Global Monitoring Report 2010

The MDGs after the Crisis

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Foreword

The world is five years from the target date for the Millennium Development Goals (MDGs). We are still recovering from a historic financial and economic crisis. The recovery is uncertain and likely to be uneven. We know from past crises that the harms to human development during bad times cut far deeper than the gains during upswings.

Under these conditions, it is especially important to consider actions to achieve the MDGs by the 2015 deadline. We need to learn lessons from MDG experiences to date. This 2010 *Global Monitoring Report* can contribute to that assessment, as part of an MDG review led by the United Nations.

How has the world performed in overcoming poverty and fostering human development since the onset of the crisis? This year's report, *The MDGs after the Crisis*, aims to answer this and other critical questions. It highlights lessons from the crisis and presents forecasts about poverty and other key indicators.

We learned from the 1990s crises that macroeconomic stabilization is not enough. If strong safety nets are not in place when crises hit, malnutrition and school dropouts increase, potentially leading to the loss of an entire generation.

A key lesson from this financial crisis is that the economic and social impact of the downturn would have been far worse if not for the effective—and often extraordinary—policy responses adopted by many advanced, emerging, and developing countries, as well as the swift and sizable assistance provided by international financial institutions and multilateral development banks. Policy responses and international cooperation have been better than in previous crises.

The postcrisis MDG scorecard is still being tallied. Numbers can only be gathered with time-lags and are often incomplete. It is therefore difficult to take a sharp snapshot of the developing world and to analyze the effectiveness of international aid in real time.

Despite these measurement challenges, we will certainly see significant harm to education, health, nutrition, and poverty indicators, especially in low-income countries. This is not a time for complacency. It is a time for exceptional efforts. For example, timely and well-designed conditional cash transfer programs not only increase household incomes, but also help children—boys and girls—stay in school and learn. To beat major diseases and reduce maternal mortality, we need to work on health systems in a holistic manner. This means addressing issues ranging from financing, service delivery systems, regulation, to governance of the systems. To mitigate the damaging effects of the crisis, we must ensure inclusive and sustainable global growth, maintain and expand an open international trade and financial system, deliver on aid commitments, and encourage the private sector.

To meet the MDGs, the developing world must revive its growth and reinforce its resilience to shocks. Countries that sowed in times of plenty were able to reap in times of loss. Fiscal policy buffers must therefore be rebuilt to allow for future countercyclical responses. Effective and efficient social safety nets—the first line of defense against adverse shocks to the poor—must be strengthened.

Progress on Goal 1—halving extreme poverty and hunger—is advancing in fits and starts. Poverty rates are forecast to continue falling in the wake of the crisis, but will do so more slowly. The global rate for extreme poverty is projected to be 15 percent in 2015, down significantly from 42 percent in 1990. Much of the progress in reducing extreme poverty has taken place in East Asia, where poverty dropped from 55 percent in 1990 to 17 percent in 2005. If this report's baseline projection for a recovery holds, the developing world will reach the poverty reduction goal by 2015.

However, the crisis has harmed many people. By the end of this year, we estimate that an additional 64 million people will fall into extreme poverty due to the crisis. And by 2015, 53 million fewer people will have escaped poverty. We estimate the poverty rate for Sub-Saharan Africa will be 38 percent by 2015, rather than the 36 percent it would have been without the crisis. The continent will therefore fall short of Goal 1.

Goal 1 also encompasses the aim of halving the proportion of people who suffer from hunger. The developing world is off track to meet this goal. Reducing malnutrition deserves more attention, because nutrition has a multiplier effect on the success of other MDGs, including infant mortality, maternal mortality, and education. Child malnutrition accounts for more than a third of the disease burden of children under five. And malnutrition during pregnancy accounts for more than 20 percent of maternal mortality.

We will likely meet the Goal 3 target of achieving gender parity in primary and secondary education by 2015. More girls than ever in history complete primary school. Almost two-thirds of developing countries reached gender parity at the primary school level by 2005. However, at higher levels of schooling, female enrollment lags seriously. And the quality of secondary and tertiary education needs significant improvement.

Progress in reducing maternal mortality is advancing more quickly than we had estimated earlier. This report includes the new findings just reported in *The Lancet* that the maternal death toll worldwide dropped from 526,300 in 1980 to around 342,900 in 2008, far below the latest UN estimates of some 500,000 for the same year. These signs of improvement are encouraging. But the progress is fragile and we are still far from reaching the global target of a 75-percent reduction in maternal deaths by 2015 from the ratio that prevailed in 1990. As we emerge from the crisis, we must also renew our efforts to achieve universal access to reproductive health.

The World Bank Group and the International Monetary Fund have stepped up to the challenge posed by the crisis. We have taken numerous initiatives to limit the slide in global economic growth and avert the collapse of the banking and private sectors in many countries. We have also provided financing to governments and the private sector, helping to soften the impact of the crisis on the poor. And we have scaled up our support for social safety nets.

With the deadline for the MDGs fast approaching, we must recognize and overcome obstacles in reaching the targets for tackling extreme poverty, hunger, and disease. Business as usual will not work. At a time of uncertainty, we need to extend our limited resources further. We must build upon the progress made in improving gender equality, education, and environmental sustainability. The actions we take today will shape future opportunities and challenges.

Robert B. Zoellick
President
The World Bank Group

Dominique Strauss-Kahn
Managing Director
International Monetary Fund

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Abbreviations and Acronyms

ADB	Asian Development Bank
AfDB	African Development Bank
AIDS	acquired immune deficiency syndrome
AfDF	African Development Fund
AsDF	Asian Development Fund
CIS	Commonwealth of Independent States
CPIA	Country Policy and Institutional Assessment
DAC	Development Assistance Committee
EBRD	European Bank for Reconstruction and Development
EU	European Union
FDI	foreign direct investment
G-8	Group of Eight
G-20	Group of Twenty
GDP	gross domestic product
GNI	gross national income
HIPC	heavily indebted poor country/countries
HIV	human immunodeficiency virus
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association (World Bank Group)
IDB	Inter-American Development Bank
IFC	International Finance Corporation (World Bank Group)
IFI	international financial institution
IMF	International Monetary Fund
MCI	Monetary Conditions Index
MDGs	Millennium Development Goals
MIGA	Multilateral Investment Guarantee Agency (World Bank Group)
NGO	nongovernmental organization
ODA	official development assistance
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
PEPFAR	President's Emergency Plan for AIDS Relief
PPP	purchasing power parity
SDR	special drawing rights
UN	United Nations
WTO	World Trade Organization

Goals and Targets from the Millennium Declaration

GOAL 1	**ERADICATE EXTREME POVERTY AND HUNGER**
TARGET 1.A	Halve, between 1990 and 2015, the proportion of people whose income is less than $1.25 a day
TARGET 1.B	Achieve full and productive employment and decent work for all, including women and young people
TARGET 1.C	Halve, between 1990 and 2015, the proportion of people who suffer from hunger
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
GOAL 3	**PROMOTE GENDER EQUALITY AND EMPOWER WOMEN**
TARGET 3.A	Eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015
GOAL 4	**REDUCE CHILD MORTALITY**
TARGET 4.A	Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate
GOAL 5	**IMPROVE MATERNAL HEALTH**
TARGET 5.A	Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio
TARGET 5.B	Achieve by 2015 universal access to reproductive health
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
TARGET 6.B	Achieve by 2010 universal access to treatment for HIV/AIDS for all those who need it
TARGET 6.C	Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases
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
TARGET 7.B	Reduce biodiversity loss, achieving by 2010 a significant reduction in the rate of loss
TARGET 7.C	Halve by 2015 the proportion of people without sustainable access to safe drinking water and basic sanitation
TARGET 7.D	Have achieved a significant improvement by 2020 in the lives of at least 100 million slum dwellers
GOAL 8	**DEVELOP A GLOBAL PARTNERSHIP FOR DEVELOPMENT**
TARGET 8.A	Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system (including a commitment to good governance, development, and poverty reduction, nationally and internationally)
TARGET 8.B	Address the special needs of the least-developed countries (including tariff- and quota-free access for exports of the least-developed countries; enhanced debt relief for heavily indebted poor countries and cancellation of official bilateral debt; and more generous official development assistance for countries committed to reducing poverty)
TARGET 8.C	Address the special needs of landlocked 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)
TARGET 8.D	Deal comprehensively with the debt problems of developing countries through national and international measures 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
TARGET 8.F	In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

Source: United Nations. 2008. *Report of the Secretary-General on the Indicators for Monitoring the Millennium Development Goals.* E/CN.3/2008/29. New York.

Note: 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 (http://www.un.org/millennium/declaration/ares552e.htm) and from further agreement by member states at the 2005 World Summit (Resolution adopted by the General Assembly–A/RES/60/1). 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."

Overview: MDGs after the Crisis

What is the human cost of the global economic crisis? How many people will the crisis prevent from escaping poverty, and how many will remain hungry? How many more infants will die? Are children being pulled out of schools, not getting the education they need to become more productive adults and making it virtually impossible to reach 100 percent completion in primary education by 2015? What are the gender dimensions of the impacts? These are some of the questions as the global economy comes out of the worst recession since the Great Depression.

The questions do not have immediate answers—partly because the data to assess development outcomes are incomplete and collected infrequently but also because impacts can take several years to emerge. For example, deteriorating health and nutrition today could lead to higher mortality rates in subsequent years. Lower investments will hamper future progress in sanitation and water supply. Fewer children in school will lower completion rates in later years. And household incomes that fall far below the poverty line will delay escapes from poverty. This report uses indirect evidence to assess the impact of the crisis on several indicators, including the number of people who will not escape poverty, the increase in infant mortality, the number of children who will be denied education, and the increase in discrimination against women. Based on that assessment, the report identifies key policies necessary for the developing countries, donors, and the international financial institutions (IFIs) to reestablish progress toward the Millennium Development Goals (MDGs).

The MDGs provide powerful benchmarks for measuring global progress on key development outcomes, calling attention to the enormous challenges in low-income countries. The goals have likely contributed to the progress itself, galvanizing governments, donors, civil society, private agencies, and the media to support human development. But uniform goals—reducing poverty by half, infant mortality by two-thirds, maternal mortality by three-quarters—can underestimate progress in poor countries. Why? Because the greater the distance to the goals from low starting points in poor countries, the greater the improvement needed to reach the targets. While the extent to which countries are on track to achieve the MDGs in 2015 varies widely, recent improvements have been widespread, as have the losses caused by the crisis.

From the 1990s until the onset of the crisis in 2008, developing countries, including low-income countries, made significant progress in human development. However, the crisis attacked two critical drivers of progress toward the MDGs: faster growth and better service delivery. The impact was undoubtedly negative because of the severity of the recession and the tendency for indicators of human development to decline much more in bad times than they improve in good times. But these asymmetric effects are estimated from past crises, which were often driven by internal shocks, such as domestic policy failures, conflict, and institutional breakdowns. By contrast, the current crisis was driven by an external shock, and policies and institutions in developing countries have improved considerably in the past 15 years. Moreover, many countries have maintained social safety nets in the face of the income decline. That is why the impact on the MDGs could be more moderate than in past crises.

Even so, the analysis and projections discussed in this report indicate that the deterioration in human development is severe, with effects likely to last for several years. This grim outlook has been taken seriously by the international community. The International Monetary Fund (IMF), the World Bank, and the regional multilateral development banks have sharply boosted their assistance to developing countries. Despite some increase in protectionist measures, developing countries have largely maintained their access to markets, and the very real danger of widespread beggar-thy-neighbor policies has been avoided. Although aid expanded through 2008, it was at levels far below what is needed to meet donor commitments for total aid and aid to Sub-Saharan Africa.

Policy responses to the crisis have repercussions that must be dealt with. The expansion of fiscal deficits—required to sustain demand in the depths of the recession—must be reined in by developing and advanced countries alike. Additional resources will be required so that the frontloading of concessional assistance and the rapid expansion in lending by the multilateral development banks do not result in a sharp decline in multilateral flows in the coming years. And shifts in the organization and staff expertise of the IFIs may be required to confront the challenges in the new global economic environment.

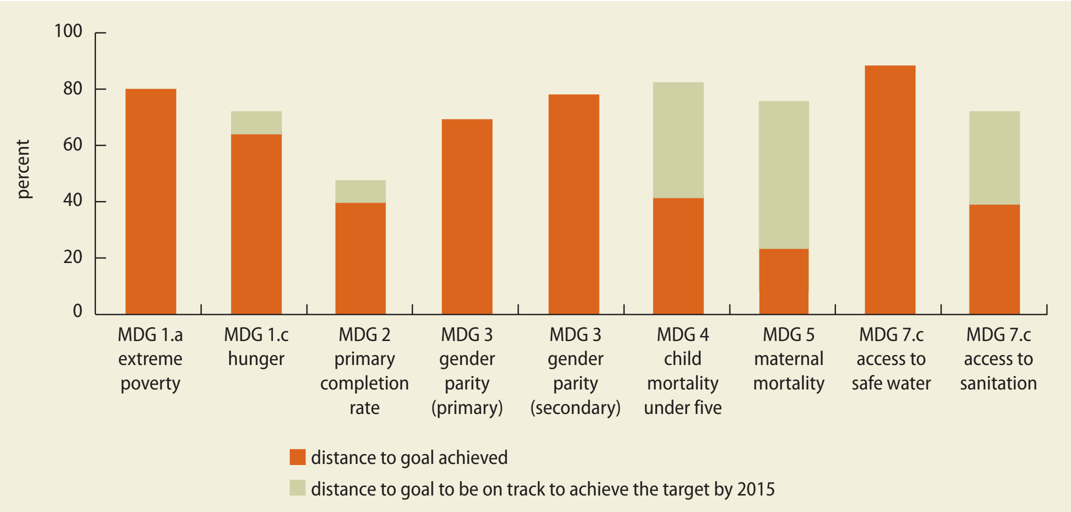
Ten years after the adoption of the MDGs, the international community is intensifying its monitoring of the progress toward these goals. The United Nations has called on member states to convene a formal summit on the MDGs in 2010 to review implementation of the agreement, and the leaders of the Group of Eight (G-8), meeting in L'Aquila in 2009 renewed their commitment to mitigate the impact of the crisis on developing countries.

The MDG indicators showed significant progress before the crisis

When the crisis hit, many countries had already made considerable progress in reducing extreme poverty. Globally, poverty had fallen 40 percent since 1990, and the developing world was well on track to reach the global target of cutting income poverty in half by 2015. Thanks to rapid growth, especially in China, East Asia had already halved extreme poverty. Although Sub-Saharan Africa was unlikely to reach the target, poverty had been falling rapidly since the late 1990s. The goal was more ambitious for Africa than for other regions, because the 1990 incomes of a large part of the African population were far below the poverty line. And Africa implemented reforms later than other regions and therefore benefited later from accelerating income growth.

Progress on MDGs outside poverty was uneven. Developing countries were on track to achieve gender parity in primary and secondary education and access to safe water, although countries were falling behind on gender parity in tertiary education and empowerment of women. Progress was good on primary school completion, nutrition, maternal mortality and (less so) sanitation, even if results at the global level were expected to fall short of targets (figure 1). The health goals appeared most challenging. Most regions were off track, with East Asia, Latin America, and Europe and Central Asia doing better than other regions.

FIGURE 1 **Serious global shortfalls loom for the human development MDGs**



Source: Staff calculations based on World Development Indicators database.
Note: Based on available data as of 2009, which can range from 2005 to 2009.

The crisis interrupted this progress, but the effects will not be apparent for many more years. Data needed to assess the degree of deterioration in development indicators will not be available for two or more years, and some impacts—for example, on mortality rates and school completion rates—will materialize only after several years. So this report uses historical examples and indirect evidence to assess the effects of the crisis on progress toward the MDGs.

Past crises generated exceptionally poor outcomes

The impact of economic cycles on MDG indicators is highly asymmetric. The deterioration in bad times is much greater than the improvement during good times (figure 2). Vulnerable groups—infants and children, especially girls, particularly in poor countries of Sub-Saharan Africa—are disproportionately affected during crises. For example, during contractions, female enrollment in primary and secondary education drops more than male enrollment. And the consequences of this disproportionate impact persist long into the future. Once children are taken out of school, future human capital is permanently lowered.

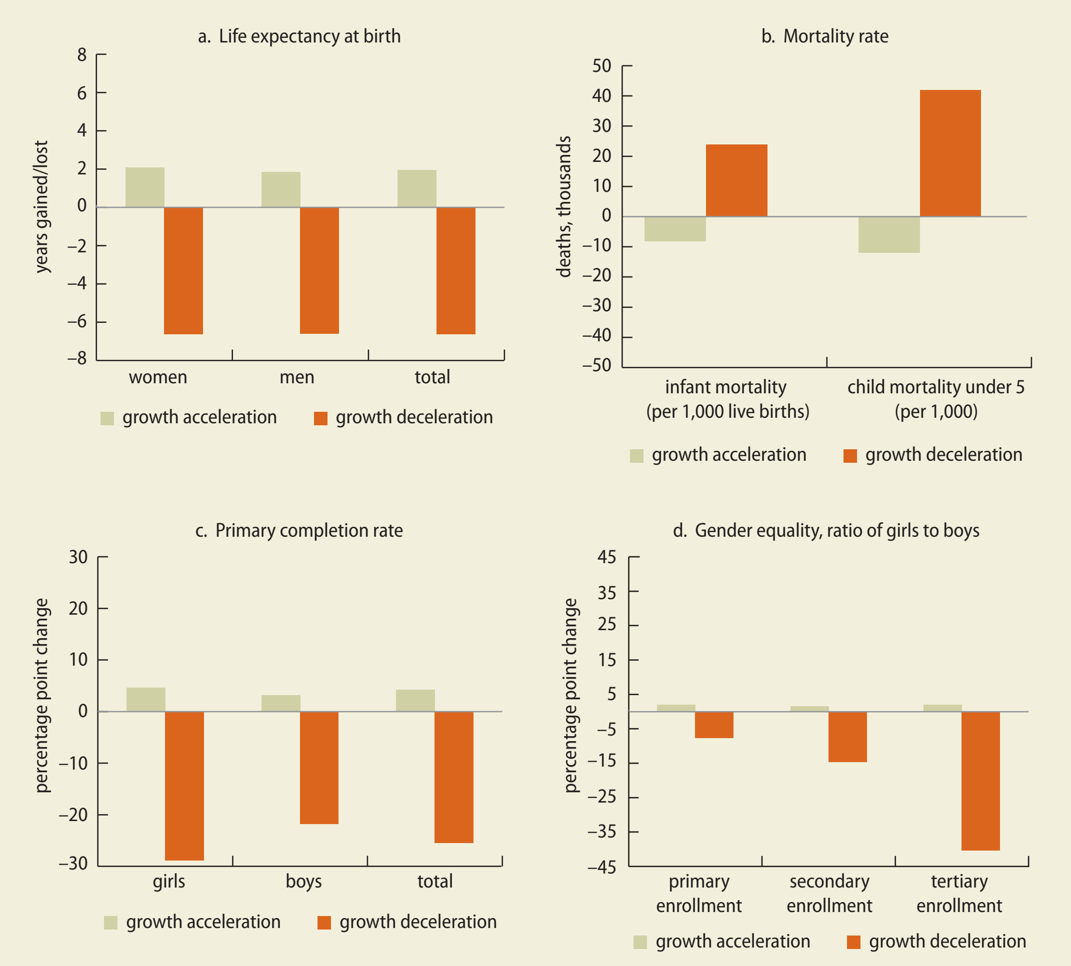
Several factors produce the asymmetric response.

- Economic indicators and quality of institutions and policy, such as political stability, voice and accountability, regulatory framework, rule of law, and government effectiveness, tend to decline sharply in downturns. Distinguishing cause and consequence is difficult, but vicious circles during crises are stronger than virtuous ones during prosperous times.
- Public and private spending on social services can easily be disrupted during economic crises, just when people need them most.
- Safety nets were uncommon in developing countries in previous crises.
- Donor funding also came under pressure if the crisis was global or if aid effectiveness declined during crises. But there is some evidence that official development assistance has provided countercyclical support since 2003.

Why this crisis may be different for low-income countries

Policies and institutions improved before the crisis. The economic performance of

FIGURE 2 **Key indicators plummet from their overall mean during growth decelerations, all countries**



Source: World Bank staff calculations based on data from World Development Indicators database. See chapter 2 for more details.
Note: The panels show differences of averages during growth accelerations and decelerations from overall averages.

developing countries is highly correlated with the quality of policies. Many countries entered the crisis with better policies and fiscal positions than they had in previous episodes of contraction.

Unlike many previous crises, the current crisis was not caused by domestic policy failure. Historically, almost 90 percent of the output volatility in low-income countries has been generated by internal conditions and shocks, such as policy failures and conflicts. Since the 1990s output volatility in low-income countries has lessened, and the relative frequency of external shocks has increased. Stronger institutions and policies in developing countries mean that they are better prepared to cope with shocks. Thus the impacts on human development outcomes may be less severe if conditions do not deteriorate and lead to widespread policy failures.

Spending on social safety nets has been relatively protected so far. Lower initial fiscal deficits and higher priorities for social spending have protected education and health spending in most countries. Up-to-date information is incomplete, but scattered information provides some examples. For example, of 19 programs initiated and monitored by the IMF and implemented in collaboration with the World Bank in 2008–09, 16 budgeted higher social spending for 2009. Of these, 9 were countries in Sub-Saharan Africa: Burundi, Republic of Congo, Côte d'Ivoire, Liberia, Malawi, Mali, Niger, Togo, and Zambia. Several African countries with poverty reduction strategies have protected their funding for social sectors. And some countries with fiscal space (Kenya and Nigeria) have protected capital expenditure, mainly for infrastructure. But there are also examples of forced contractions in social spending. Countries with precrisis fiscal and debt issues (such as Ethiopia and Ghana) had to undertake fiscal tightening. HIV/AIDS (human immunodeficiency virus/acquired immune deficiency syndrome) funding has been largely sustained, but with a new concern for the efficiency of resource use.

