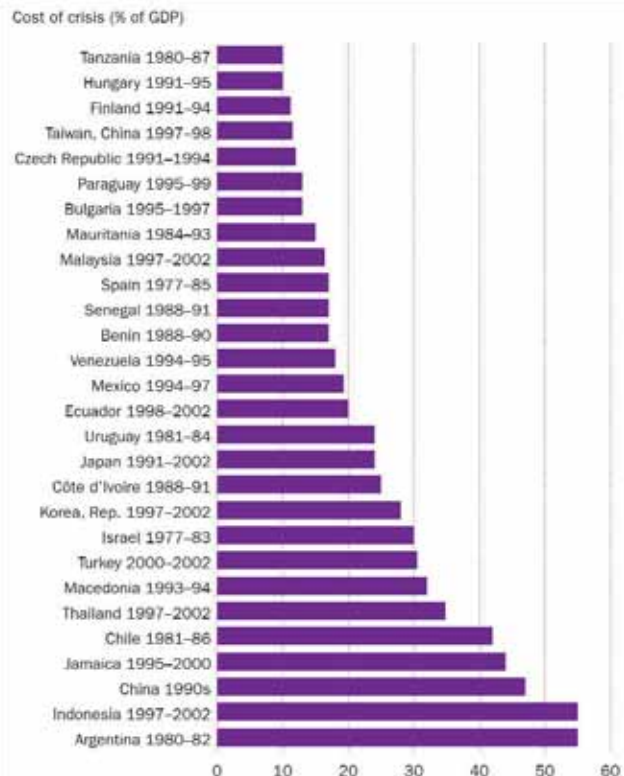
**1dd**



Source: Reinhart and Rogoff 2008 and World Development Indicators data files.

**The cost of systemic financial crises can be very high**

**1ee**



Source: Caprio and Klingebiel 2003.



## The crisis spreads quickly . . .

Past crises show that equity prices typically fall 55 percent over 3.5 years (Reinhart and Rogoff 2008). Housing prices decline an average 35 percent over 6 years. Unemployment rises 7 percentage points over 4 years. Output falls by 9 percent over 2 years. And the real value of government debt rises an average of 86 percent. This pattern is beginning to play out in the major high-income economies. In the fourth quarter of 2008 U.S. gross domestic output contracted by an annualized rate of 6.2 percent, euro area countries by 5.9 percent, and Japan by 12.1 percent.

Many low- and middle-income economies have begun to feel the impact as high-income economy demand for their exports declines. The troubles of the financial sector have increased risk aversion and reduced liquidity, impairing or reversing capital flows to low- and middle-income economy borrowers and equity markets (figures 1ff and 1gg). The subsidiaries of troubled banks are likely to curtail lending, pushing corporations with debt falling due into risk of insolvency. Foreign direct investment flows may also decline as corporations adjust to an increasingly uncertain environment and as plunging commodity prices make some ventures less appealing. Higher unemployment will also reduce workers' remittance flows to low- and middle-income economies.

### Borrowing costs have climbed, reflecting perceived risk

1ff

Spread on emerging market sovereign bonds against 10-year U.S. Treasury notes (basis points)

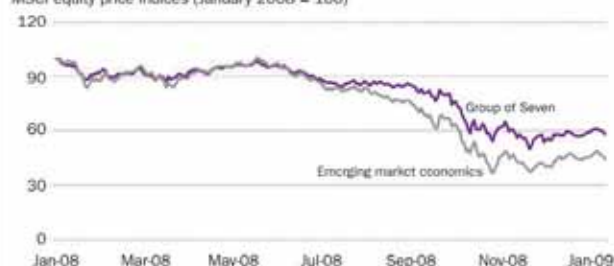


Source: JPMorgan-Chase.

### Equity markets have suffered large losses

1gg

MSCI equity price indices (January 2008 = 100)



Source: Morgan-Stanley.

## . . . And developing economies feel the pain

Low-income economies are the most vulnerable to potential losses of official aid, workers' remittances, and foreign direct investment, which often make up a large share of their GDP (table 1hh). But the slowdown in trade could also hurt low-income commodity exporters such as The Gambia, Guinea-Bissau, Nigeria, Mauritania, Mongolia, Papua New Guinea, and Zimbabwe, which are expected to suffer large terms of trade losses as prices fall. Lower commodity prices will reduce both export revenues and fiscal revenues—and discourage foreign direct investment. But food and fuel importers, which have endured soaring prices since January 2007, will get some relief—oil importers such as Kyrgyz Republic and Tajikistan and food importers such as Benin, Eritrea, Ghana, Guinea, Haiti, Madagascar, Niger, Senegal, and Togo may benefit from improved terms of trade.

Remittances have proved surprisingly resilient, rising again in 2008. But they are expected to fall as unemployment rises in high-income economies and some migrants return home. For many low-income economies, remittances are a big part of total capital flows—10 percent of GDP in more than a quarter of them (figure 1ii). And if the pattern of past financial crises is a guide, there is also a risk that official aid will decline. Low-income economies rely heavily on official aid flows, with median official aid at 15 percent of GDP in 2005–07.

### Low-income economies depend the most on official aid, workers' remittances, and foreign direct investment

1hh

External financing, 2007 (% of GDP)

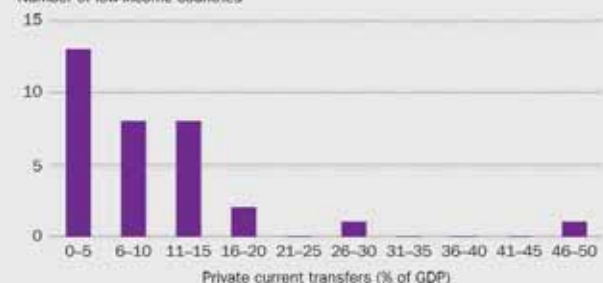
Source	Low-income economies	Middle-income economies
Workers' remittances and compensation of employees, receipts	5.7	1.8
Official aid	5.0	0.3
Foreign direct investment, net inflows	4.2	3.7
Portfolio equity investment	1.6	0.9
Bonds	0.2	0.6
Commercial banks and other lending, net flows	-0.1	1.6
Net exports of goods and services	-6.3	2.6

Source: World Development Indicators data files.

### Remittances are significant for many low-income economies

1ii

Number of low-income countries



Source: International Monetary Fund balance of payments data files and World Development Indicators data files.

## Coping with the crisis

In November 2008 China introduced a \$585 billion economic stimulus package to counter the global crisis. Other middle-income economies also have stimulus plans. Fiscal responses to the crisis must address short-term risks to macroeconomic stability and long-term fiscal sustainability—while protecting the vulnerable segments of society and the longer term investments that sustain economic growth and human development. About 40 percent of low- and middle-income economies have good fiscal and current account positions, including many larger economies, and may be able to expand fiscal policy without jeopardizing solvency (table 1jj).

In addition to strong fiscal and external positions, a successful fiscal stimulus requires administrative capability to design and implement new programs, or expand existing ones (box 1kk). Getting the timing and size right for a discretionary fiscal stimulus is not easy. Packages often cannot be delivered quickly enough, and expenditures may go to wasteful projects, especially when subject to political pressure. Where administrative capacity is weak, easier to implement options are boosting existing safety net programs, supplementing or replacing faltering foreign financing of infrastructure projects already under way with domestic financing, creating jobs through public works projects, increasing fiscal transfers to subnational governments, and facilitating central bank support of trade financing.

### Fiscal positions have generally improved but remain weak for some developing economies

1jj

Fiscal position (% of GDP; median)

Country group	Public debt 2007	Maximum debt 2002–07	Fiscal balance 2007 <sup>a</sup>
Low-income economies <sup>b</sup>	40.5	87.9	-2.4
Large economies	36.7	87.9	-1.9
East Asia and Pacific	40.6	70.1	-2.5
Europe and Central Asia	31.7	77.5	-2.6
Latin America and Caribbean	37.6	55.0	-0.4
Middle East and North Africa	41.2	57.8	-4.8
South Asia	57.1	66.4	-3.4
Sub-Saharan Africa	28.0	93.9	-1.7
Small economies	61.0	87.1	-3.6
Middle-income economies	34.1	51.1	-0.6

a. After official grants.

b. IDA-eligible economies.

Source: IMF 2008b; World Development Indicators data files.

### Finding fiscal space in low-income economies

1kk

Low-income economies can allow fiscal deficits to temporarily increase if they can access financing, but this generally has not been the case in past downturns. Median public debt among low-income economies was 41 percent of GDP in 2007. A quarter of developing economies had public debt of less than 21 percent. Among larger Sub-Saharan African economies median debt was 28 percent.

The ability to borrow depends on the size of the fiscal deficit, the level of government debt, the country's growth prospects, the government's reputation for fiscal management, the structure of debt (maturity, currency), and recent debt history.

Financing a larger fiscal deficit is generally easier if the country's starting external balance and reserve position are strong. A fiscal stimulus package tends to increase the external deficit by bolstering domestic demand. For commodity-exporting countries current account and fiscal deficits tend to rise when commodity prices fall, as at present. Thus a large imbalance or a low level of reserves will tend to limit the size of the fiscal stimulus that is possible.