The international community responded strongly to the crisis

Despite widespread fears, developing countries' market access was not significantly reduced. At the end of 2009, 350 trade-restrictive measures had been put in place around the world, some 20 percent of them nontariff measures, such as quantitative restrictions, import licenses, standards requirements, and subsidies. Trade remedies were also on the rise. But in the aggregate, protectionism has been contained. The trade-restricting or -distorting measures introduced since October 2008 have amounted to only about 0.5 percent of world merchandise trade. Governments and multilateral development institutions supported developing countries' exports by bolstering trade finance. The Group of Twenty leaders pledged $250 billion in support of trade at their April 2009 London Summit; the World Bank Group provided guarantees and liquidity for trade finance through the International Finance Corporation's Global Trade Finance Program and Global Trade Liquidity Program. And export credit agencies stepped in to prevent a complete drying up of trade finance.

A massive IMF rescue was designed to limit economic contraction and contagion. The global nature of the crisis led the IMF to act swiftly to boost lending and modify conditionality frameworks. By the end of February 2010, the IMF had committed a record high $175 billion (including precautionary financing) to emerging and other developing countries with balance of payments difficulties; the commitments included a sharp increase in concessional lending to the world's poorest countries. The IMF also implemented a general allocation of special drawing rights equivalent to $250 billion, including almost $100 billion to emerging market economies and developing countries, $18 billion of it to low-income countries. Standard access to IMF financing has been doubled, a new flexible credit line without ex post policy conditions for countries with very strong track records has been adopted, and the provision of exceptionally large loans has become easier, while safeguards have been preserved.

Responses by multilateral development banks have sought to protect core development programs, strengthen the private sector, and assist poor households. More than $150 billion has been committed since the beginning of the crisis (two-thirds from the World Bank Group). International Bank for Reconstruction and Development (IBRD) lending almost tripled in fiscal 2009, and the first half of fiscal 2010 shows the strongest IBRD commitments in history ($19.2 billion, up from $12.4 billion in the same period in fiscal 2009). Commitments by the regional multilateral development banks also increased sharply, by more than 50 percent from 2007 to 2009. Low-income countries tapped more deeply into multilateral concessional resources in 2009, in part through frontloading multiyear allocations.

Donors increased aid volumes in real terms through 2009. Following an 11.7 percent increase in 2008, total net official development assistance (ODA) from the OECD's Development Assistance Committee (DAC) countries rose slightly by 0.7 percent in real terms in 2009. But in current U.S. dollars, it actually fell from $122.3 billion in 2008 to $119.6 billion in 2009. The 2009 figure represents 0.31 percent of members' combined gross national income (GNI). Aid from non-DAC donors, led by Saudi Arabia, rose

63 percent in real terms in 2008 to $9.5 billion. Development assistance from China will likely more than double in the next three years. Private aid, also substantial, is rising rapidly. And progress continued in reducing poor countries' debt burden through the Highly Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative. For 35 post-HIPC-decision-point countries, the debt burden will be reduced by 80 percent.

The recovery is stronger than expected, but the outlook for the MDGs remains worrisome

GDP growth in emerging market and developing economies is projected to accelerate to 6.3 percent in 2010. Most economies show signs of recovery (table 1), although many countries remain dependent on exceptional policy stimulus, and in most countries growth is not strong enough to undo the damage caused by the sharp deceleration in incomes and social conditions in 2009. Fiscal deficits in emerging market and developing economies rose by almost 3 percent of GDP in 2009 and are projected to remain high in 2010. Financial market conditions for these economies are improving and capital flows are returning, although international bank financing and foreign direct investment flows are projected to remain weak in 2010. The rebound of commodity prices in tandem with the global recovery in manufacturing production has supported commodity exporters, but commodity prices remain below their precrisis levels.

Trade is recovering unevenly across regions. World trade contracted by 12 percent in 2009, and all regions experienced deep declines in imports. Signs of recovery are evident, but trade remains fragile. At the end of 2009 global trade was still below its precrisis level. Almost a year into the recovery, the dollar value of global trade remains 20 percent lower than it was before the crisis.

The impact of the crisis on poverty will be long lasting. Poverty rates will continue to fall after the crisis, but more slowly (table 2).[1] By 2015 the global poverty rate is projected to be 15 percent, not the 14.1 percent it would have been without the crisis. The crisis will leave an additional 64 million people in extreme poverty by the end of 2010. The recovery will not make up all the lost ground. And as a result of the crisis, 71 million fewer people will have escaped poverty by 2020. For Sub-Saharan Africa, the poverty rate is expected to be 38 percent by 2015, rather than the 36 percent it would have been without the crisis, lifting 20 million fewer people out of poverty.

The medium-term impact on other MDGs may also be considerable. Illustrative and indicative results from growth analyses[2] suggest persistent gaps between precrisis and postcrisis trends in 2015 (figure 3):

- An additional 55,000 infants might die in 2015. And 260,000 more children under

TABLE 1 Global output
percent change

Region	2007	2008	2009	Projections 2010	Projections 2011–13
World output	**5.2**	**3.0**	**–0.6**	**4.2**	**4.4**
Advanced economies	2.8	0.5	–3.2	2.3	2.4
Emerging and developing economies	8.3	6.1	2.4	6.3	6.6
Central and Eastern Europe	5.5	3.0	–3.7	2.8	3.8
Commonwealth of Independent States	8.6	5.5	–6.6	4.0	4.1
Developing Asia	10.6	7.9	6.6	8.7	8.6
Middle East and North Africa	5.6	5.1	2.4	4.5	4.8
Sub-Saharan Africa	6.9	5.5	2.1	4.7	5.7
Western Hemisphere	5.8	4.3	–1.8	4.0	4.2

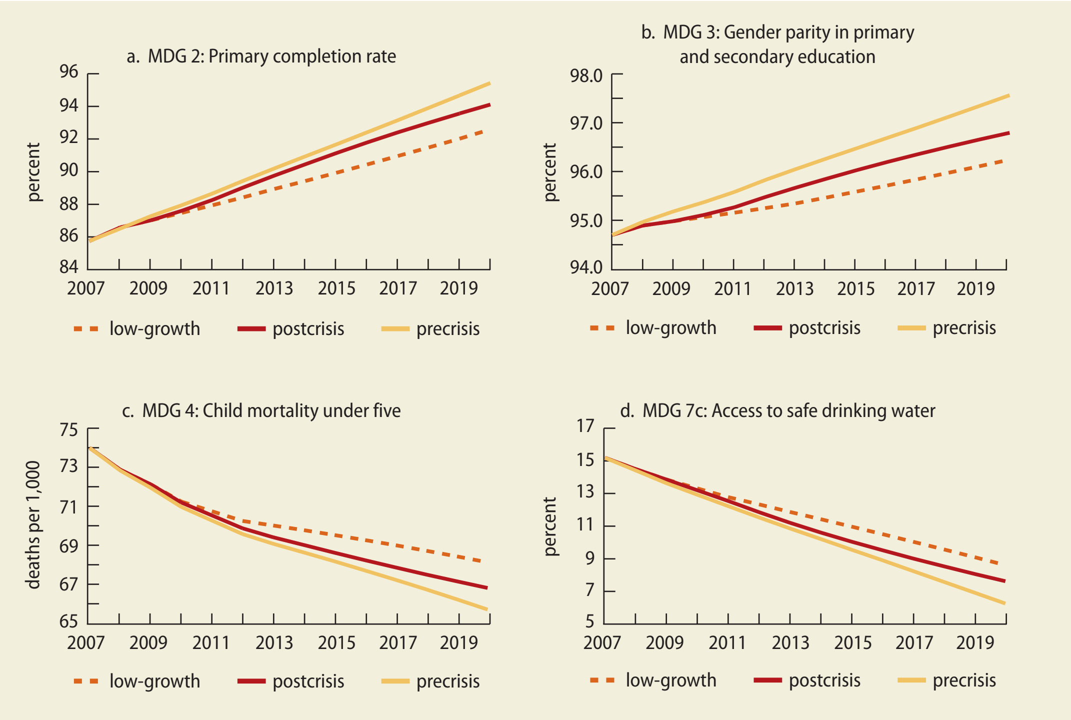
Source: IMF World Economic Outlook. See chapter 3 for further discussions.

TABLE 2 Poverty in developing countries, alternative scenarios, 1990–2020

Scenario	1990	2005	2015	2020
Global level				
	Percentage of the population living on less than $1.25 a day			
Postcrisis	41.7	25.2	15.0	12.8
Precrisis	41.7	25.2	14.1	11.7
Low-growth	41.7	25.2	18.5	16.3
	Number of people living on less than $1.25 a day (millions)			
Postcrisis	1,817	1,371	918	826
Precrisis	1,817	1,371	865	755
Low-growth	1,817	1,371	1132	1053

Source: World Bank staff calculations.

FIGURE 3 The long-run effect of slower growth on selected MDGs is worrisome



Source: World Bank staff calculations.

five could have been prevented from dying in 2015 in the absence of the crisis. The cumulative total from 2009 to 2015 could reach 265,000 and 1.2 million, respectively.

- An estimated 350,000 more students might be unable to complete primary school in 2015.
- Some 100 million more people might remain without access to an improved source of water.

Developing countries must maintain good policies and effective service delivery

Growth and institutional quality reinforce each other. Before the crisis, policy reforms triggered an impressive acceleration of growth in the developing world, which in turn helped to strengthen institutions and economic fundamentals. One of the dangers of the crisis is that reforms might be abandoned, leading to policy reversals and a deteriorating economy. It is important that all countries adopt credible medium-term fiscal adjustment plans to bolster confidence in macroeconomic policies and that they undertake policy reforms to secure long-term growth.

The effectiveness of safety nets should be enhanced given their importance in cushioning the effects of crises and in reducing poverty. Safety net programs in low-income countries are often small and fragmented, covering only a small percentage of the poor and vulnerable. There are real concerns about whether they are affordable and administratively feasible in light of the various negative incentives they might create. Understanding what kind of safety nets will serve social assistance best, what their implementation challenges are, and how to develop such programs for maximum effectiveness should inform policy reforms in developing countries.

If the global recovery remains weak, spending shifts, internal resource mobilization, and better service delivery can help, but these tools have limits. In the face of declining external revenues, shifting expenditures to protect social services and increasing domestic tax collections can keep the MDG indicators from deteriorating to a worst-case level. But higher taxes can also retard progress on the poverty MDG by reducing household income and spending. The negative effects of a tax increase need to be offset by better policies and service delivery. Even so, better development outcomes hinge critically not only on a better policy environment but also on a rapid global recovery that improves the export conditions, terms of trade, and capital flows for low-income countries.

The global community must continue to support developing countries

Multilateral cooperation in trade must be strengthened. Completion of the Doha Round is important in the aftermath of the crisis, because it would help governments resist protectionist pressures and keep markets open as expansionary policies unwind. Beyond Doha, there is a need to broaden cooperation on cross-border policy matters that are not on the Doha Development Agenda (climate change, and food and energy security). The crisis has also revealed the importance of strengthening monitoring and public reporting of government measures to increase transparency in the trading system (Global Trade Alert, Global Antidumping Database, World Trade Organization [WTO] monitoring reports).

Better monitoring of trade finance is needed. Although recent data indicate that trade finance is recovering, a mechanism is needed to collect data and monitor the market systematically and reliably—to assess how current interventions influence the supply of credit and trade flows, and to provide a useful early warning of stress in trade credit.

Developing countries' trade logistics need further support. Lowering trade costs through better trade regulations, trade logistics, and infrastructure can make a critical contribution toward development. The Second Global Review of Aid for Trade in Geneva in July 2009 found that donors were offering more and better aid for trade and that cooperation between developing countries is engaging new partners. Sustaining efforts to deliver on the commitments at the 2005 WTO Ministerial Meeting (in Hong Kong, China) to expand aid for trade should continue to be a priority. And more such aid needs to be directed to low-income countries, which receive only about half the total.

Aid has to expand to meet previous commitments. The expected medium-term impact of the crisis on low-income countries has heightened the urgency to scale up aid. But current donor spending plans leave a $14 billion shortfall in the commitments to increase aid by $50 billion by 2010 (in 2004 dollars). And the Group of Eight Gleneagles commitment to double aid to Africa by 2010 has yet to be reflected in core development aid to the region. Aid to Africa has grown 5 percent annually since 2000, but much of it has been in the form of debt relief or emergency and humanitarian assistance, not new finance. Reaching the 2010 target requires a further increase of $20 billion. Donor spending plans indicate that only an additional $2 billion is programmed, leaving a gap of $18 billion. Moreover, considerable scope remains for strengthening aid effectiveness by making aid more predictable; rationalizing the division of labor among donors; untying aid from the provision of goods and services in the donor country; increasing reliance on need and merit to guide aid allocations; and addressing the problem of countries that receive too little aid.

Necessary reactions to the crisis raise further policy challenges

Developing countries' fiscal positions deteriorate. Several developing countries maintained spending and expanded fiscal deficits to support domestic demand during the crisis. Indeed, more than one-third of these countries introduced discretionary fiscal stimulus plans in 2009. Absent such support, the impact on individual countries' growth and the shortfall in global demand would have been even greater than they were. But the rapid expansion of fiscal deficits and greater reliance on domestic finance in many countries may not be sustainable. The deterioration in debt ratios in low-income countries is particularly worrisome.

Optimal exit policies from policy support depend on country circumstances. Countries with weak private demand should continue policy support if they have the fiscal space. But countries facing financing constraints cannot delay adjustment. Donors should assist them by meeting their commitments to increase aid. All countries should adopt credible medium-term fiscal adjustment plans to bolster confidence in macroeconomic policies and undertake policy reforms to secure long-term growth.

The international financial institutions need to adapt to the new global environment. In the absence of increased resources from donors, the crisis-induced frontloading of concessional resources by the International Development Association and other multilateral agencies implies that concessional flows from these institutions must decline in the near future. Similarly, the sharp rise in IBRD commitments highlights the need for discussing a capital increase to avoid an eventual falloff in lending. Changes in responsibilities and organization of the IFIs are on the horizon: increased demand for technical services will shift requirements for staff expertise; coordination among the IFIs will need to be strengthened; and proposals to improve the responsiveness of the multilateral development banks (such as decentralization at the World Bank) are under consideration. The rapid response of the global economic community to the downturn helped avoid a new Great Depression, but decisive leadership still is required to ensure a rapid and sustainable recovery.

Notes

1. This projection is based on household surveys in more than 100 countries and on the effect of growth on household consumption.
2. These analyses are based on the estimated relationships between GDP growth and the MDGs, which can vary by country.

1

Millennium Development Goals: Significant Gains before the Crisis

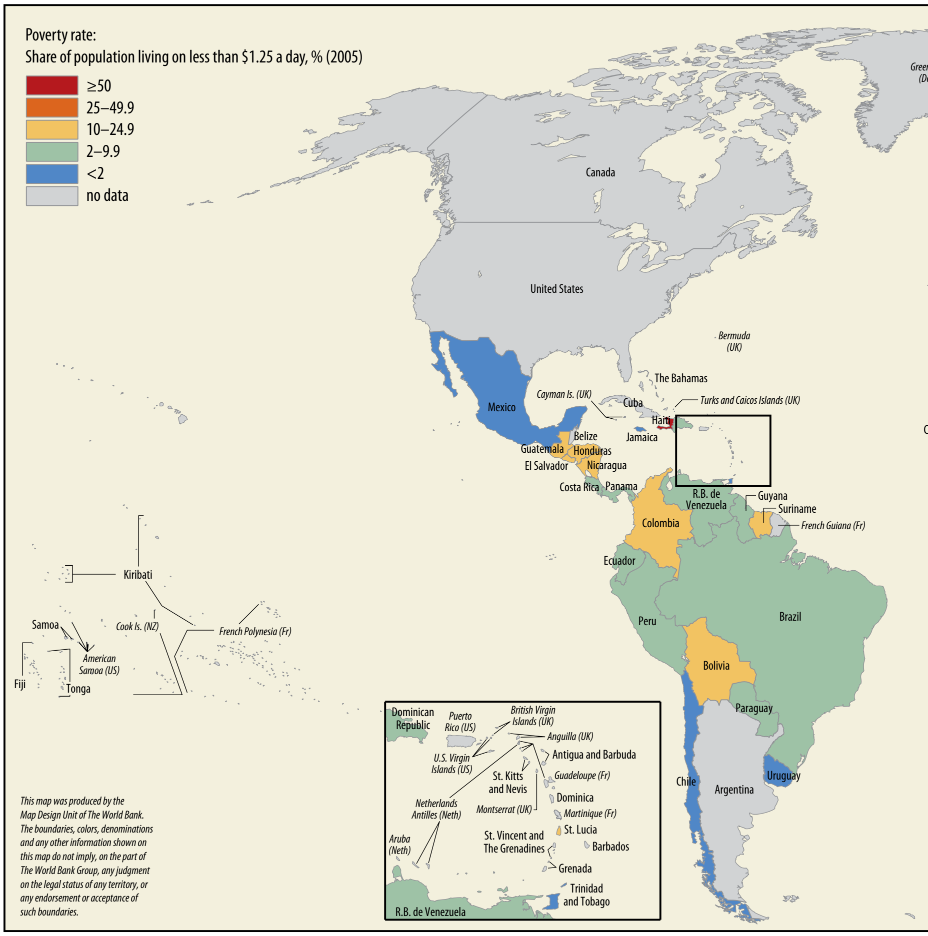
What is the human cost of the global economic crisis? How many people will the crisis prevent from escaping poverty, and how many will remain hungry? How many more infants will die? Are children being pulled out of schools, making it virtually impossible to reach 100 percent completion in primary education by 2015? What are the gender dimensions of the impacts? These are some of the questions as the global economy comes out of the worst recession since the Great Depression.

The questions raised here are hard to answer immediately, partly because the data to assess development outcomes are incomplete and collected infrequently but also because impacts can take several years to emerge. For example, deteriorating health and nutrition now will lead to higher mortality rates later. Lower investments will hamper future progress in sanitation and water supply. Fewer children in school will lower completion rates in later years. And household incomes that fall far below the poverty line will delay escapes from poverty.

The Millennium Development Goals (MDGs) provide powerful benchmarks for measuring global progress on key development outcomes, calling attention to the enormous challenges in low-income countries. The goals have likely contributed to the progress itself, galvanizing governments, donors, civil society, private agencies, and the media to support human development.[1] But uniform goals—reducing poverty by half, infant mortality by two-thirds, maternal mortality by three-quarters—can underestimate progress in poor countries. Why? Because the pace of progress is inversely related to initial conditions, particularly the greater distance to the goals from low starting points in poor countries.[2] And although the extent to which countries are on track to achieve the MDGs in 2015 varies widely, recent improvements have been widespread. So, too, are the losses caused by the interruption in progress.

This chapter offers an overview of progress in the decade before the crisis. It serves as the starting point for a more forward-looking analysis and explains what is at stake when a period of strong growth in many developing countries, including the low-income countries in Africa, is interrupted.[3] Subsequent chapters examine economic forecasts, how development indicators responded to previous crises, and how the current crisis differs, thus providing the building blocks to answer the questions about the human costs of the crisis.

MAP 1.1 Africa is the only region with high extreme poverty



Source: PovcalNet, the World Bank.

Because the MDGs are more ambitious for poor countries, global progress is mixed

Before the global economic crisis in 2008–09, overall progress on the MDG targets were particularly strong on poverty reduction, even in Africa (figure 1.1). Progress was also made on gender parity in primary and secondary education, maternal mortality, and on reliable access to improved water. Progress was less encouraging on gender parity in tertiary education and other targets for the empowerment of women. Of greatest concern were the human development goals. Progress on most of them—especially for child mortality but also for primary school completion, nutrition, and sanitation—was lagging at the global level (figure 1.2).