## Protecting the vulnerable

Poor people in developing economies are highly exposed to the global crisis. World Bank estimates for 2009 suggest that lower growth rates will trap 46 million more people below the \$1.25 a day poverty line than expected before the crisis. An extra 53 million people will be living on less than \$2 a day, and child mortality rates could soar. It is estimated that 200,000–400,000 more children a year, a total of 1.4–2.8 million from 2009 to 2015, may die if the crisis persists.

Poor consumers are the first to be hurt by lower demand for labor and falling remittances. In addition, shrinking fiscal revenues and potential decreases in official aid flows threaten to reduce access to social safety nets and to such social services as health care and education. Households may have to sell productive assets, pull children out of school, and reduce calorie intake, which can lead to acute malnutrition. The long-term consequences can be severe and in some cases irreversible, especially for women and children.

Almost 40 percent of low- and middle-income economies are highly exposed to the poverty effects of the crisis. Yet three-quarters of them cannot raise funds domestically or internationally to finance programs to curb the effects of the downturn.

### Recent World Bank Group initiatives

1ll

*Establish a vulnerability fund.* The World Bank has proposed a vulnerability fund financed by high-income economies to assist countries that cannot afford to protect the vulnerable. The fund's priorities would be to invest in safety net programs and infrastructure and to finance small and medium-size enterprises and microfinance institutions.

*Substantially increase lending by the International Bank for Reconstruction and Development (IBRD).* IBRD could make new commitments of up to \$100 billion over the next three years.

*Fast track funds from the International Development Association (IDA).* A facility is now in place to speed \$2 billion to help the poorest countries deal with the effects of the crisis.

*Respond to the food crisis.* Nearly \$900 million is approved or in the pipeline to help developing countries cope with the impact of high food prices through a \$1.2 billion food facility.

*Ensure trade flows.* The International Finance Corporation (IFC), a member of the World Bank Group that focuses on the private sector, plans to double its existing Global Trade Finance Program to \$3 billion over three years and to mobilize funds from other sources.

*Bolster distressed banking systems.* IFC is putting in place a global equity fund to recapitalize distressed banks. IFC expects to invest \$1 billion over three years, and Japan plans to invest \$2 billion.

*Keep infrastructure projects on track.* IFC expects to invest at least \$300 million over three years and mobilize \$1.5 billion to provide rollover financing and recapitalize viable infrastructure projects in distress.

*Support microfinance.* IFC and Germany have launched a \$500 million facility to support microfinance institutions facing difficulties as a result of the crisis.

*Shift advisory support to help companies weather the crisis.* IFC is refocusing advisory services to help clients cope with the crisis. It estimates a financing need of at least \$40 million over three years.

# Millennium Development Goals

## Goals and targets from the Millennium Declaration Indicators for monitoring progress

### Goal 1 Eradicate extreme poverty and hunger

Target 1.A	Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day	1.1	Proportion of population below \$1 purchasing power parity (PPP) a day <sup>1</sup>
		1.2	Poverty gap ratio [incidence × depth of poverty]
		1.3	Share of poorest quintile in national consumption
Target 1.B	Achieve full and productive employment and decent work for all, including women and young people	1.4	Growth rate of GDP per person employed
		1.5	Employment to population ratio
		1.6	Proportion of employed people living below \$1 (PPP) a day
		1.7	Proportion of own-account and contributing family workers in total employment
Target 1.C	Halve, between 1990 and 2015, the proportion of people who suffer from hunger	1.8	Prevalence of underweight children under five years of age
		1.9	Proportion of population below minimum level of dietary energy consumption

### Goal 2 Achieve universal primary education

Target 2.A	Ensure that by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1	Net enrollment ratio in primary education
		2.2	Proportion of pupils starting grade 1 who reach last grade of primary education
		2.3	Literacy rate of 15- to 24-year-olds, women and men

### Goal 3 Promote gender equality and empower women

Target 3.A	Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1	Ratios of girls to boys in primary, secondary, and tertiary education
		3.2	Share of women in wage employment in the nonagricultural sector
		3.3	Proportion of seats held by women in national parliament

### Goal 4 Reduce child mortality

Target 4.A	Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1	Under-five mortality rate
		4.2	Infant mortality rate
		4.3	Proportion of one-year-old children immunized against measles