But substantial progress is evident in many areas

Economic growth is a key driver in reducing poverty and achieving other desired development outcomes, and it is there that progress has been most evident (figure 1.3). Economic growth in developing countries has accelerated, thanks to improved macroeconomic policies and a hospitable global environment—rapidly expanding world trade, favorable commodity prices, more foreign aid and debt relief, abundant low-cost capital, and large remittance flows. The 12 years before the

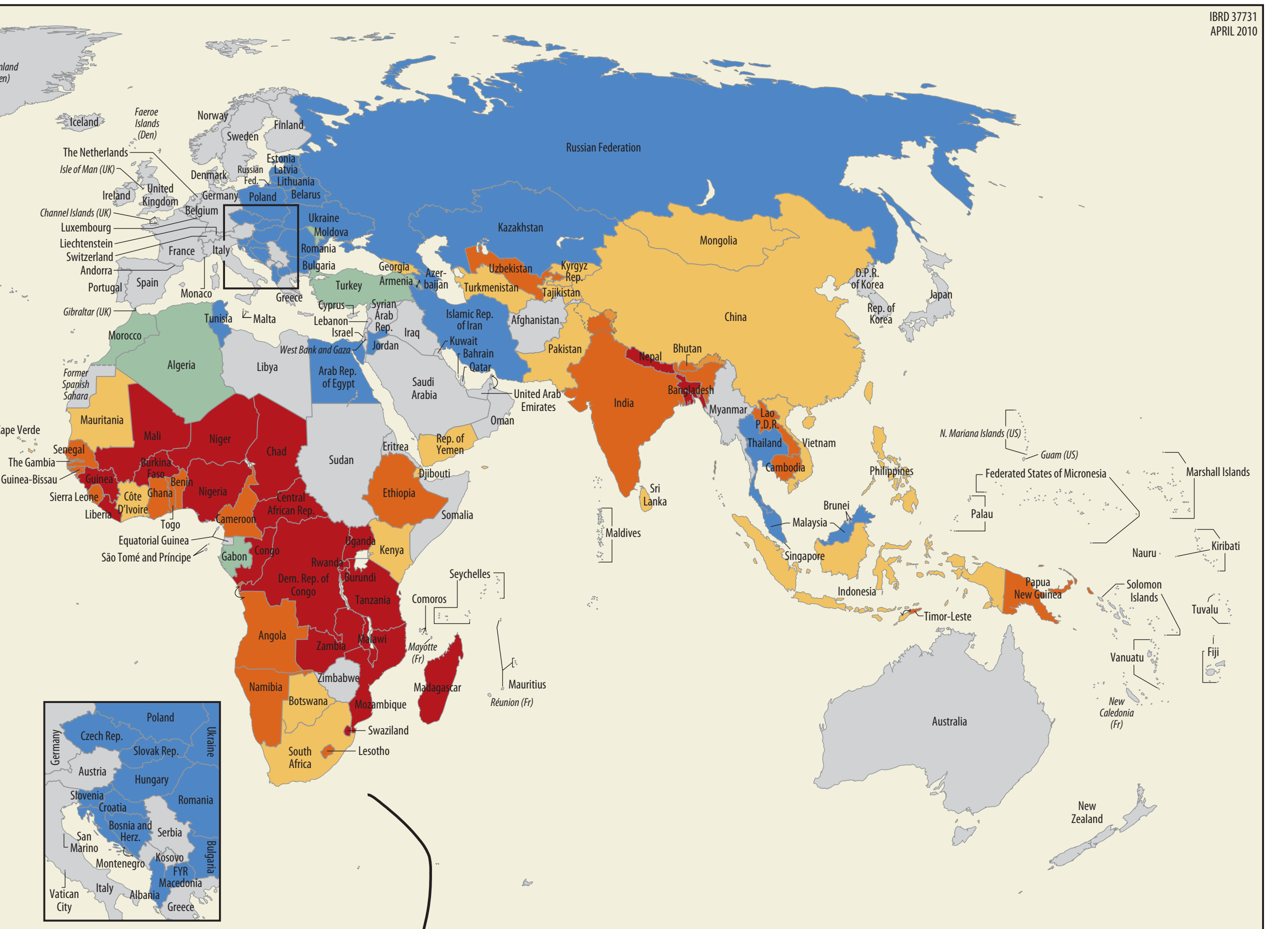
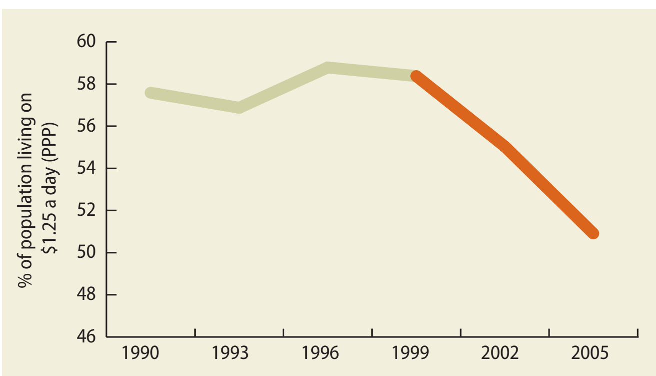
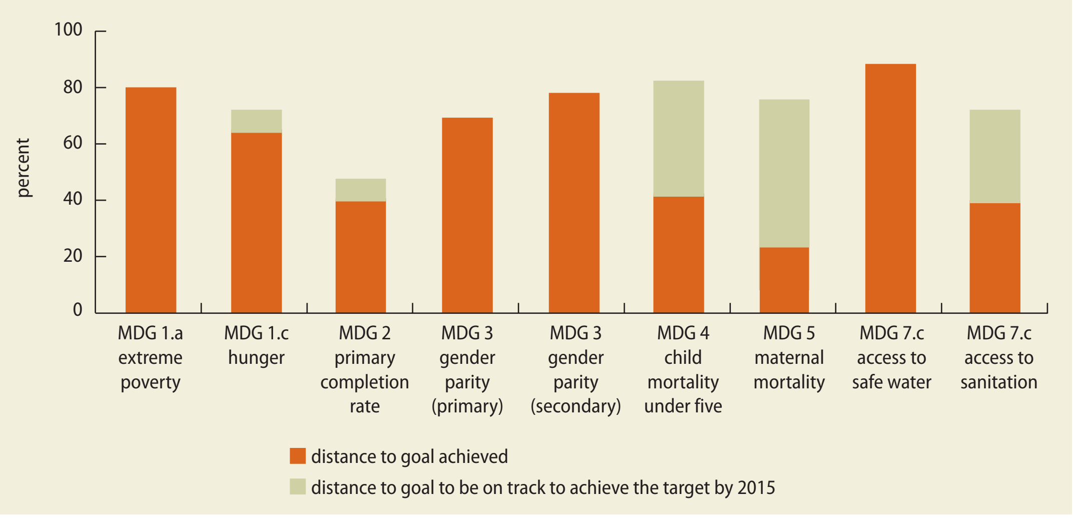


Figure 1.1 **But Africa's poverty rate is falling**



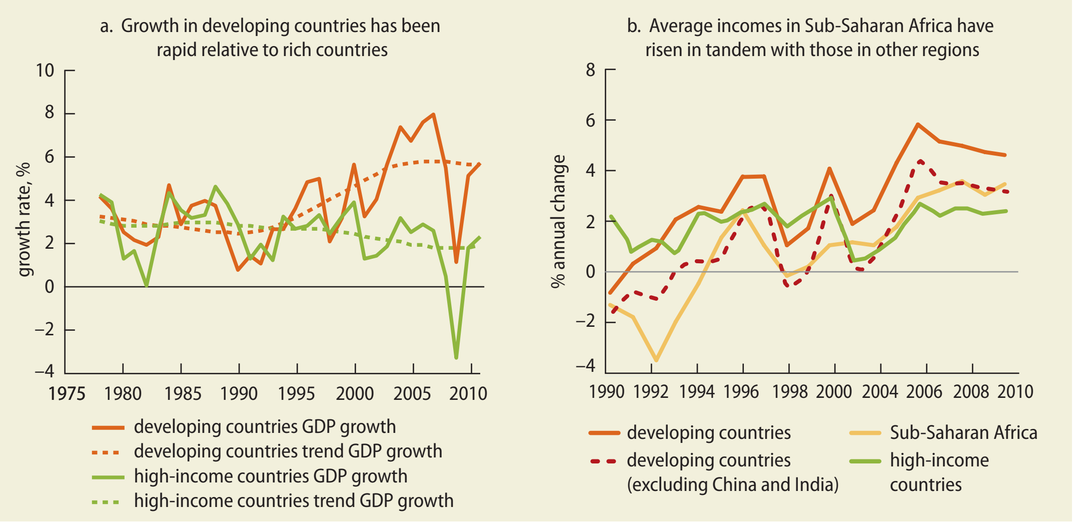
Source: World Development Indicators.

FIGURE 1.2 At the global level, serious shortfalls loom for the human development MDGs



Source: Staff calculations based on latest available data as of 2009 from the World Development Indicators database.

FIGURE 1.3 Since the 1990s growth in developing countries has accelerated

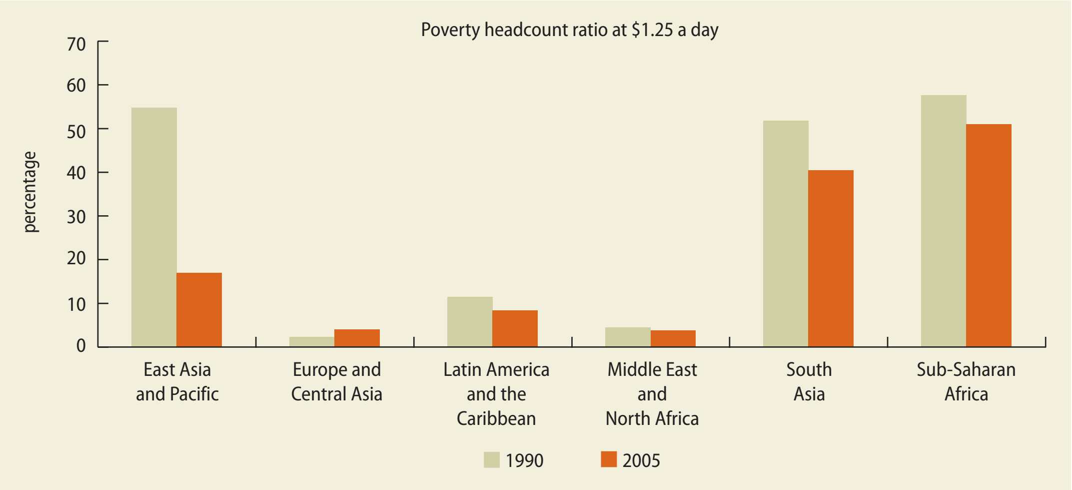


Source: Staff calculations based on World Development Indicators database.

crisis capped a remarkable period of sustained economic growth, technological advances, and globalization that started in 1950, and spread to a widening number of developing countries in Asia and Latin America and finally to low-income countries in Africa.[4] Since the mid-1990s growth in Sub-Saharan Africa has been comparable to that in other regions. As a result, progress toward the MDGs has been greater for the goals most influenced by economic growth, such as income poverty.

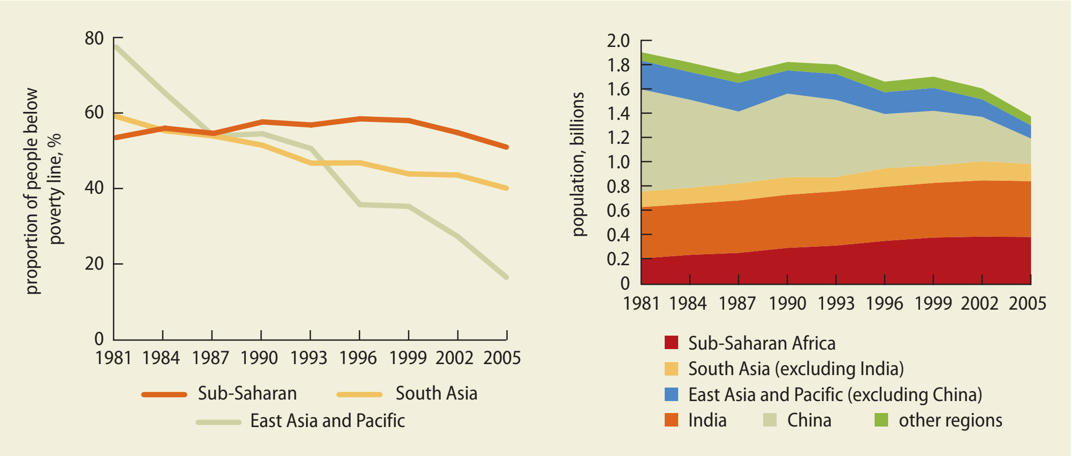
Extreme poverty is falling rapidly. Despite growing populations, the number of poor people living on less than $1.25 a day in developing countries fell from about 1.8 billion in 1990 to 1.4 billion in 2005—from 42 percent of the population to 25 percent. The global MDG target of 21 percent poverty is

FIGURE 1.4 Poverty reduction is substantial in all regions



Source: PovcalNet, World Bank.
Note: Poverty rate is given as purchasing power parity (PPP) rate.

FIGURE 1.5 Another view: Poverty rates and the number of poor people are falling rapidly



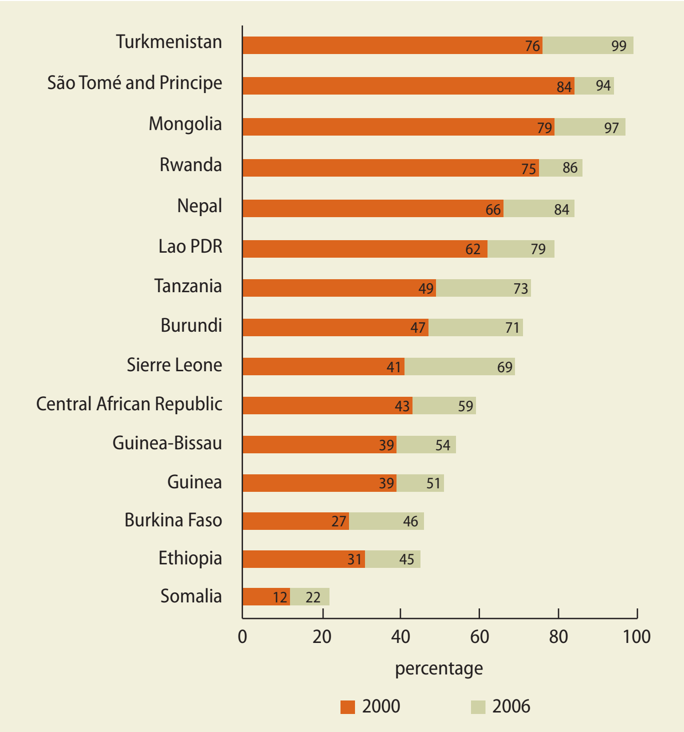
Source: PovcalNet, World Bank.

the one most likely to be exceeded, but the economic crisis adds new risks to prospects for reaching the goal.

Much of the progress is attributable to East Asia, which reduced the incidence of poverty from 55 percent in 1990 to 17 percent in 2005 (figure 1.4). China reduced its poverty rate from 60 percent to 16 percent, as the absolute number of extremely poor fell from 683 million to 208 million. India reduced the share of its population living in poverty from 51 percent to 42 percent, but because of population growth, the number of poor people actually rose from 436 million to 456 million.

With the precrisis surge of growth in Sub-Saharan Africa, the proportion of Africans living on less than $1.25 a day fell from 58 percent in 1990 to 51 percent in 2005, but the absolute number of poor people rose from 296 million to 388 million (figure 1.5). Despite Africa's recent progress, the pace of economic growth is still not fast enough there to cut the 1990 poverty rate by half in 2015. In almost every other region, it is.

FIGURE 1.6 Net enrollment rates are rising in many countries



Source: UNICEF 2007.

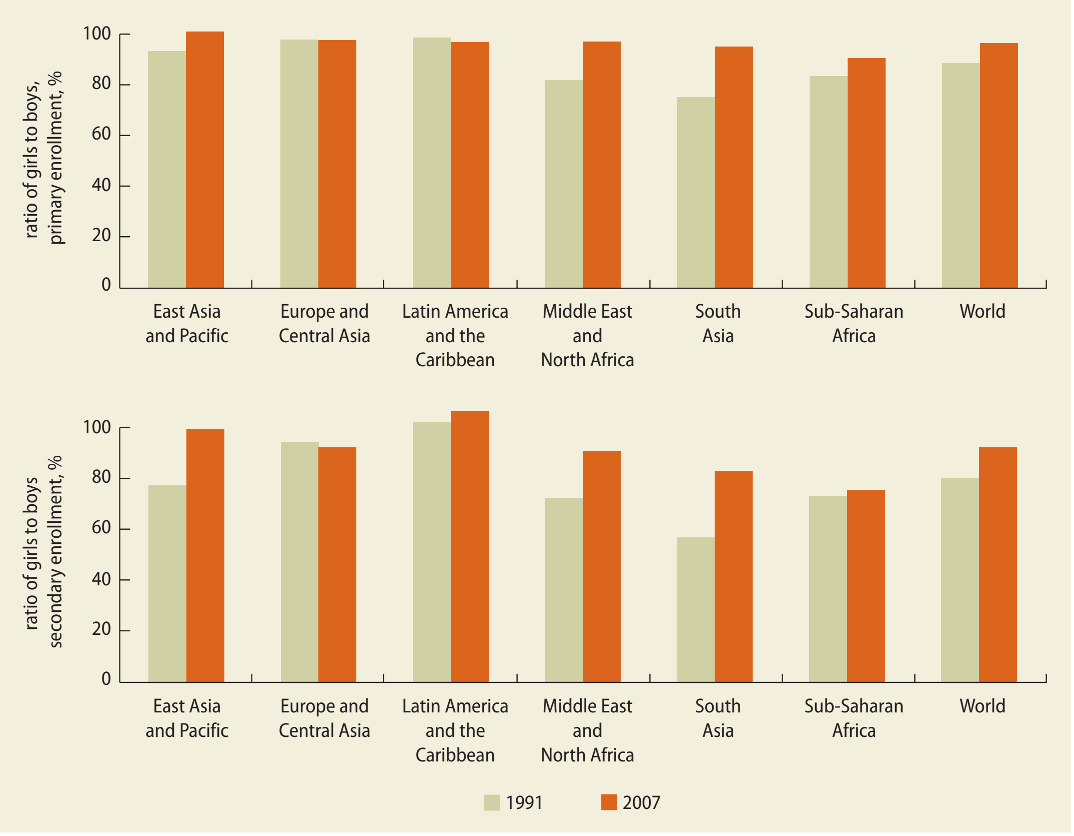
Universal primary education is within reach. Many countries are close to providing universal primary education. In more than 60 developing countries, over 90 percent of primary-school-age children are in school; the number of children out of school fell from 115 million in 2002 to 72 million in 2007, even with growing populations. In 2007 the primary school completion rate reached 86 percent for all developing countries together—93 percent for middle-income countries but just 65 percent for low-income countries. Net enrollment rates are rising in several poor countries (figure 1.6). Because of the substantial improvements, the world will come close to the goal of universal primary school completion in 2015 (MDG 2) but still fall short. For Sub-Saharan Africa and South Asia the lower rates of 60 percent and 80 percent in 2007 still constitute advancement over the 51 percent and 62 percent, respectively, in 1991. But with 41 million primary-school-age children in Sub-Saharan Africa and 31.5 million in South Asia out of school, the task of meeting the target remains challenging.

Higher enrollments are shrinking the gender gap in education. Gender equality and female empowerment, the third MDG, are important not only in themselves but also because they improve progress on the other MDG targets related to poverty, hunger, disease, and education. As more girls than ever complete primary school, many countries have reached gender parity in primary education (figure 1.7). All told, almost two-thirds of developing countries reached gender parity at the primary school level by 2005, and the MDG 3 target of achieving gender parity in primary and secondary education can be met by 2015. Sub-Saharan Africa is making good progress but is far behind the global target.

Access to safe drinking water is on track globally and in most regions. Rapid expansions of infrastructure spending account for part of this increased access. Progress on this part of MDG 7 remains vital for child survival and various health improvements. Between 1990 and 2006 more than 1.6 billion people gained access to improved sources of drinking water, raising the proportion of the population with such access from 76 percent to 86 percent (figure 1.8). As many as 76 developing countries are on track to hit the target. But 23 developing countries have made no progress, and 5 others have fallen behind.

New findings suggest a significant drop worldwide in the maternal mortality. New analysis of maternal deaths in 181 countries from better data found a significant decline globally.[5] Aggregate maternal deaths decreased by over 35 percent from about 526,300 in 1980 to 342,900 in 2008. More than half of all maternal deaths were concentrated in six countries—India, Nigeria, Pakistan, Afghanistan, Ethiopia, and the Democratic Republic of Congo. All told, maternal deaths for every 100,000 live births decreased markedly from 422 in 1980 to 320 in 1990 and to 251 in 2008. The yearly rate of the decline in the global maternal mortality ratio since 1990 was 1.3 percent (with an uncertainty range of 1.0–1.5). Progress is still varied. The Arab Republic of Egypt, China, Ecuador, and Bolivia have been achieving rapid gains, and

FIGURE 1.7 Gender parity is close in primary education



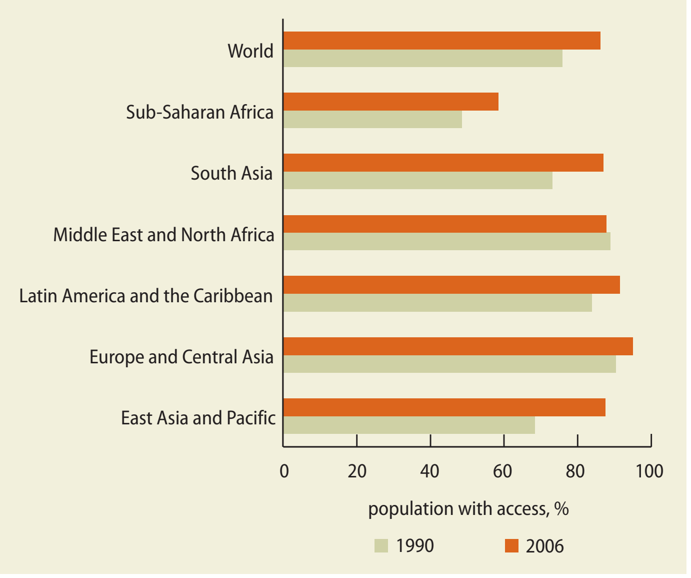
Source: World Development Indicators.

23 countries are on track with this MDG 5. In Sub-Saharan Africa, central and eastern regions showed some improvement since 1990, but southern and western regions showed deterioration because of the significant number of pregnant women who died from HIV infection. In southern Africa, the maternal mortality ratio increased from 171 in 1990 to 381 in 2008.

Where progress has been mixed or lacking

The recent food crisis has complicated progress on fighting malnutrition and hunger. The developing world is not on track to halve the proportion of people who suffer from hunger. Because reducing malnutrition is essential to success on several other MDGs, including infant mortality, maternal mortality, and education, it has a multiplier effect.

FIGURE 1.8 More people have improved sources of water



Source: World Development Indicators.

Child malnutrition accounts for more than a third of the disease burden of children under age five. And malnutrition during pregnancy accounts for more than 20 percent of maternal mortalities.

The proportion of children under five who are underweight declined from 31 percent in developing countries in 1990 to 26 percent in 2007, a much slower pace than needed to halve malnutrition by 2015. Progress has been slowest in Sub-Saharan Africa and South Asia, with severe to moderate stunting affecting as many as 46 percent of children under five—more than 140 million children.

Progress on full and productive employment, especially for women, was lacking even before the crisis. (figure 1.9). The employment-to-population ratio is the proportion of a country's working-age population (ages 15 years and older) that is employed. Considerable underemployment in informal sectors and subsistent activities of rural areas are of course hard to account for in developing countries. The female employment ratios have consistently been lower than male ratios, particularly in the Middle East and North Africa and in South Asia. Nonetheless, progress is noted in the female ratios for Latin America and the Caribbean and to a slight extent in the Middle East and North Africa (figure 1.9).

Gender parity is weak beyond primary education. MDG 3 also calls for gender parity in tertiary education (figure 1.10), gender equality in employment, and greater political representation of women. Progress toward these targets has been slower and less even. The gender targets face added risk from the current crisis because evidence from past crises suggests that women in general are more vulnerable.

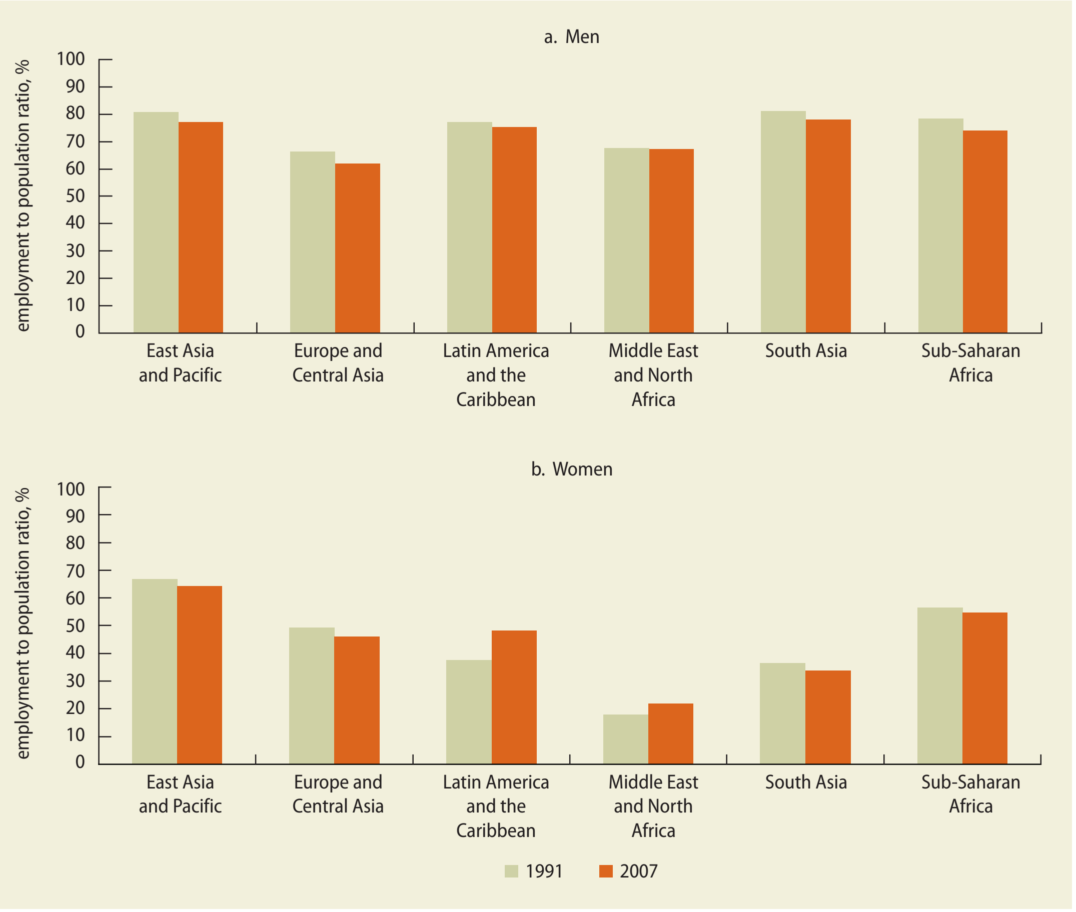
Access to sanitation has been elusive. Sanitation coverage, another important target of MDG 7 on environmental sustainability, rose from 43 percent in 1990 to 55 percent in 2006, in low- and middle-income countries. But the global target will be missed. Almost half the people in developing countries lack adequate sanitation. In Sub-Saharan Africa the proportion with access rose from 26 percent in 1990 to just 31 percent in 2006, and in South Asia, from 18 percent to 33 percent. MDG 7 also calls for integrating sustainable development into country policies and programs and reversing the losses of environmental resources. Progress on this broader environmental agenda, although fairly slow, is picking up as the world focuses on environmental sustainability and climate change.[6]

Prospects are worst for most MDGs relating to health, such as infant mortality. The under-five mortality rate in developing countries declined from 101 deaths per 1,000 to 74 between 1990 and 2007, showing notable but insufficient progress to meet MDG 4 for reducing child mortality under five by two-thirds. In 2006, 10 million children died before age five from preventable diseases, compared with 13 million in 1990. The human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) epidemic and civil conflicts have impeded Sub-Saharan Africa's progress. Its under-five mortality rate stood at 144 deaths per 1,000 in 2008, down from 185 in 1990. Sub-Saharan Africa has 20 percent of the world's children under age five but 50 percent of all child deaths. Progress in reducing infant mortality is also well short of the target in South Asia.

The situation is similar for universal access to reproductive health (MDG 5.b). For example, the contraceptive prevalence rate has increased for all income groups between 1990 and 2007 but is still quite low at only 33 percent for low-income countries in 2007 (figure 1.11).

Progress in halting the spread of major communicable diseases has been mixed (MDG 6). An estimated 33.4 million people were living with HIV/AIDS in 2008; there were 2.7 million new infections and about 2 million AIDS-related deaths. The rapidly rising trends of HIV spread and related deaths that were recorded in the 1990s were halted in the 2000s and were showing some signs of decline in recent years (figure 1.12). However, further actions are still necessary to achieve

FIGURE 1.9 Progress lacking on ratio of employment to population



Source: World Development Indicators.

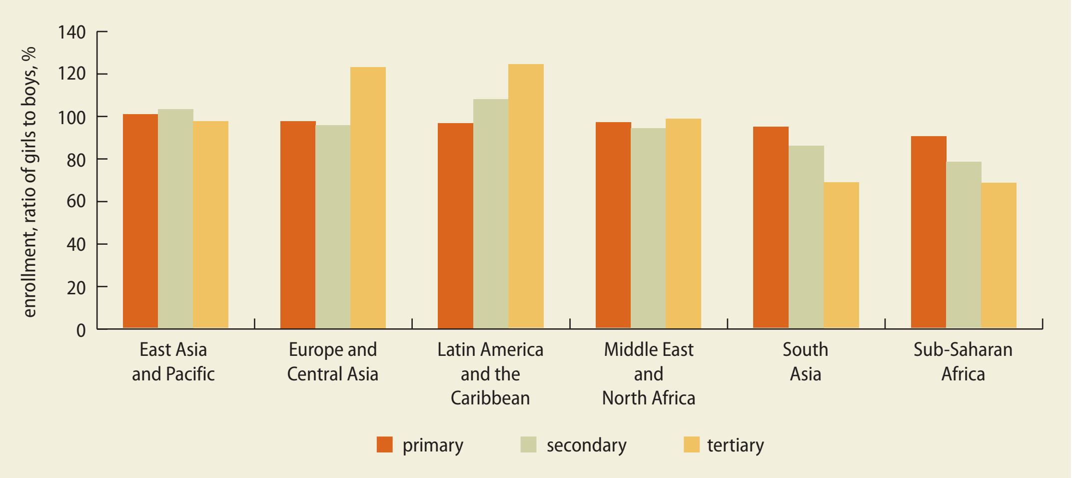
significant reversals. Sub-Saharan Africa remains the region most heavily affected by HIV worldwide, accounting for over two-thirds of all people living with HIV and for nearly three-fourths of AIDS-related deaths in 2008. HIV prevalence has declined in recent years in Sub-Saharan Africa (map 1.2), but it has risen in other regions, albeit from much lower levels.

Antiretroviral treatment (ART) now reaches almost a third of people living with HIV/AIDS in developing countries (figure 1.13). But few countries will meet the target of universal access to treatment anytime soon.

The prevalence of tuberculosis, which killed 1.3 million people in 2008, has been declining in all regions except Sub-Saharan Africa. Mortality from malaria remains high—at about 1 million people annually, 80 percent of them children in Sub-Saharan Africa.

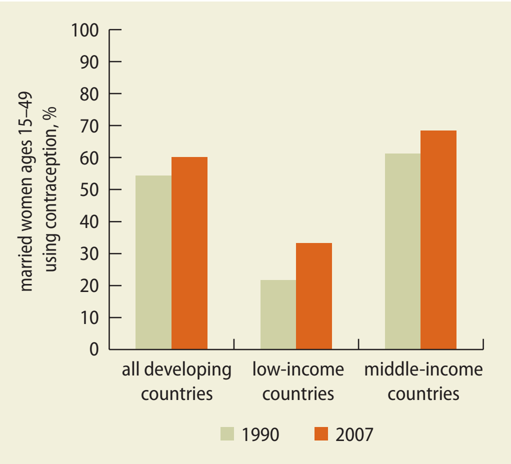
More attention should be given to achieving environmental goals. According to the World Bank's 2010 *World Development Report* on development and climate change, developing countries can shift to lower-carbon paths while promoting development and reducing poverty, as long as they receive financial and technical assistance from high-income countries. High-income countries, which produced most of the greenhouse gas emissions of the past, must act to shape our climate future, taking actions quickly to reduce their own carbon footprints and boost development of alternative energy sources. The costs for getting there will be high but still manageable. A key way

FIGURE 1.10 Female enrollment in tertiary education lags in Sub-Saharan Africa and South Asia, 2007



Source: World Development Indicators.

FIGURE 1.11 The contraceptive prevalence rate is low for low-income countries



Source: World Development Indicators.

to slow climate change is to ramp up funding for mitigation in developing countries, where most future growth in emissions will occur.[7]

More progress is needed on developing a global partnership for development. MDG 8 covers cooperation in aid, trade, debt relief, and access to technology and essential drugs. Net disbursements of official development assistance (ODA) from the Development Assistance Committee of the Organisation for Economic Co-operation and Development rose during 2003–05 but fell in both 2006 and 2007, dropping from 0.33 percent of donor gross national income (GNI) in 2005 to 0.28 percent in 2007. The ratio of ODA to GNI reached 0.31 percent in 2009, but to meet donors' aid commitments, aid increases will have to be larger and sustained. Donors need to shield aid budgets from the fiscal impact of the financial crisis. In trade the largest implementation gap is the failure to conclude the Doha Round of negotiations. Progress has been greater in providing debt relief to poor countries, thanks to the Heavily Indebted Poor Countries Initiative and the Multilateral Debt Relief Initiative. The lack of specific targets is hampering the transfer of technology to developing countries and their access to essential drugs.[8]

Progress varies by type of country

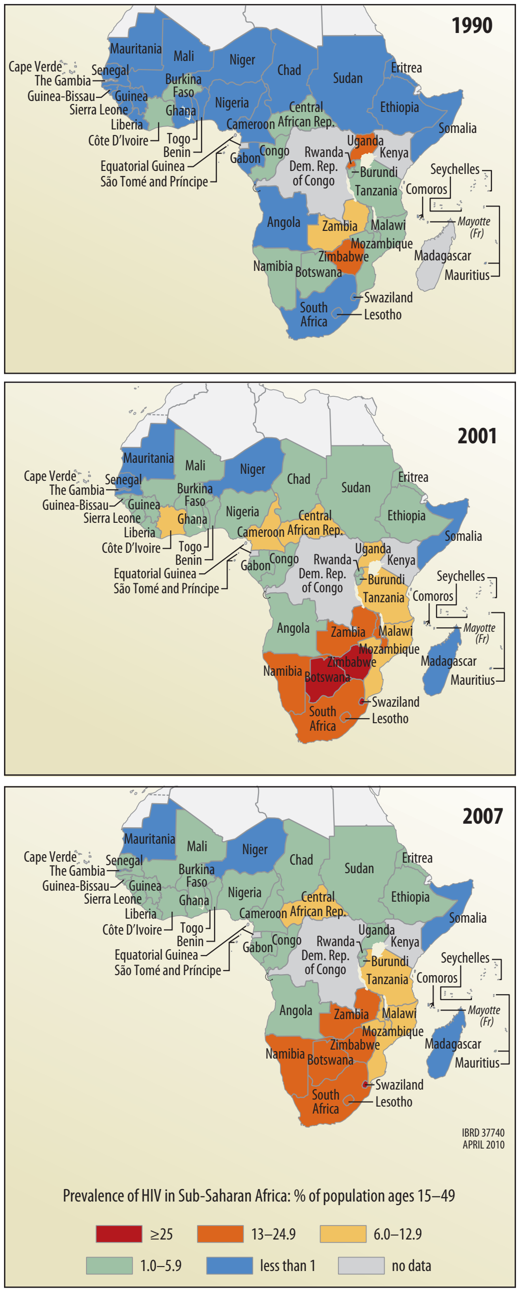
Inside the global picture is considerable variation across income groups, regions, and countries. Middle-income countries have progressed fastest toward the MDGs. As a group, they are on track to achieve the target for poverty reduction. But many of them still have large concentrations of poverty, in part reflecting great income inequality. These concentrations of poverty, together with large populations in some countries, mean that middle-income countries remain home to a majority of the world's poor in absolute numbers. Many middle-income countries also continue to face major challenges in achieving the nonincome human development goals.

Progress has been weaker in low-income countries, with considerable variability. It has been slowest in fragile and conflict-affected states (figure 1.14). Wracked by conflict and hampered by weak capacities, these states—more than half of them in Sub-Saharan Africa—present difficult political and governance contexts for the effective delivery of development finance and services. Fragile states account for close to a fifth of the population of low-income countries but more than a third of their poor people. Much of the challenge of achieving the MDGs will be concentrated in low-income countries, especially fragile states.

Most regions are progressing rapidly toward the goals. Thanks to rapid economic growth, especially in China, East Asia has already halved extreme poverty. South Asia is on track to do the same, but it is seriously off track on most human development goals. For the health goals most regions are off track, although the rate of progress varies substantially, with East Asia and the Pacific, Latin America and the Caribbean, and Europe and Central Asia doing better than the other regions.

Sub-Saharan Africa is a special case. It is easy to see that Sub-Saharan Africa lags on all the MDGs, including poverty reduction. But that is only half the story—because the region has made progress. Practically all the MDG curves for Sub-Saharan Africa (figure 1.15) have been headed in the right direction for more than 10 years, but the progress required looks steeper in direct comparisons with other regions because of Africa's lower starting points. Achievements are more apparent when viewed against the severe economic stagnation that afflicted the region from the 1970s to the early 1990s.

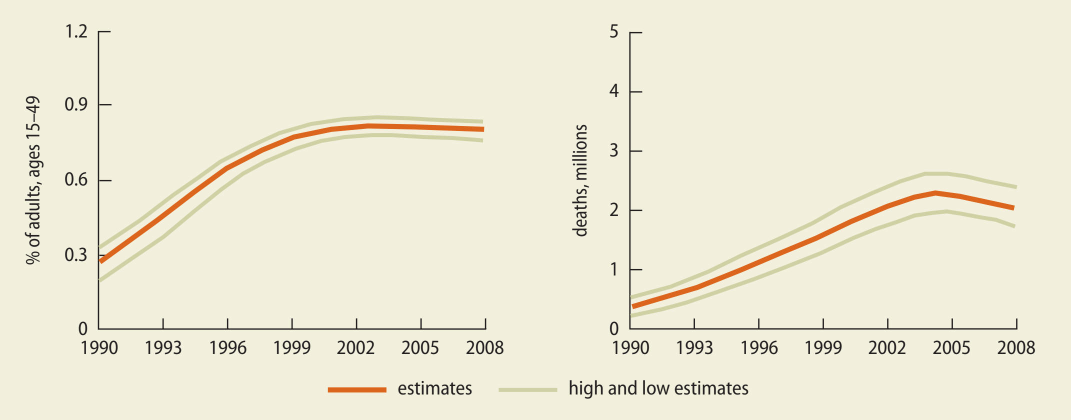
MAP 1.2 Proportion of population living with HIV is still high but declining in Sub-Saharan Africa, 1990, 2001, and 2007



Source: United Nations 2009.

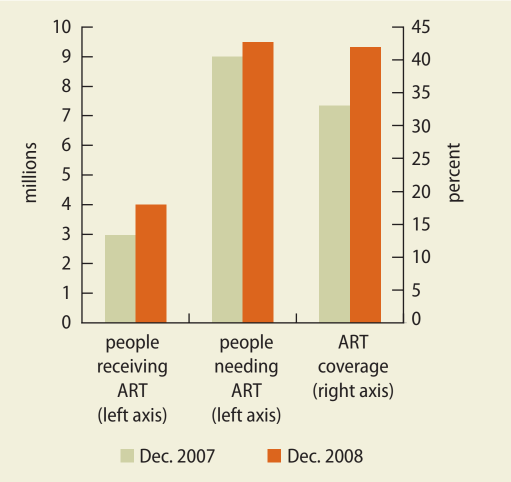
Many countries are likely to fall short of most of the goals. Among countries for which there are data, the proportion off track exceeds that of countries on track for

FIGURE 1.12 HIV prevalence rates and estimated deaths are showing signs of decline



Source: UNAIDS/WHO.
Note: The HIV adult prevalence rate is defined as the proportion of people ages 15 and above who are infected with HIV.

FIGURE 1.13 Improving access to antiretroviral treatment is still far from universal



Source: UNAIDS/WHO.
Note: ART - antiretroviral treatment.

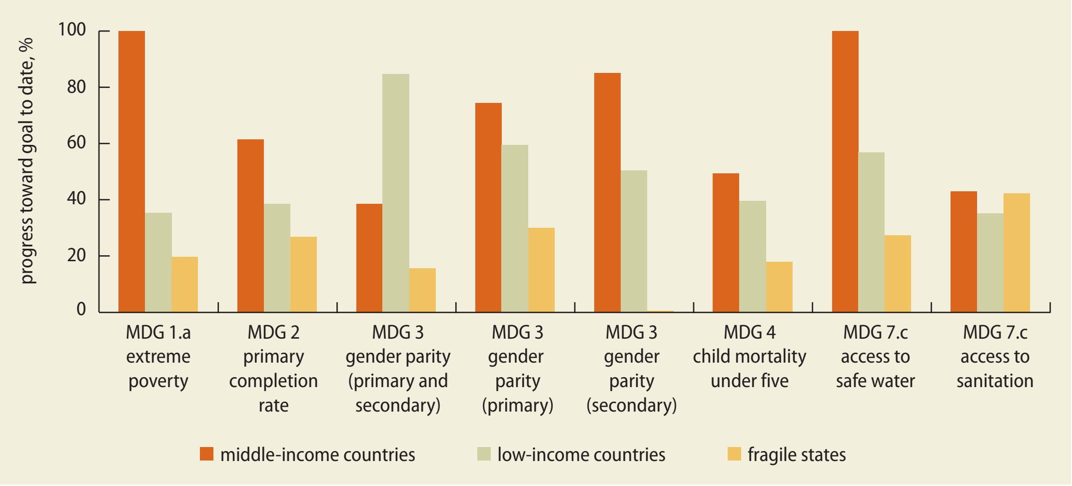
all MDGs except poverty reduction and gender parity in school (figure 1.16). This result likely comes from low starting points in poor countries.

How starting points affect results

Progress varies positively with income growth but is conditioned by starting points or country circumstances. This phenomenon is best illustrated for poverty reduction. In general, the elasticity, or responsiveness, of poverty with respect to economic growth depends on how the incomes of poor people move with average growth; whether growth is in broad terms reaching poor people; and how any increase in incomes interacts with the income distribution and the poverty line. However, when a common poverty goal like the MDG 1 is applied to all developing countries against a uniform poverty yardstick (such as $1.25 a day), starting points or country circumstances matter greatly. Starting points thus help explain why, despite the precrisis progress in growth and poverty reduction, low-income countries are still far from reaching the poverty MDG.

Recent empirical analysis reveals that a high initial poverty incidence slows progress against poverty at any given growth rate.[9] Analysis of more than 600 household surveys in 116 countries since 1980 confirms the story: in two countries with the same economic growth rate, poverty reduction will be slower in the country that begins with the higher poverty rate (figure 1.17). There are some data and observation issues to consider. At low poverty rates, there is considerable noise, and elasticity becomes volatile, especially at the $1.25-a-day poverty threshold. Some more advanced countries have no computable observations in this range. Twelve countries with zero poverty rates in the initial period have zero or irregular elasticity; seven

FIGURE 1.14 Fragile states have made the least progress toward the MDGs



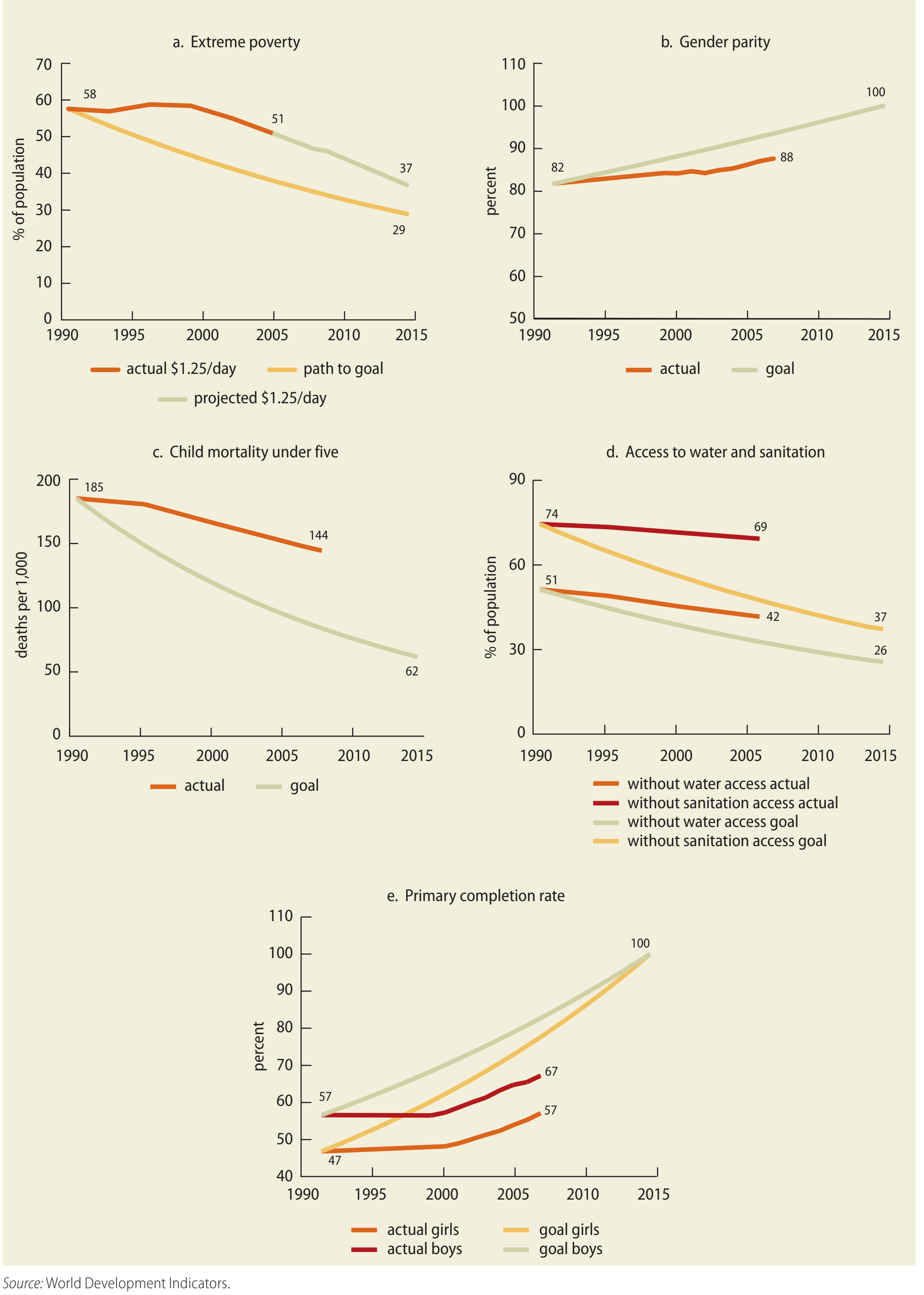
Source: Staff calculations based on World Development Indicators database.
Note: Most recent data as of 2009.

other countries with nonzero poverty rates have zero elasticity. Almost all these outliers belong to transitional economies in Eastern Europe and include the turbulent years in the 1990s when their economies, incomes, and income distributions were undergoing fundamental changes. Even at a $2.00-a-day poverty line, seven countries have zero elasticity. When the initial poverty rate is greater than 10 percent, the pattern becomes broadly more regular.[10]

At the aggregate or regional level, the responsiveness (median elasticity) of poverty to growth is generally lower in low-income countries, which tend to have higher initial poverty rates for both the $1.25-a-day and the $2.00-a-day international thresholds (table 1.1). Elasticity also depends on the choice of a global poverty threshold, although the pattern holds in general. For middle-income countries, particularly upper-middle-income ones, the lower $1.25 threshold becomes less meaningful as the median poverty rate falls below 4 percent. The regional numbers are summarized in table 1.2.