### Goal 5 Improve maternal health

Target 5.A	Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	5.1	Maternal mortality ratio
		5.2	Proportion of births attended by skilled health personnel
Target 5.B	Achieve by 2015 universal access to reproductive health	5.3	Contraceptive prevalence rate
		5.4	Adolescent birth rate
		5.5	Antenatal care coverage (at least one visit and at least four visits)
		5.6	Unmet need for family planning

### Goal 6 Combat HIV/AIDS, malaria, and other diseases

Target 6.A	Have halted by 2015 and begun to reverse the spread of HIV/AIDS	6.1	HIV prevalence among population ages 15–24 years
		6.2	Condom use at last high-risk sex
		6.3	Proportion of population ages 15–24 years with comprehensive, correct knowledge of HIV/AIDS
		6.4	Ratio of school attendance of orphans to school attendance of nonorphans ages 10–14 years
Target 6.B	Achieve by 2010 universal access to treatment for HIV/AIDS for all those who need it	6.5	Proportion of population with advanced HIV infection with access to antiretroviral drugs
Target 6.C	Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	6.6	Incidence and death rates associated with malaria
		6.7	Proportion of children under age five sleeping under insecticide-treated bednets
		6.8	Proportion of children under age five with fever who are treated with appropriate antimalarial drugs
		6.9	Incidence, prevalence, and death rates associated with tuberculosis
		6.10	Proportion of tuberculosis cases detected and cured under directly observed treatment short course

The Millennium Development Goals and targets come from the Millennium Declaration, signed by 189 countries, including 147 heads of state and government, in September 2000 ([www.un.org/millennium/declaration/ares552e.htm](http://www.un.org/millennium/declaration/ares552e.htm)) as updated by the 60th UN General Assembly in September 2005. The revised Millennium Development Goal (MDG) monitoring framework shown here, including new targets and indicators, was presented to the 62nd General Assembly, with new numbering as recommended by the Inter-agency and Expert Group on MDG Indicators at its 12th meeting on 14 November 2007. The goals and targets are interrelated and should be seen as a whole. They represent a partnership between the developed countries and the developing countries "to create an environment—at the national and global levels alike—which is conducive to development and the elimination of poverty." All indicators should be disaggregated by sex and urban-rural location as far as possible.



## Goals and targets from the Millennium Declaration Indicators for monitoring progress

### Goal 7 Ensure environmental sustainability

Target 7.A	Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources	7.1 Proportion of land area covered by forest 7.2 Carbon dioxide emissions, total, per capita and per \$1 GDP (PPP)
Target 7.B	Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	7.3 Consumption of ozone-depleting substances 7.4 Proportion of fish stocks within safe biological limits 7.5 Proportion of total water resources used 7.6 Proportion of terrestrial and marine areas protected 7.7 Proportion of species threatened with extinction
Target 7.C	Halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source 7.9 Proportion of population using an improved sanitation facility
Target 7.D	Achieve by 2020 a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in slums <sup>2</sup>

### Goal 8 Develop a global partnership for development

Target 8.A	Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system  (Includes a commitment to good governance, development, and poverty reduction—both nationally and internationally.)	Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries, and small island developing states.  <b>Official development assistance (ODA)</b> 8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income 8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water, and sanitation) 8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied 8.4 ODA received in landlocked developing countries as a proportion of their gross national incomes 8.5 ODA received in small island developing states as a proportion of their gross national incomes
Target 8.B	Address the special needs of the least developed countries  (Includes tariff and quota-free access for the least developed countries' exports; enhanced program of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral debt; and more generous ODA for countries committed to poverty reduction.)	<b>Market access</b> 8.6 Proportion of total developed country imports (by value and excluding arms) from developing countries and least developed countries, admitted free of duty 8.7 Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries 8.8 Agricultural support estimate for OECD countries as a percentage of their GDP 8.9 Proportion of ODA provided to help build trade capacity
Target 8.C	Address the special needs of landlocked developing countries and small island developing states (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the 22nd special session of the General Assembly)	<b>Debt sustainability</b> 8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative) 8.11 Debt relief committed under HIPC Initiative and Multilateral Debt Relief Initiative (MDRI) 8.12 Debt service as a percentage of exports of goods and services
Target 8.D	Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	
Target 8.E	In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	8.13 Proportion of population with access to affordable essential drugs on a sustainable basis
Target 8.F	In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	8.14 Telephone lines per 100 population 8.15 Cellular subscribers per 100 population 8.16 Internet users per 100 population

1. Where available, indicators based on national poverty lines should be used for monitoring country poverty trends.

2. The proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of these characteristics: lack of access to improved water supply, lack of access to improved sanitation, overcrowding (3 or more persons per room), and dwellings made of nondurable material.