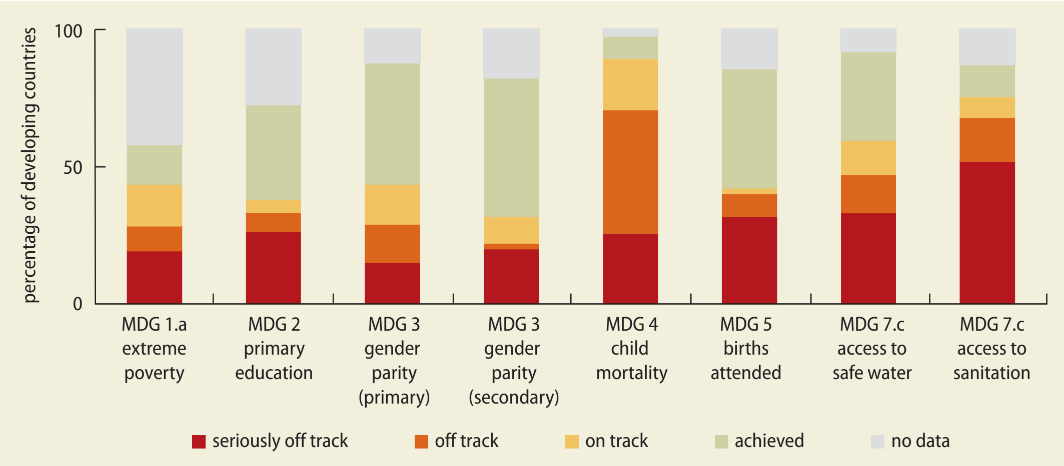
The pattern clearly reflects the more difficult circumstances in poor countries and fragile states. For example, in fragile states the median elasticity of extreme poverty to growth is lowest at the $1.25 a day poverty line. One explanation is that the poverty gap, which reflects the depth of poverty as well as its incidence, is greater in poor countries. A related "distance" measure is the percent ratio of the average income of the poor to the poverty line; the distance between the average income of the poor and the poverty line is greater in many low-income countries. In 2005 Sub-Saharan Africa's poverty gap and its mean ratio of the average income of the poor to the $1.25-a-day poverty line are 20.1 percent and 59.7 percent, respectively. These numbers are worse than comparable figures for other regions (table 1.3). Middle-income countries tend to have better numbers. The two large countries, China and India, are exceptions in the sense that, despite their starting points in income and poverty rates, poverty reduction has been rapid not just because of the high growth rates but also because the poverty gap and the average income distance from the poverty line have been relatively low. For all these countries, many of the poor are already close to the $1.25-a-day threshold and growth can more easily raise their incomes over the poverty line. In contrast, in African countries like Liberia, Mozambique, Rwanda, and Tanzania, which have very high poverty gaps and greater distance to the thresholds, the same

FIGURE 1.15 Progress in Sub-Saharan Africa is significant but still insufficient—partly because of low starting points



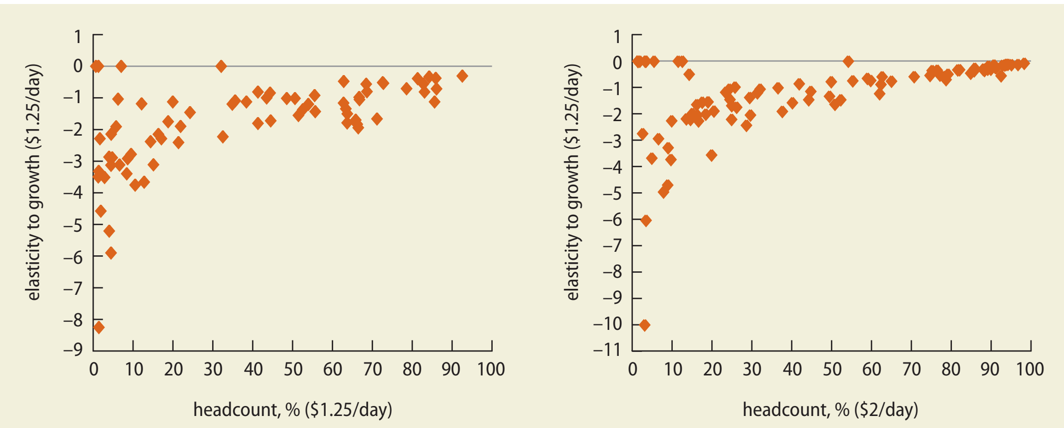
Source: World Development Indicators.
Note: PPP is purchasing power parity.

FIGURE 1.16 **Many countries are falling short of most MDGs, 2009**



Source: Staff calculations based on World Development Indicators database.
Note: The data cover 144 developing countries and the latest available information as of 2009.

FIGURE 1.17 **Poverty responds less to growth when the initial poverty rate is high**



Source: Staff calculations from PovcalNet, the World Bank.
Note: There are data or observation issues especially when the poverty rate is low; see text for details.

level of growth would be unlikely to push many households above the poverty line in a short period of time.

Another explanation is simply arithmetic, having to do with the way the poverty MDG is defined.[11] It is easier for a middle-income country to halve its poverty rate from, say, 10 percent to 5 percent than for a poor country to cut its rate by even less than half, say, from 50 percent to 35 percent. Although the rate of reduction is lower in the poorer country than in a richer country of comparable population size, the number of people to move out of poverty will be much larger in the poor country.

All this simply means that a long period of sustained and shared growth will be crucial to meet the poverty MDG in many poor countries. To really achieve rapid progress, growth may have to reach the rates in China and India. Although a pro-poor growth rate will raise the income of the poor, the high

TABLE 1.1 Poverty reduction is more difficult in poor countries

Country group	Median growth elasticity of poverty with respect to poverty line		Median poverty headcount at initial year with respect to poverty line (%)	
	$1.25 a day	$2.00 a day	$1.25 a day	$2.00 a day
Low-income countries	–1.01	–0.53	66.02	85.77
Fragile states	–0.81	–0.54	51.46	74.99
Lower-middle-income countries	–1.65	–0.88	15.11	29.54
Upper-middle-income countries	–1.04	–1.41	3.60	11.32

Source: World Bank staff calculations from PovcalNet.
Note: The values in the table are the medians of {ln(H2/H1/ln(M2/M1} in each category.

TABLE 1.2 Poverty reduction is several times more difficult in Sub-Saharan Africa

Region	Median growth elasticity of poverty with respect to poverty line		Median poverty headcount at initial year with respect to poverty line (%)	
	$1.25 a day	$2.00 a day	$1.25 a day	$2.00 a day
East Asia and Pacific	–1.43	–0.79	48.6	77.9
Europe and Central Asia	–2.00	–1.12	3.7	10.2
Latin America and the Caribbean	–2.03	–1.44	8.8	20.9
Middle East and North Africa	–2.89	–2.06	4.6	19.6
South Asia	–1.05	–0.48	66.5	88.1
Sub-Saharan Africa	–0.76	–0.36	66.0	83.9
Total	–1.18	–0.81	18.4	39.4

Source: World Bank staff calculations from PovcalNet.
Note: The values in the table are the medians of {ln(H2/H1/ln(M2/M1} in each category.

TABLE 1.3 Poverty gaps and ratio of mean income of the poor to the $1.25-a-day poverty line are worse for low-income regions or countries, 2005

	Poverty gap with respect to $1.25 a day (%)	Ratio of mean income of those below $1.25 a day to the poverty line (%)
Sub-Saharan Africa	20.1	59.7
South Asia	9.2	75.9
East Asia and Pacific	5.6	71.3
Latin America and the Caribbean	4.9	65.1
Middle East and North Africa	1.4	84.1
Europe and Central Asia	1.1	67.8
Middle-income countries		
Albania	0.1	91.7
Brazil	2.8	65.6
Mexico	0.1	89.6
Thailand	0.01	96.4
Large countries		
China: urban	0.2	90.2
China: rural	6.5	75.2
India	10.0	76.1
African countries		
Tanzania	48.6	45.1
Mozambique	42.0	48.1
Liberia	40.7	50.7
Rwanda	38.2	49.9

Source: PovcalNet, World Bank.

poverty gaps imply that it will take longer or more effort for the poor to cross the poverty line. In light of the finding that the poverty rate itself may take more time to evolve, what low-income countries achieved before the crisis is indeed remarkable.

The full impact of the global economic crisis still lies ahead

It is likely that the world has not yet seen the full impact of the crisis on the MDG indicators. A slow global recovery could imply that progress on MDG indicators will stray further from the path it was on before the crisis. Will economic growth and development deteriorate because of a less hospitable global economic environment brought about by the global economic crisis? Chapters 2, 3, and 4 look at lessons from past crises, the current economic situation, the prospects for growth, and the outlook for the MDGs. Chapter 5 focuses on the actions and policies for attaining the MDGs—and beyond.

Notes

1. See, for example, Sachs 2005.
2. A point raised by Clemens and Moss (2005); Clemens, Kenny, and Moss (2007); Easterly (2009); and Vandemoortele (2009).
3. This observation is documented in several recent studies. See, for example, World Bank (2008) on the decoupling of trend growth for developed and developing countries. For Africa, see IMF (2008), Go and Page (2008), Ndulu (2008), and World Bank (2000).
4. Rodrik 2009.
5. Hogan and others 2010. Weak vital registration systems in developing countries make the maternal mortality ratio one of the hardest things to measure, and previous estimates showed very little change over time. The new study supplemented national vital registration data with other sources, such as sibling histories in household surveys, census data, and death surveys. It also carefully examined uncertainty in the expected maternal death rate from five sources—stochastic variance in the input data, nonsampling error in data systems, errors in the covariates (such as GDP per capita, educational attainment, HIV seroprevalence, and the like), and estimation error from using simulation methods.
6. Environmental sustainability and its links to the MDGs were a major focus of Global Monitoring Report 2008 (World Bank and IMF 2008). The 2010 World Development Report also focused on development and climate change (World Bank 2010).
7. See World Bank (2010) for an in-depth discussion and treatment of this issue.
8. United Nations 2008.
9. Ravallion 2009.
10. The \$1.25-a-day relationship can be approximated by a logarithmic regression: log(elasticity) = –1.0634 + 0.4725 (initial poverty rate), n = 101, which is significant at 1 percent (t = 5.13). See Ravallion (2009) for careful estimation and testing of convergence.
11. Easterly 2009.

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2

Lessons from Past Crises—and How the Current Crisis Differs

Historically, periods of sharp contraction have been extremely harmful for human development. Social indicators tend to deteriorate rapidly during economic downturns and improve slowly during economic booms. Moreover, vulnerable groups, such as children and women, are more exposed to the effects of growth volatility.

The asymmetric response of social indicators to the growth cycle likely results from contractions associated with conflict or weak institutions that impair government services. With global crises, donor spending may also come under pressure.

There are several reasons, however, why this crisis may be different from previous crises for low-income countries—social spending has been largely protected so far; precrisis policies and institutions were better; and external shocks, not domestic policy failures, were the main cause of the current crisis for developing countries.

Nonetheless, the impact on the Millennium Development Goals (MDGs) is worrisome. In particular, several rapid and qualitative assessments find that households are already making painful adjustments, particularly in middle-income countries.

How growth volatility affects human development and gender indicators

It is commonly observed that human development indicators deteriorate during growth downturns. Also true, but more difficult to calculate, is that deteriorations in human development indicators during downturns tend to exceed improvements during economic booms (box 2.1 explains the definition of growth cycles used here). For example, life expectancy is 2 years longer during growth accelerations than the overall average, but 6.5 years shorter during decelerations (figure 2.1). Infant mortality is 8 per 1,000 lower during accelerations, and 24 per 1,000 higher during decelerations. The primary school completion rate is 4 percent higher during accelerations but 25 percent lower during decelerations. Further evidence for asymmetry is the size of correlation coefficients relating social indicators with upturns and downturns (table 2.1). In general, the correlation between social indicators and periods of deceleration is stronger than the correlation between social indicators and periods of acceleration (for details, see annex 2A.1).

BOX 2.1 Defining growth cycles in developing countries

The historical growth patterns considered in this study are derived from a dataset for 163 countries covering 1980–2008. A growth acceleration episode meets three conditions for at least three consecutive years:

- The four-year forward-moving average growth rate minus the four-year backward-moving average growth rate exceeds zero for each year.
- The four-year forward-moving average growth rate exceeds the country's average growth rate, meaning that the pace of growth during accelerations is faster than the country's trend. Thus the definition of episodes of growth acceleration (or deceleration) is endogenous to each country's long-run rate of growth.
- Average GDP per capita during the four-year forward-moving period exceeds the average during the four-year backward-moving period, ensuring that the growth acceleration episode is not a recovery from a recession.

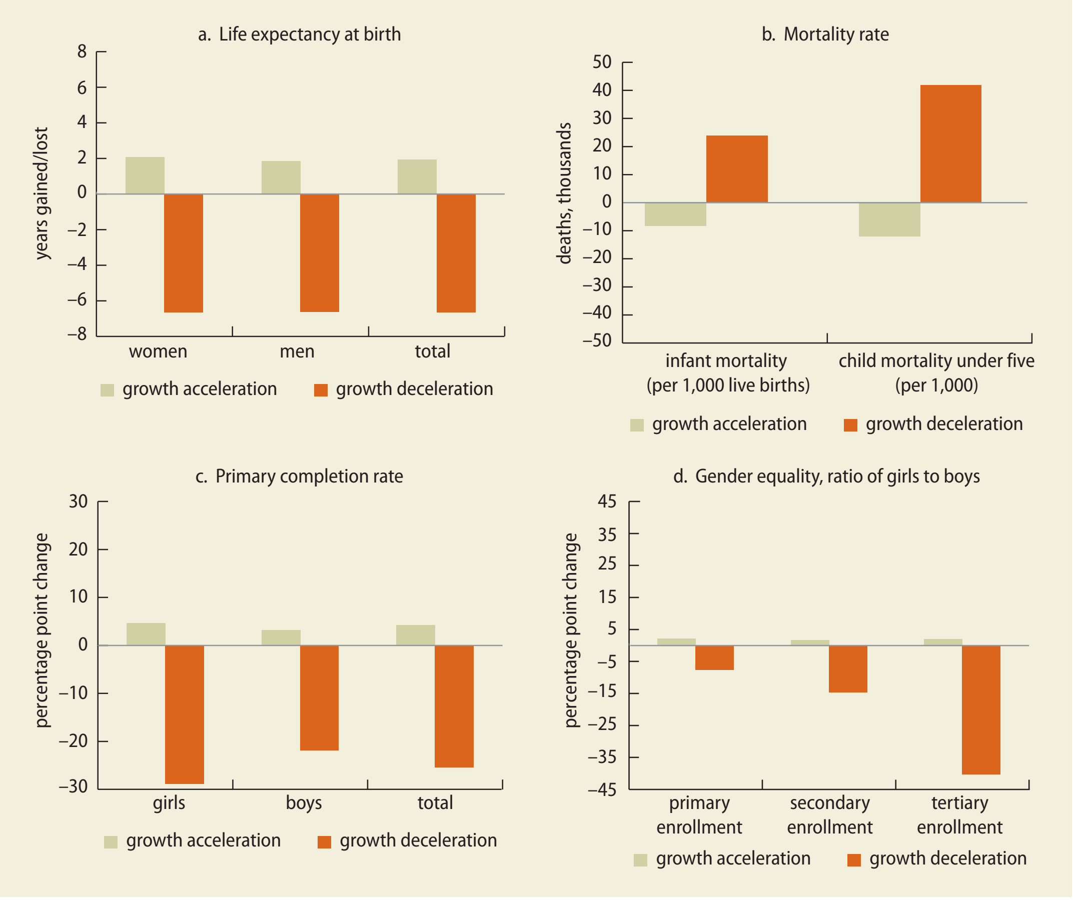
A growth deceleration episode meets these three conditions in reverse. The framework is from Arbache and Page (2007), which extends the methodology in Hausmann, Pritchett, and Rodrik (2005) by examining both accelerations and decelerations and by making each country's long-run growth rate endogenous. Testing the sample means of development indicators for significant differences during periods of growth acceleration and deceleration can show whether countries that experience more growth fluctuations face slower progress on the MDGs and identify how growth cycles affect changes in development indicators.

Source: Arbache and Page 2007; Arbache, Go, and Korman 2010.

Economic downturns also have a disproportionate impact on girls relative to boys. Life expectancy of girls and boys increases by two years during good times but decreases by about seven years for girls and six years for boys during bad times. The primary education completion rate rises 5 percent for girls and 3 percent for boys during good times but decreases 29 percent for girls and 22 percent for boys during bad times. The female-to-male enrollment ratios for primary, secondary, and tertiary education rise about 2 percent during growth accelerations but fall 7 percent (primary), 15 percent (secondary), and 40 percent (tertiary) during decelerations. These differences may result from household time and resource allocations that favor boys over girls when household budgets shrink.[1] The differential impact on child schooling and child survival is greatest in low-income countries, while gender differences are smaller in middle-income countries. Economic downturns also have different effects on the labor force participation of women and men, with important implications for how families adjust to economic crises (box 2.2).

Despite some commonalities, the relationship between growth volatility and development outcomes varies across countries and regions. Initial conditions, regional spillovers, trade arrangements, economic geography, and other factors are associated with how countries and regions respond to economic downturns. For example, human development indicators in Sub-Saharan Africa are among the lowest in the world: infant and under-five mortality rates are almost three times higher than the global average, life expectancy is 29 percent lower, primary school completion is 66 percent lower, and the ratio of female to male tertiary enrollment is about half the global mean. But the difference between the average level of social indicators in good and bad times is smaller for Sub-Saharan Africa than it is for developing countries as a whole (compare figures 2.1 and 2.2). This finding may imply that at low levels

FIGURE 2.1 Key human development and gender indicators plummet from their overall mean during growth decelerations, all countries



Source: World Bank staff calculations based on data from World Development Indicators. See annex table A2.1 for levels and Arbache, Go, and Korman (2010) for more details.
Note: Differences of sample averages during growth accelerations and decelerations from overall sample means.

TABLE 2.1 Correlation coefficients between growth acceleration and deceleration and human development indicators

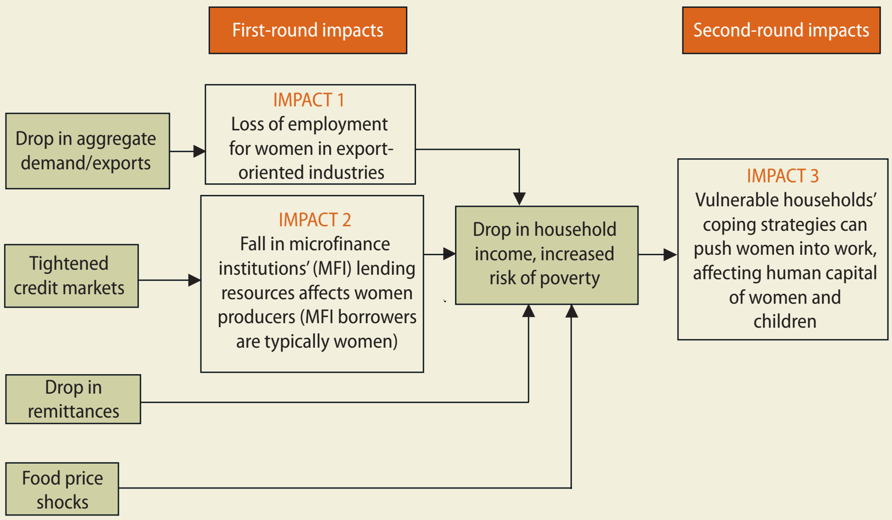
	Growth acceleration		Growth deceleration	
Indicator	Coefficient	Significance level	Coefficient	Significance level
Life expectancy at birth, women (years)	0.13	**	−0.22	**
Life expectancy at birth, men (years)	0.12	**	−0.25	**
Life expectancy at birth, total (years)	0.13	**	−0.23	**
Infant mortality rate (per 1,000 live births)	−0.17	**	0.21	**
Child mortality under five rate (per 1,000)	−0.15	**	0.22	**
Primary completion rate, girls (% of relevant age group)	0.16	**	−0.26	**
Primary completion rate, boys (% of relevant age group)	0.13	**	−0.23	**
Primary completion rate, total (% of relevant age group)	0.16	**	−0.26	**
Ratio of girls to boys, primary enrollment	0.17	**	−0.22	**
Ratio of girls to boys, secondary enrollment	0.1	**	−0.19	**
Ratio of women to men, tertiary enrollment	0.06		−0.18	**

Source: World Bank staff calculations based on data from World Development Indicators.
Note: Tests for differences in the means of these variables among growth accelerations, decelerations, and all country-year observations show that they are almost all statistically significant at the 1 percent level (**).

BOX 2.2 Aggregate economic shocks and gender differences: A review of the evidence

The labor market for nonagricultural wage work by women (often used as a proxy for women's access to decent work) tends to behave very differently from the market for nonagricultural wage work by men. While the unemployment rate rarely differs between men and women, a much smaller proportion of working-age women are in the labor force (whereas most men of working age are either working or unemployed, women may be working at home). Thus in analyzing the impact of crises (see the figure below), it is important to take into account the response of women who are not in the labor force. In some crises, for example, in Indonesia in 1997, women entered the labor force to maintain household consumption (called the added-worker effect). In the Republic of Korea during the 1997 crisis, some women left the labor force (the discouraged-worker effect).

Possible transmission channels of economic crisis



of income, the ability to improve social indicators is particularly limited—and therefore so is the likely deterioration.

Explaining the pattern of past crises

Several factors contributed to negative human development outcomes during past economic downturns, including the high frequency of downturns in low-income countries; the poor policy environment in many countries during past crises, particularly in low-income countries; shrinking social spending during contractions and the lack of social safety nets; and declines in aid during crises that also affect high-income countries.

Poor countries suffer from frequent economic contractions and high growth volatility

One reason for the low levels of human development in low-income countries is that they experience numerous crises. Of all country-year observations for low-income, International Development Association (IDA)-eligible, and Sub-Saharan African countries, nearly

BOX 2.2 (continued)

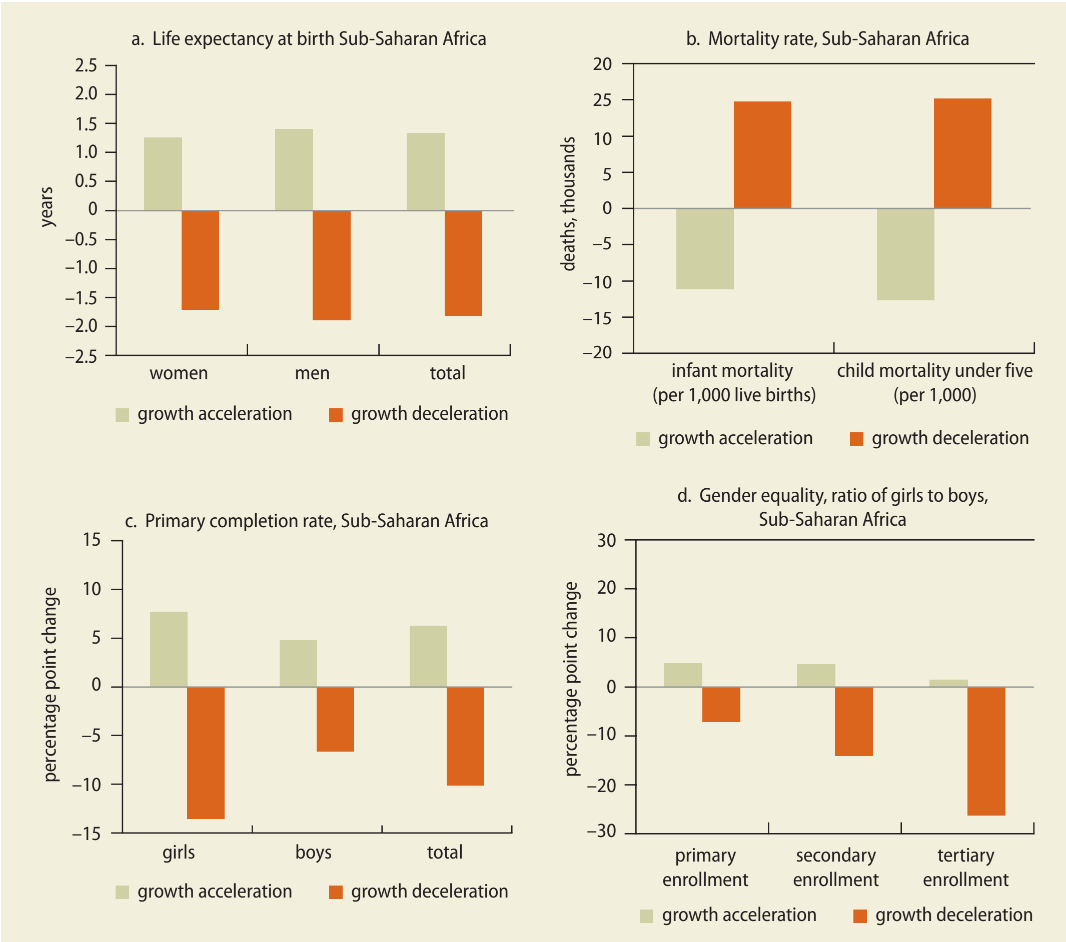
The table below summarizes country studies of the impact of crises on women's labor market participation and health and education outcomes.

Previous crises: Available evidence by country

Income level at time of crisis	Country	Labor market effects for women	Schooling	Health
Low-income country	Côte d'Ivoire		Decline in student enrollment for both boys and girls.	Deteriorating child health for both boys and girls.
	Pooled survey data from several low-income countries			Girls' infant mortality more sensitive than boys' infant mortality to fluctuations in GDP.
Lower-middle-income country	Indonesia	Added-worker effect in 1997–98.	Decline in student enrollment for young boys and girls and older girls.	Higher neonatal mortality, but overall not much effect on child health. Lower body mass index for adults.
	Peru	Added-worker effect in Lima.	Increase in student enrollment for both boys and girls.	Higher infant mortality rate.
	Philippines	Added-worker effect.	Drop in high school enrollment for both boys and girls. Drop in elementary school enrollment, more for girls than boys. Increase in child labor, more for boys than girls.	
Upper-middle-income country	Argentina	Added-worker effect in urban areas during 1990s.		
	Brazil	Both added- and discouraged-worker effect in São Paulo during 1980s.		
	Costa Rica		Decline in student enrollment for both boys and girls in rural areas; higher for girls than boys in urban areas.	
	Mexico	Added-worker effect during 1980s.	Increase in student enrollment in 1995–96, stronger for boys than girls.	Higher child mortality during crises.
	Russian Federation			Deterioration in weight for height for both boys and girls.
High-income country	Korea, Rep.	Discouraged-worker effect in Seoul in 1997–98.		
	United States	No effect.	Increase in student enrollment during Great Depression.	Improved child health outcomes.

Source: Sabarwal, Sinha, and Buvinic 2009.

FIGURE 2.2 Key human development and gender indicators also fall below their overall means during growth decelerations in Sub-Saharan countries, if less so



Source: World Bank staff calculations based on data from World Development Indicators. See annex table A2.1.2 for levels and Arbache, Go, and Korman (2010) for more details .
Note: Differences of sample averages during growth accelerations and decelerations from the overall sample means.

a quarter are decelerations; for the middle-income countries in East Asia, Europe and Central Asia, and Latin America, less than 10 percent are decelerations (table 2.2). Similarly, the share of accelerations is 37–39 percent for poorer countries but 43–53 percent for middle-income countries.[2] In addition, overall growth volatility is greater in low-income countries and in Sub-Saharan Africa than in middle-income countries (see table 2.2). The regional pattern suggests growth spillovers at the geographic level, which may be associated with economic geography, regional trade arrangements, natural disasters, regional migration, and regional conflicts.

Differences in the frequency of economic contraction explain a significant share of the differences in the average growth rate of different groups of countries. Growth in GDP per capita during 1980–2008 was 0.6 percent a year in low-income countries and more than 2 percent a year in middle-income countries. The slower growth in low-income countries stems from the greater frequency of decelerations,[3] not from a marked difference in growth rates during booms and busts. For example, during periods of acceleration, low-income countries' per capita GDP rose 3.75 percent, slightly less than the 4.5 percent growth rate for middle-income countries. During decelerations, low-

TABLE 2.2 Frequency of growth acceleration and deceleration, growth rates, and GDP per capita, 1980–2008

Region, income	GDP: GDP per capita growth rate (%)	GDP: Standard deviation of growth	Growth acceleration: Frequency (country years)	Growth acceleration: GDP per capita growth rate (%)	Growth deceleration: Frequency (country years)	Growth deceleration: GDP per capita growth rate (%)
World	1.89	6.03	0.47	4.27	0.11	–3.81
Region						
East Asia and Pacific	3.09	4.45	0.46	5.01	0.09	–2.75
Europe and Central Asia	2.20	6.65	0.53	4.79	0.08	–7.19
Latin America and the Caribbean	1.63	4.65	0.53	3.72	0.07	–2.78
Middle East and North Africa	1.41	5.51	0.43	2.89	0.06	–3.44
South Asia	3.72	2.87	0.36	4.69	—	—
Sub-Saharan Africa	1.02	7.28	0.39	4.19	0.22	–3.17
Country Income category						
Developing countries	1.67	6.37	0.46	4.33	0.14	–3.87
IDA countries	0.99	6.28	0.39	3.82	0.21	–3.47
Low-income countries	0.63	6.74	0.37	3.75	0.23	–3.50
Lower-middle-income countries	1.98	5.89	0.47	4.52	0.13	–4.99
Upper-middle-income countries	2.34	6.43	0.55	4.54	0.08	–2.76
High-income, non-OECD countries	3.02	7.41	0.42	5.90	0.02	–4.62
High-income OECD countries	2.19	2.59	0.54	3.31	0.03	–2.32

Source: World Bank staff calculations based on data from World Development Indicators.
Note: — = not available. OECD = Organisation for Economic Co-operation and Development.

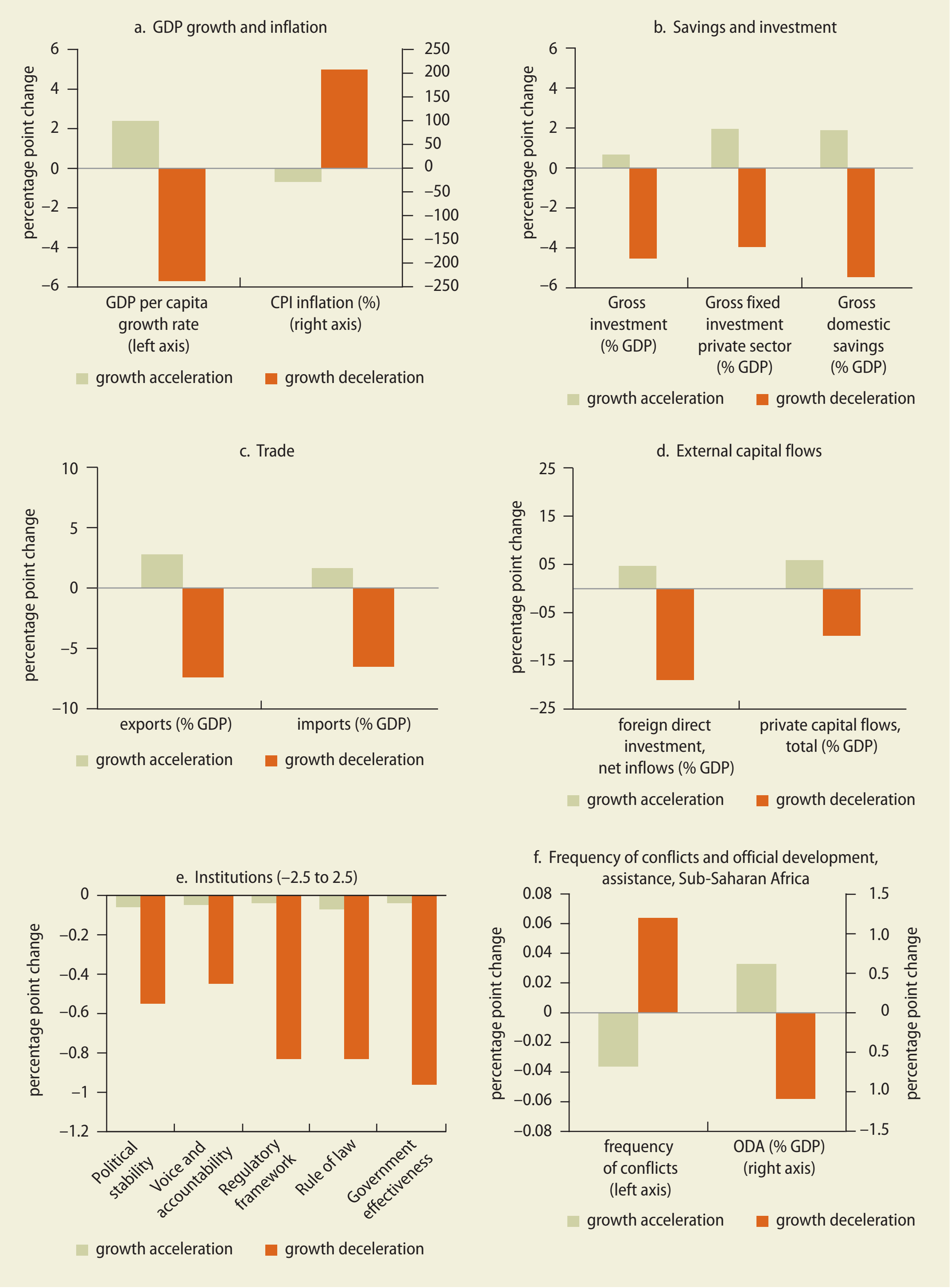
income countries' per capita GDP fell 3.5 percent, somewhat less than in middle-income countries. Thus "defensive" policies that prevent collapses should have substantial impacts on average growth by avoiding multiple collapses and their negative outcomes.[4] The finding that the elasticity of poverty to growth is lower in high-poverty countries (see chapter 1) suggests that low-income countries, where poverty rates are high, need a long period of sustained growth to reduce poverty and improve other human development indicators.

Contractions tend to occur in severely unfavorable economic and policy environments

Contractions have a grave impact on human development because they are marked by an overall deterioration in government effectiveness. Similar to human development indicators, indicators of institutional quality (political stability, voice and accountability, regulatory framework, rule of law, and government effectiveness) in developing countries perform asymmetrically over the growth cycle. In other words, the deterioration during bad times is much greater than the improvement during good times relative to the sample averages for all times (figure 2.3). Causality likely moves in both directions: a deterioration in institutions impairs growth, which leads to further institutional weaknesses, and so on. In many cases both institutions and growth are affected by domestic violence or foreign wars. In Sub-Saharan Africa, for example, the frequency of major and minor conflicts is about 23 percent during growth deceleration and 13 percent during growth acceleration. In oil- and mineral-dependent economies, defects in institutional quality may be masked by the revenues generated by favorable commodity prices. These defects become clear when prices turn down and revenues dry up.[5]

Macroeconomic variables such as investment, savings, exports, imports, external finance, and inflation deteriorate more during downturns than they improve during upturns (see figure 2.3). During decelerations, both savings and investment, particularly fixed private investment, decline relative to average levels (as a share of GDP) by much more than they rise during accelerations. The increase in foreign direct investment as a share of GDP during accelerations is twice as large as the drop during decelerations (relative to the sample mean). The very high values for inflation during growth decelerations reflect the incidence of hyperinfla-

FIGURE 2.3 During growth decelerations, economic and institutional indicators diverge far from the overall means



Source: World Bank staff calculations based on data from World Development Indicators. See annex table A2.3 for levels and Arbache, Go, and Korman (2010) for more details.
Note: Differences of sample averages during growth accelerations and decelerations from the overall sample means.

TABLE 2.3 Correlation coefficients between economic cycles and economic and institutional indicators

Indicator	Growth acceleration		Growth deceleration	
	Coefficient	Significance level	Coefficient	Significance level
Final consumption (% GDP)	−0.1	**	0.13	**
Government consumption (% GDP)	−0.07	**	0.04	**
Gross capital formation (% GDP)	0.09	**	−0.17	**
Gross domestic savings (% GDP)	0.1	**	−0.13	**
Gross private fixed capital formation (% GDP)	0.19	**	−0.19	**
Imports (% GDP)	0.06	**	−0.09	**
Exports (% GDP)	0.09	**	−0.11	**
Trade (% GDP)	0.08	**	−0.11	**
Net foreign direct investment (% GDP)	0.03		−0.04	*
Private capital flows, total (% GDP)	0.04	*	−0.04	*
Inflation (%)	−0.06	**	0.13	**
Institutions				
Political stability	−0.07	**	−0.12	**
Voice and accountability	−0.07	**	−0.1	**
Regulatory framework	−0.06	*	−0.19	**
Rule of law	−0.1	**	−0.18	**
Government effectiveness	−0.05	*	−0.21	**

Source: World Bank staff calculations. Indicators on institutions are from the World Bank Institute's Worldwide Governance Indicators database, which relies on 33 sources, including surveys of enterprises and citizens, and expert polls, gathered from 30 organizations around the world.
* Significant at the 5 percent level; ** significant at the 1 percent level.

tion during several growth collapses in Africa before the 1990s and incidents of high inflation in the early 1990s (such as in Angola, Armenia, Azerbaijan, Belarus, Brazil, Democratic Republic of Congo, Peru, and Ukraine).[6]

Aid to poor countries is procyclical, suggesting that donors respond to an emerging policy failure by giving less aid. Macroeconomic and institutional variables are more closely correlated with the incidence of deceleration than of acceleration (table 2.3)—further evidence of the asymmetric behavior of these indicators over the economic cycle and of the extremely poor economic environment characterizing downturns in developing countries.

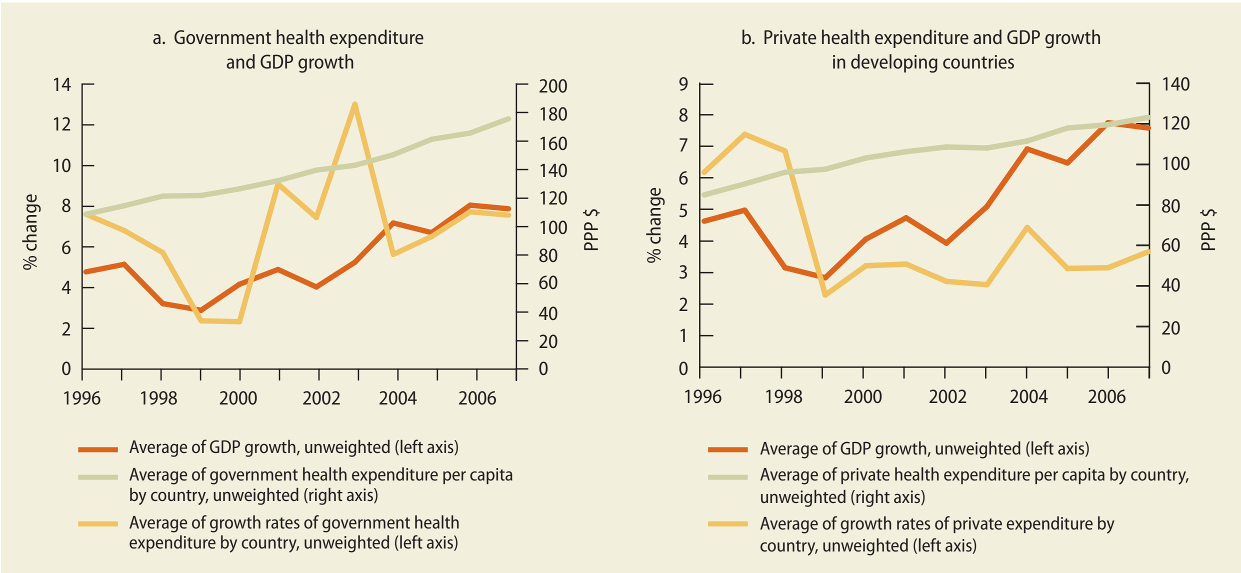
Social spending under pressure

Drops in spending on social services like education and health care are an important reason for the sharp deterioration in human development indicators during crises. Cutbacks in social spending are more worrisome during crises because that is when people need these services most. Cutbacks during crises are also harmful because such disruptions have long-lasting effects. This section draws on evidence of the impacts of GDP downturns on public and private domestic spending on health and public education for over 108 developing countries for 1995–2007.[7]

The analysis points to three key results. First, social spending growth rates tended to be volatile. Second, per capita social spending levels nonetheless showed a steady upward trend. Third, social spending in poor countries was subject to more pressures than in richer countries during contractions in GDP. The last result confirms that it is the low-income countries that are more likely to need help in protecting social expenditures during crises.

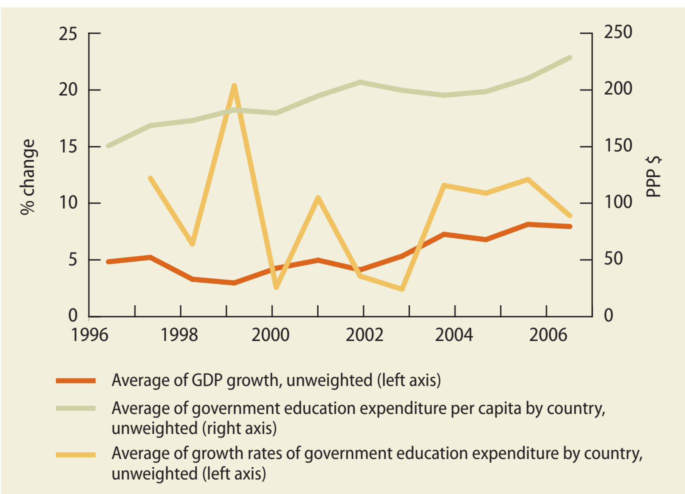
The volatility of public and private health spending is evident from the unweighted average of growth rates of social spending by country over time, a calculation that gives equal weight to changes for each country and does not allow the larger countries to dominate the pattern. In particular, changes in public health spending are more volatile than GDP growth trends over time (figure 2.4). Historically, a drop in GDP growth of 2 percent or more has had a greater than proportional effect on the growth of public health spending. Growth of private health spending (insurance and out-of-pocket payments) responds in a similar way, although the pattern is more vola-

FIGURE 2.4 Health spending growth rate is more volatile than its per capita level or GDP growth



Source: Lewis and Verhoeven 2010.

FIGURE 2.5 Public education spending is less closely tied to GDP growth than is health spending



Source: Lewis and Verhoeven 2010.

tile than for government spending, especially before 2005.

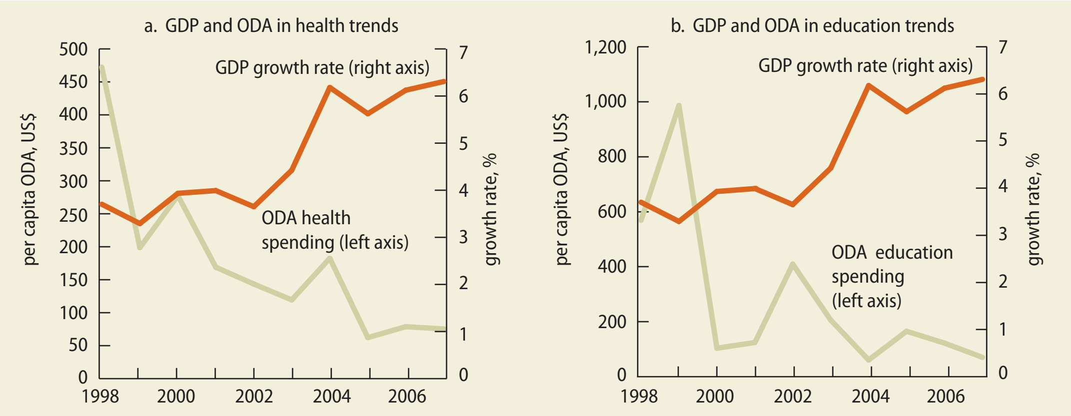
Despite the fluctuations in growth rates of GDP and health spending, the trends in absolute per capita health spending continue to rise over time. In general, private health spending rises more slowly than public health spending. The steady rise of the mean per capita spending level (which is also an unweighted average across countries) suggests that the volatility of spending growth rates was affecting countries with lower levels of per capita spending more than countries with higher spending levels. Indeed, the data confirm that the negative impacts of crises on health spending are much stronger in the lowest-income countries, where growth in health spending is more likely to fall in response to a decline in GDP.

Education spending in developing countries appears to be less closely tied to GDP growth than is health spending (figure 2.5). In absolute terms, the public sector spends more, on a per capita basis, on education than on health. There is also a modest rising trend. The data on education spending are weak, however, so any conclusions concerning cross-country trends are subject to considerable uncertainty.[8]

Donor funding under pressure

Does aid to developing countries rise during crises? The sharp deterioration in human development indicators and the decline in social spending during growth decelerations highlight a potentially important role for donors. Aid's contribution to welfare in developing countries could be bolstered by increasing aid in

FIGURE 2.6 Aid to education and health does not appear to be closely related to GDP growth, 1998–2007



Source: Lewis and Verhoeven 2010.

bad times to compensate for shortfalls in government resources. The evidence on whether aid plays such a countercyclical role is mixed. Overall, aid to individual countries appears to be procyclical, increasing when growth rises and falling when growth slows. And growth in aid to health and education sectors does not appear to be closely related to GDP growth in developing countries (figure 2.6). However, after 2003, aid to education shows a small response to growth, with donor financing rising and falling as national education resources fall and rise. This countercyclical financing suggests that donor spending is modestly compensating for GDP growth shifts.

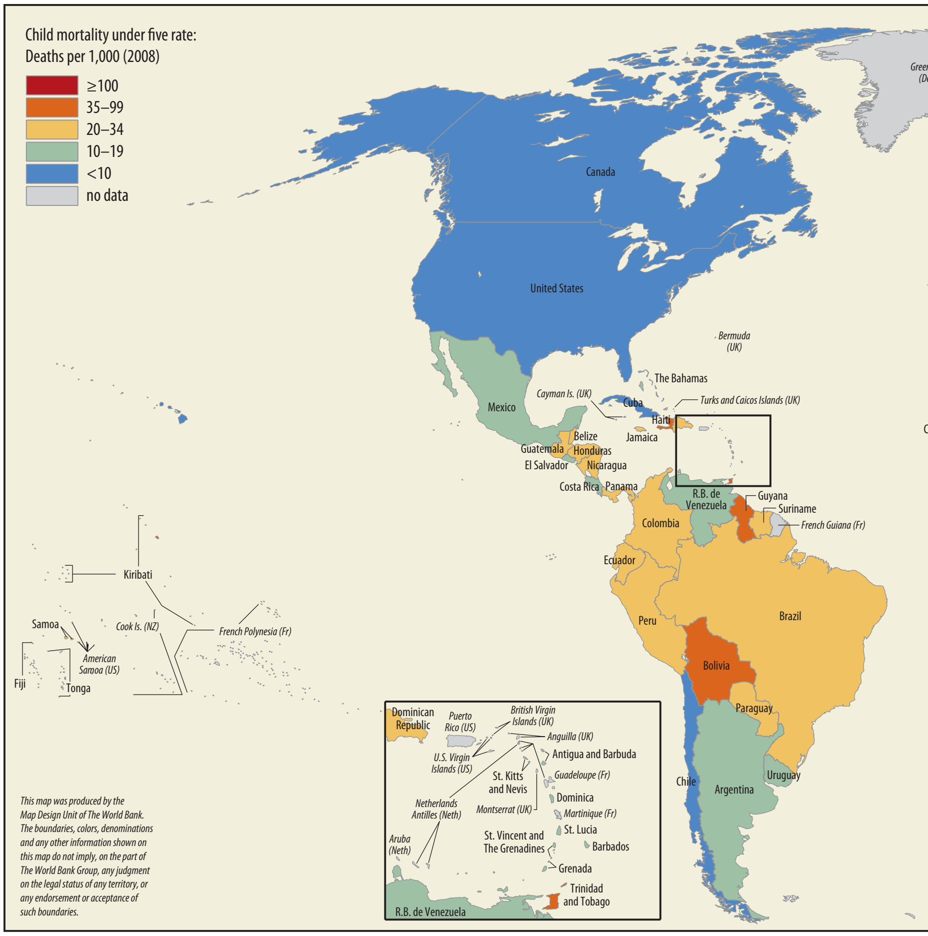
Evidence on aid funding during financial crises in donor countries is limited. A recent study that tracked donor allocations during and after banking crises (1998–2007) in developed countries suggests that donor funding is tied to economic prosperity in those countries.[9] Aid flows decline 20–25 percent during banking crises in member countries of the Organisation for Economic Co-operation and Development (OECD) and take significant time to recover. Not all donor programs are equally affected. But some combination of the fiscal costs of crises, debt overhang after the crisis ends, and perhaps erosion in public support reduces aid flows from affected donor countries. To the extent that aid recipients and donors are simultaneously affected by crises (as in the recent crisis), cutbacks in donor funding could deepen the economic deterioration in developing countries.

Two deviations from these aggregate trends are instructive—and encouraging. During the Southeast Asian crisis of 1997, donors (most notably the U.K. Department for International Development) supported core social programs in Indonesia, slowing the declines in education and health spending and permitting social services to continue.[10] During the current crisis, Mexico sought loans from the World Bank to compensate for budget reductions and to expand temporary safety nets. Latvia, Lithuania, Poland, and Romania all received policy loans or technical assistance from the World Bank to support reforms and continued financing of safety nets and education and health programs. These aid responses provided necessary finance for income support and social service programs—both critical for bridging financial gaps during a downturn.

Safety nets were uncommon in developing countries before previous crises

Few countries facing previous macroeconomic and financial crises in Asia (1997–99), Europe (Russian Federation 1998, Turkey 2001), and Latin America (1980s, 1994–95, 1999, 2001–02) had strong safety nets in place before the crisis. Countries had to scale up programs, regardless of the fit between the original target

MAP 2.1 Around 9 million young children die before their fifth birthday

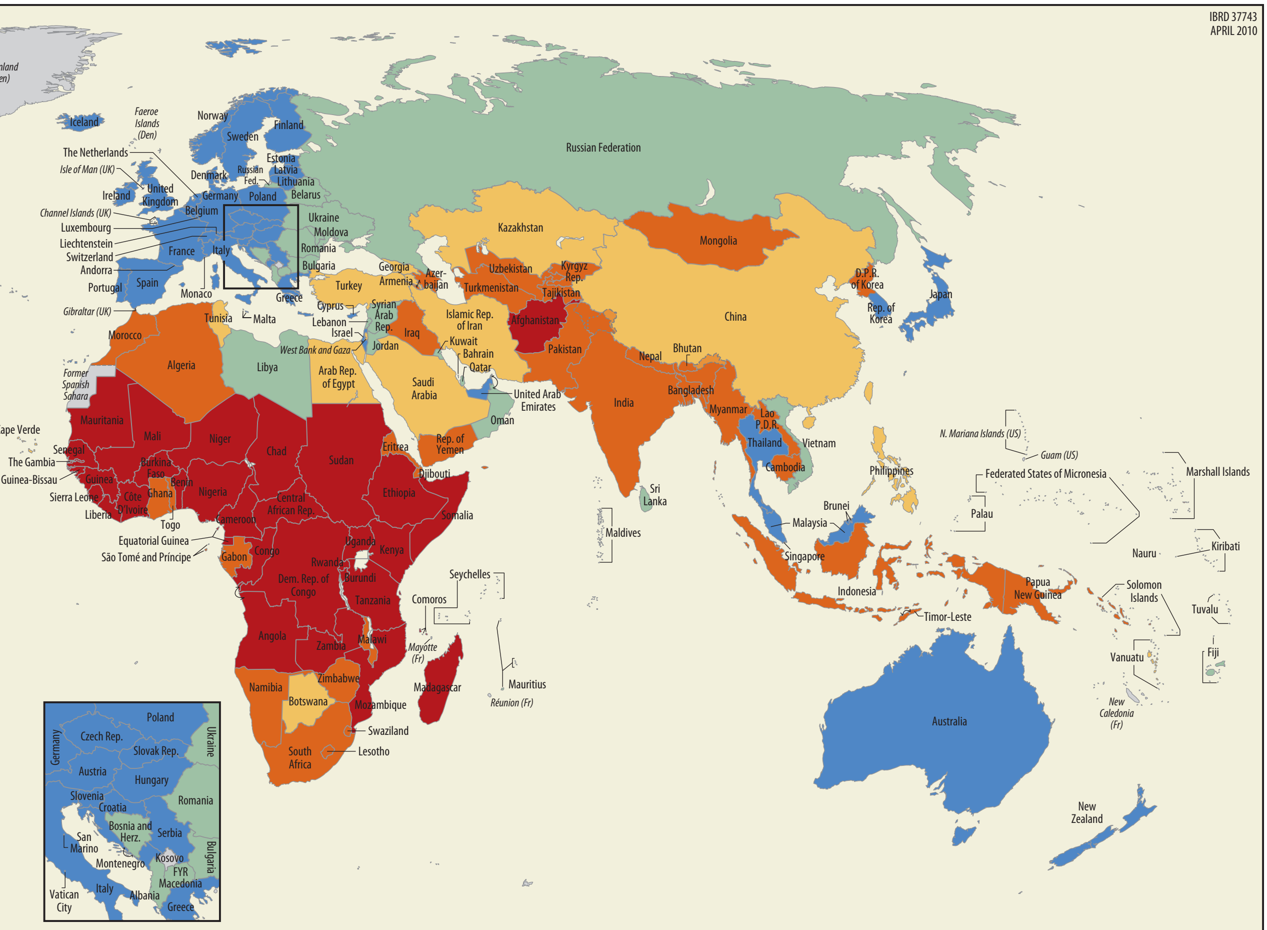


Source: World Development Indicators.

population and the population affected by the crisis, or quickly start new ones. Mexico scaled up retraining and employment programs and targeted food distribution in response to the "tequila" crisis, even though these programs probably did not target the most affected populations. Safety net programs set up after a crisis starts often suffer from poor initial implementation, as with Indonesia's Labor-Intensive Public Works (JPS Padat Karya) program, or take too long to scale up, as with Colombia's Families in Action (Familias en Acción) program.[11]

Despite the difficulties, however, countries have managed to start effective safety net programs in response to crises. Argentina established a new workfare (Jefes de Hogar) program in response to the 2002 crisis and extended it to 2 million participants within a year. Incidence and coverage were good, with about 80 percent of the benefits concentrated among the poorest 40 percent of the population. Argentina benefited from extensive experience with an earlier, smaller workfare program. The Republic of Korea was able to quickly introduce a public works program in response to the Asian financial crisis, reaching more than 400,000 people within six months.[12]

Beyond emergency responses to natural disasters and humanitarian crises, safety nets have been uncommon in low-income countries, partly because they were viewed as taking away from more productive expenditures. But support for social safety nets in the poorest



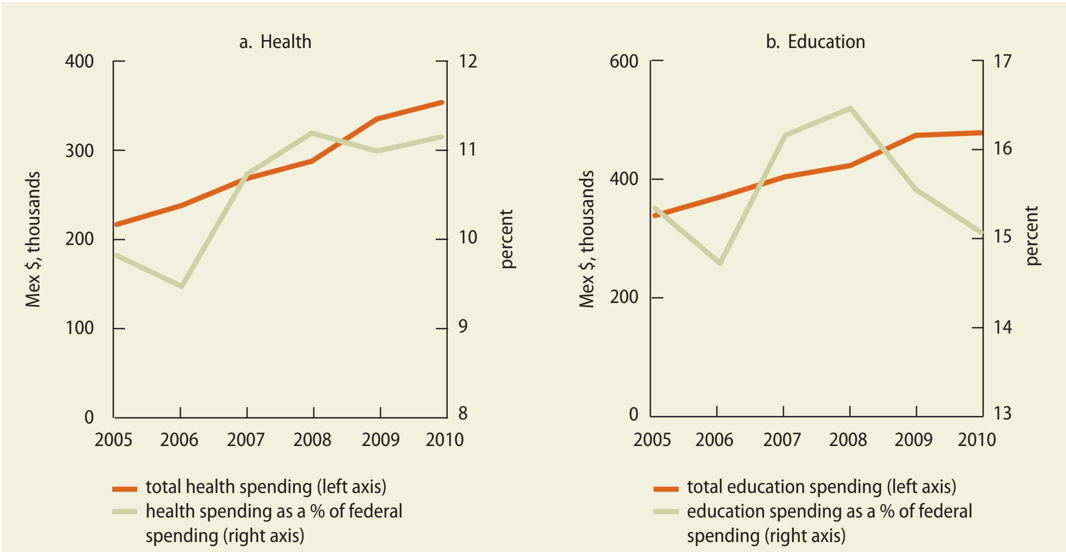
countries has risen as their importance in protecting the poor and vulnerable during crises has become evident. Low-income and fragile countries are devoting a larger share of lending to public works programs and increasing cash transfers and in-kind safety nets, with a renewed focus on school feeding programs.

A key lesson in previous crises is the importance of well-functioning safety nets in responding to a crisis and promoting growth and development afterward. When already in place, safety nets can be scaled up to meet increased needs and then scaled back as the crisis subsides. They can provide temporary protection for households by cushioning unemployment, contractions in public services, and falling demand for formal and informal work. But if safety nets are not in place when shocks strike, governments might respond with price subsidies or other suboptimal policies, which can leave an unwanted legacy of fiscal burden, economic distortions, lower growth, and greater poverty.

What is happening in the current crisis—and what is different?

There is some hope that human development indicators have not deteriorated as much during the current crisis as in previous crises. Because the current economic crisis did not reach most developing countries until 2009, it is too early to arrive at a definitive conclusion on its impact. However, rapid surveys and dis-

FIGURE 2.7 Despite intense fiscal pressures, Mexico's federal funding for health and education is set to rise in 2009–10



Source: Mexican government statistics.
Note: Data are estimated for 2005–07, approved for 2008 and 2009, and projected for 2010.

cussions with governments have yielded preliminary evidence showing that social spending may have held up better during this crisis than in previous ones and that there has been more reliance on social safety nets. Moreover, policy regimes in developing countries had improved considerably before the crisis, so governments might have had greater success in protecting their populations from the worst effects of the growth downturn.

Social spending held up in some regions

Impacts on social sector budgets for 2008–10 varied by country circumstances, specifically according to how the global downturn affected the economy and public revenues and whether countries prepared for a possible contraction.

Latin America and the Caribbean. In Latin America social spending has remained strong, partly because of the relatively modest size and scope of the downturn in much of the region and partly because of efforts to protect social spending. Some of the larger economies (such as Brazil and Chile) instituted social measures aimed at financing temporary employment and transfers to vulnerable populations. Chile's Social and Economic Stabilization Fund provided a countercyclical boost in spending, blunting the effect of the external shock.[13] In Mexico, the severe contraction imposed intense fiscal pressure, but education and health funding are nevertheless set to rise 10 percent in 2009–10 (although spending on education is expected to fall sharply as a share of total government expenditures; figure 2.7). El Salvador is not cutting education funding despite the severe recession, but health spending is expected to fall from 3.4 percent to 3.0 percent of GDP, largely because of reductions in the Social Security Institute's health expenditures.[14]

Eastern Europe and Central Asia. Because Eastern Europe was the hardest hit of emerging market regions, countries there were the first to cut all areas of public spending. Neither education nor health has necessarily been spared. However, aggregate trends in social spending alone are not an accurate indication of the impact of the crisis on outcomes. Some countries have directed spending reductions to sectors with overcapacity, thus improving

BOX 2.3 Crises as opportunities for reform

Crises can present opportunities to achieve reforms in social sector spending that will improve efficiency and welfare over the long term. The current crisis sharply reduced GDP in many countries in Eastern Europe—by more than 15 percent in Latvia—making it impossible to sustain social spending at precrisis rates. Across-the-board cuts in education spending would have greatly impaired access to education, with dismal implications for the quality of the workforce and long-term productivity. Instead, Latvia and Romania directed spending cuts at areas of overcapacity, through reforms that previously had been blocked by political opposition.

Latvia is using the stringencies imposed by the crisis to right-size its teaching force. By shifting teacher financing and management to local governments and providing them with per capita student transfers, the central government is tackling overcapacity. This reform translates into an average 34 percent reduction in the number of teachers and a 45 percent reduction in teacher salaries. In the health sector, the government has embraced sources of efficiency gain through restructuring. Drawing on diagnostic work with the World Bank, the government has eliminated excess hospital beds, invigorated outpatient care, and prioritized the financing of effective health care procedures by adjusting the list of ineligible health services. The crisis made all these needed reforms possible, and policy research informed strategic investment decisions, largely avoiding across-the-board reductions or random cuts in social programs.

Romania responded to declining school enrollments and tighter budgets by substantially reducing education personnel (teaching and nonteaching positions) in 2009 and by curtailing supplements to base salaries. Some 18,000 teachers (6 percent) were laid off following adjustments in teaching norms and substantial cuts in the funds allocated to each county. The Ministry of Education, Research, and Innovation cut 15,000 additional public positions, consolidated schools, and reduced the number of scholarships for higher education. The staffing reductions will allow much needed adjustments to class size and better alignment of teachers, students, and budgets. The ministry also has reduced the number of fee-paying students, which shrinks the overall resource envelope for higher education at the same time that budgets are being cut.

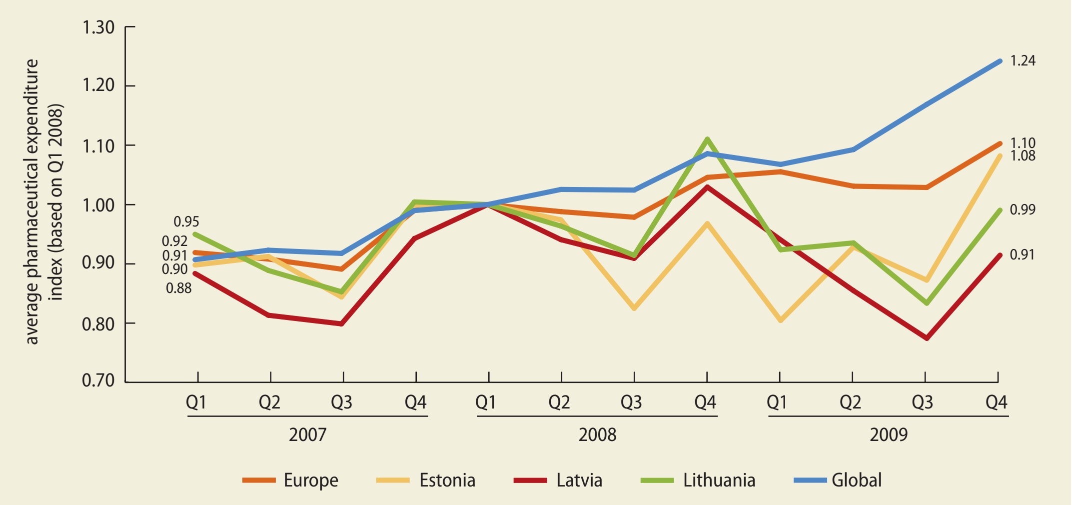
Source: Lewis and Verhoeven 2010.

long-term efficiency and limiting the welfare impact of expenditure cuts (box 2.3).

By contrast, some countries had increased planned spending heading into the crisis, necessitating painful reductions as government resources dwindled. In Moldova, education sector employees make up about 60 percent of public employees. During two election campaigns in 2009, the outgoing government raised teachers' salaries 25–30 percent to align entry-level salaries with average national earnings but made no commensurate increases in class size or shifts in teaching loads. Other measures were contemplated that would further raise real wages if implemented. The new government's challenge will be to implement corresponding increases in class size or shifts in teaching loads. Ukraine adopted a social standards law in November 2009 that calls for large increases in minimum wages and social standards throughout 2009–10. Public wages were adjusted accordingly at the end of 2009, but the subsequent wage hikes have not taken place because of challenges to the law in the Constitutional Court. More recently, the Cabinet of Ministers approved salary top-ups for secondary, vocational, and university teachers (equivalent to 20 percent of base salary). With no budget yet in place for 2010, budget operations are being executed on the basis of an operational budget that limits current monthly spending to one-twelfth of the 2009 appropriations.

One indicator of the impact of the crisis on health expenditures is that pharmaceutical spending (a good proxy for health sector spending) has declined sharply in Eastern Europe. World demand continued to rise from

FIGURE 2.8 Average pharmaceutical expenditures fall in Eastern Europe, especially in the Baltics, before beginning to rise again



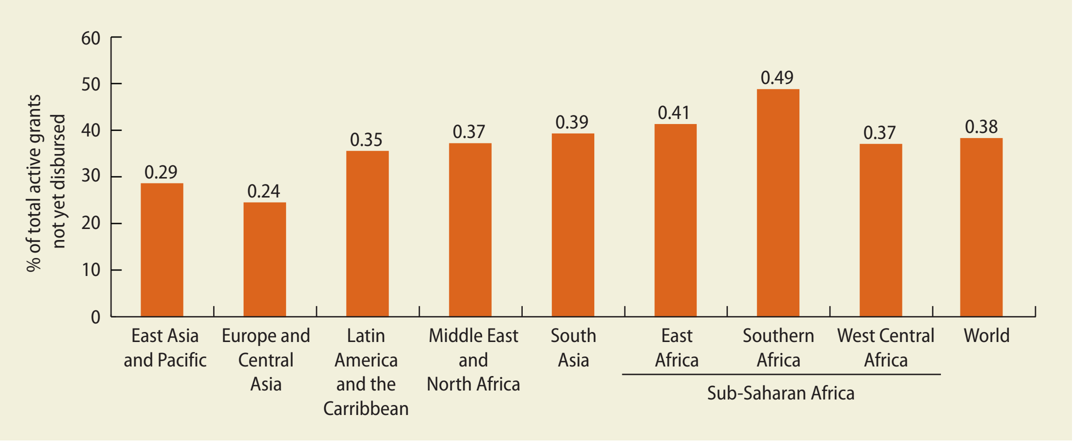
Source: Laing and Buysse 2010.

the first quarter of 2007 through the last quarter of 2009 (with the first quarter of 2008 considered the last quarter before the worldwide financial crisis), but expenditures in Eastern Europe declined in the first quarter of 2009 before beginning to rise again. The decline was most dramatic in the Baltics, with Latvia cutting back pharmaceutical expenditures by more than 25 percent between the fourth quarter of 2008 and the end of 2009 (figure 2.8).

Information on social sector spending in other regions is extremely limited, but scattered information provides some examples. For example, 16 of 19 country programs initiated and monitored by the International Monetary Fund and implemented with the World Bank in 2008–09 budgeted higher social spending for 2009; 9 of those countries were in Sub-Saharan Africa (Burundi, Republic of Congo, Côte d'Ivoire, Liberia, Malawi, Mali, Niger, Togo, and Zambia.[15] Several African countries with poverty reduction strategies have protected funding for social sectors. Some countries with adequate fiscal space (Kenya and Nigeria) have protected capital expenditure, mainly for infrastructure. But there are also examples of forced contractions in social spending. Countries with precrisis fiscal and debt problems (such as Ethiopia and Ghana) had to undertake fiscal tightening.[16] The effects of the crisis have been relatively modest in East Asia, although qualitative evidence in six countries suggests that informal work has surged and that migrants have returned home temporarily, lowering overall income and reducing households' ability to pay for social services. Households have responded by transferring children from private to public schools and reducing food consumption, although parents contend that they have tried to shield children's nutrition.[17]

Spending to combat HIV/AIDS (human immunodeficiency virus/acquired immune deficiency syndrome) is a special case. Big increases in funding have made HIV/AIDS one of the most important items on the development agenda. Funding for HIV/AIDs programs during the current crisis has been largely sustained. The uptick in donor spending in 2008–09, when the economic crisis was accelerating in donor countries, is encouraging. The Global Fund to Fight AIDS, Tuberculosis, and Malaria (the Global Fund) disburses quickly once allocations are decided, but recipient country spending has been slow. So the issue is sluggish disbursement and a new concern for efficiency of resource use (see annex 2.2 for a detailed discussion). Almost 40 percent of the Global

FIGURE 2.9 Undisbursed HIV/AIDS grants from the Global Fund to Fight AIDS, Tuberculosis, and Malaria, Rounds 1–7



Source: Lewis 2009.

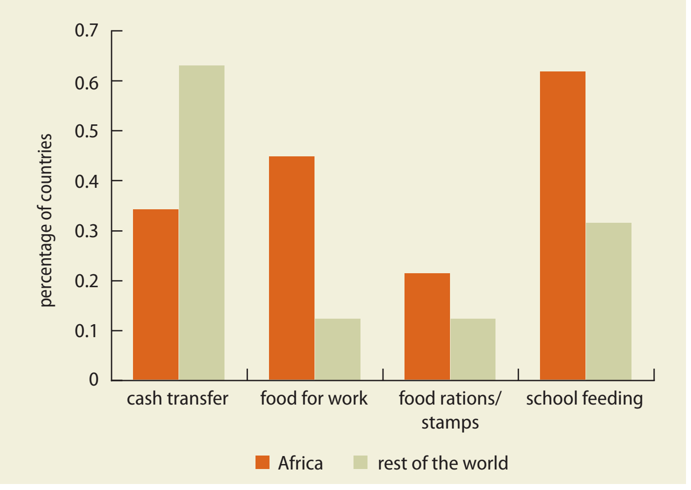
Fund resources remain undisbursed, a possible source of additional resources if there is a shortfall or delay in funding flows. Almost half the allocations to Sub-Saharan Africa are undisbursed (figure 2.9). The $900 million allocated in late 2009 under Round 9 is also unlikely to have been disbursed yet.[18]

The recent buildup of social safety nets

Safety nets have been a crucial part of the response to the crises in the hardest-hit countries. Many countries that responded most effectively already had safety nets, which governments were able to quickly modify and expand. Evidence on the distribution of safety net programs shows that programs vary considerably across regions. For example, food-based programs are more common in Africa than in other regions (figure 2.10).[19]

Another sign of the importance of safety nets in responding to the crisis is the dramatic increase in World Bank lending for safety nets after the crisis struck—topping $3 billion in 29 countries in fiscal 2009. Elevated activity is expected to continue in 2010–11, particularly in low-income countries and fragile and postconflict settings (table 2.4).[20] The regional distribution of lending activities reflects the dominance of Latin America, which had the greatest number of effective safety nets in place before the crisis that could be scaled up (table 2.5). Less funding to Africa and South Asia reflects the fact that existing safety nets were smaller and less able to absorb funds. Thus, where capacity was in place, lending could be quickly leveraged. Some countries have been reluctant to introduce safety net programs because of the costs involved, although reducing across-the-board subsidies

FIGURE 2.10 Food-related safety net programs are more common in Africa than elsewhere



Source: Wodon and Zaman 2010.
Note: Based on a March 2008 survey of 120 World Bank country teams.

TABLE 2.4 World Bank lending for safety nets before and since the food, fuel, and financial crises, 2006–11
US$ billions

Period	International Bank for Reconstruction and Development Loans	International Development Association Loans	Grants	Total
2006–08 (precrisis)	0.57	0.62	0.03	1.23
2009–11 (postcrisis)	4.48	1.38	0.03	5.89

Source: Data from the World Bank Business Warehouse project database for projects classified as social safety nets (54).
Note: Data do not include interventions funded under the Global Force Crisis Response Program.

TABLE 2.5 World Bank portfolio allocations to social safety nets, by region, 2009–10

Region	Amount (US$ millions)	Number of projects
Latin America and the Caribbean	2,917	21
Europe and Central Asia	926	21
East Asia and Pacific	618	9
Sub-Saharan Africa	574	23
South Asia	373	9
Middle East and North Africa	19	8

Source: Data from the World Bank Business Warehouse project database for projects classified as social safety nets.
Note: Data do not include interventions funded under the Global Force Crisis Response Program.

while augmenting targeted safety nets can help reduce poverty without a significant drain on revenues (box 2.4).

Several countries expanded existing or planned safety net programs in response to the crisis.

- *The Republic of Yemen*, hard hit by the global food crisis (drought has forced imports of more than three-quarters of its food), expanded safety net programs with support from the World Bank and the European Union. The cash-for-work program was extended to an additional 22,000–26,000 households in communities most affected by higher food prices, the share of cash transfers to the poorest beneficiaries was increased, and 40,000–50,000 more households were added to the cash transfer program.
- The food and fuel price shocks in 2008, the global economic crisis, and a recent typhoon have sharply increased poverty in *the Philippines*. The government had begun planning for a pilot conditional cash transfer program (Pantawid Pamilyang Pilipino Program, or 4Ps) in 2007. It was launched in February 2008 for 6,000 households. As the crisis unfolded, the government accelerated and augmented the program, rolling it out to 376,000 households by March 2009. In mid-2009, the government announced plans to expand the program to as many as 1 million households by the end of 2009.
- Before the crisis, the government of *Brazil* had established a highly successful conditional cash transfer program, Bolsa Familia, to protect poor families. When the crisis hit, the government expanded the program to more than 12 million families, using a new methodology of poverty maps and an income volatility index, and raised the benefit level 10 percent to compensate for higher food prices. The program was expanded in regions where poverty reduction has been slow—in urban municipalities and in the mid-south region—reaching 1.3 million families in those areas in 2009. Another 600,000 families within poverty belts or in specific vulnerable groups are expected to join the program in 2010.
- In response to the food, fuel, and financial crises, *Chile* announced in April 2009 the strengthening of multiple safety net programs. Family allowances of about $45 were distributed to 1.4 million families, including all families in the Chile Solidario program (around 300,000), families in the Family Subsidy program, and families whose monthly income was $555 or less. In all, some 5.6 million people in the bottom 40 percent of the income distribution will benefit, at a cost of $62 million.
- The government of *Ethiopia* established the Productive Safety Net Program in 2005 to pay for participation in labor-intensive public works and provide direct support to elderly or incapacitated household members. The program has been expanded since, providing immediate assistance to 1.5 million households when the food and fuel crises struck, and providing additional transfers to 4.4 million people as the crisis deepened. Evaluations find a positive impact on use of

BOX 2.4 Using safety nets to lower the cost of reducing poverty

Some countries have hesitated to establish safety nets because of the cost. Safety net expenditures in developing countries average 1–2 percent of GDP. Expenditures on programs that are to scale and that have been evaluated as delivering significant positive impacts, such as Mexico's Oportunidades and Brazil's Bolsa Familia, average 0.4 percent of GDP. Ethiopia's largest safety net program, the Productive Safety Net, costs about 1.7 percent of GDP.

The introduction of a well-targeted safety net can provide the political space to reduce or eliminate expensive and poorly targeted general price subsidies, freeing up resources to fund the targeted programs. The potential for such reallocations is considerable because many countries have large and costly price subsidies. More than a third of countries recently surveyed by the International Monetary Fund raised subsidies an average of 1 percent of GDP in response to higher food and fuel prices. Several examples illustrate successful country experiences in switching from universal subsidies to targeted safety nets.

In the late 1990s *Mexico* progressively moved funding from price and in-kind food subsidy programs to the Oportunidades conditional cash transfer program, probably the most positively evaluated safety net program in a developing country. Fifteen years later, as food prices rose dramatically, the government was able to protect the poor by issuing a one-time top-up benefit to those already in the program. The response was easy, fast, and affordable because of the earlier investment.

In 2005 *Indonesia* cut its fuel subsidies by $10 billion, using a quarter of the released funds for a targeted cash transfer that more than compensated poor recipients for their losses. Another quarter of the savings went to basic health and education programs for the poor.

In 2008 *the Philippines* found itself short of effective policy instruments to protect the poor against escalating rice prices. A key part of its multipronged response package, which cost some 1.3 percent of GDP, was a program of loosely targeted and distortive rice subsidies. Realizing that this approach is expensive and regressive, the government is working on better safety net options—unifying administration under a new umbrella program, scaling up a proxy means test for targeting households, reforming and expanding the school feeding program, and accelerating rollout and scaling up of a conditional cash transfer program.

Source: Data for 87 countries for which data on safety net expenditure were available from World Bank public expenditure reviews, safety net assessments, social protection strategy notes, and other studies. Data coverage is low for Sub-Saharan Africa, where government spending on safety nets may be low, but where donor funding may compensate considerably. See also IMF 2005.

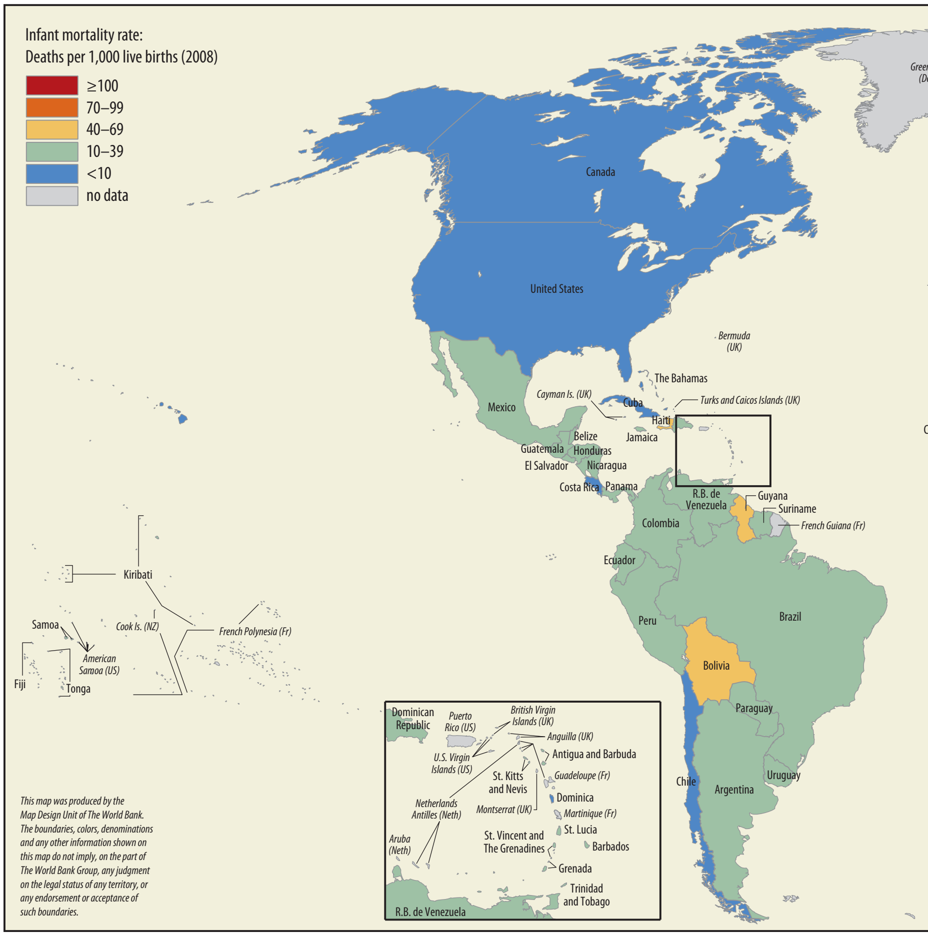
health services and caloric availability and reductions in negative coping behaviors, such as child labor and withdrawal from school.

Safety nets are important not only in cushioning the effects of the crisis but also as part of a broader poverty reduction strategy interacting with social insurance; health, education, and financial services; the provision of utilities and roads; and other policies for reducing poverty and managing risk. Many challenges remain, however. Safety net programs in low-income countries are often slight and fragmented and cover only a small percentage of poor and vulnerable populations. There are real concerns over whether they are affordable and administratively feasible or desirable, considering the negative incentives they might create. Thus a part of policy reforms in developing countries should be understanding what kind of safety net program best serves various social assistance activities, what the implementation challenges are, and how to develop programs for maximum effectiveness.[21]

Informal safety nets and remittances

Households manage risk through informal safety nets (such as crop diversification), informal savings and credit associations, burial societies, labor exchange arrangements, migration, and emigration. Informal safety nets are generally more effective against idiosyncratic

MAP 2.2 An infant in a developing country is ten times more likely to die than a newborn in a developed country

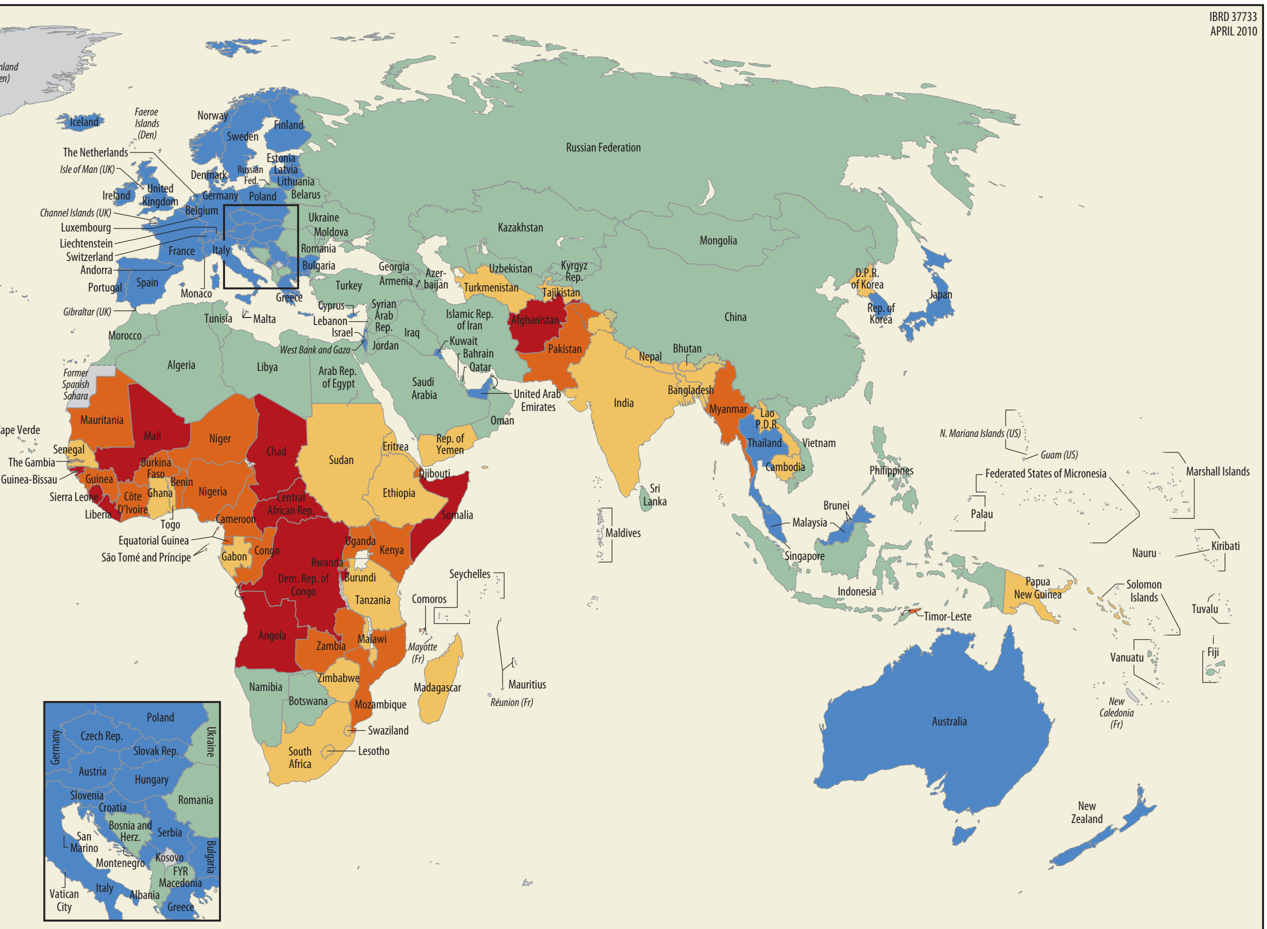


Source: World Development Indicators.

shocks that affect only one or a few households than against systemic shocks that affect whole communities. Thus it is not clear whether such risk-mitigation strategies were any more effective during the recent crisis than they had been previously.

Remittances have played an important countercyclical role in crises that affected individual developing countries.[22] Because remittances are unaffected by idiosyncratic shocks or even local or national systemic shocks, they are an important part of the household safety net for many poor households. More than tripling since earlier in the past decade, remittances constitute important monetary flows to developing countries; they reached $338 billion in 2008 before the full impact of the financial crisis was felt.[23]

The global nature of the current crisis has likely reduced the support that remittances can provide. Remittance flows to developing countries are estimated at $317 billion for 2009, a 6.1 percent decline from 2008. Analysis of the first nine months of 2009 shows that the financial crisis has affected remittance flows unevenly. Remittances to Latin America and the Caribbean have suffered large declines (down 13 percent in Mexico, for example), mainly because of the early effects of the crisis in the United States and Spain. Similarly, remit-



tances to the Middle East and North Africa have declined more than expected, plunging 20 percent in the Arab Republic of Egypt and Morocco. The situation is even more serious in Europe and Central Asia, where many countries are among the top recipients of migrant remittances as a percentage of GDP. Tajikistan, where remittances make up 50 percent of GDP, experienced a decline of more than 30 percent in the first half of 2009. Many other countries in the region have experienced similar declines. By contrast, in Sub-Saharan Africa the decline has been less steep and in some countries, such as Uganda, flows have increased. In South Asia, remittances have remained strong, even increasing in some cases (up 24 percent in Pakistan, 16 percent in Bangladesh, and 13 percent in Nepal). In East Asia and the Pacific, flows were also stronger than expected (up 4 percent in the Philippines).

A study by the World Food Programme found that families that rely on remittances from abroad were among groups most affected by the current financial crisis.[24] In Armenia, where remittances make up 20 percent of GDP and are the main source of income for 25 percent of households, the impact was felt immediately, with remittances slumping 30 percent in the first quarter of 2009. In Nicaragua, a country highly dependent on remittances and vulnerable to economic downturns in the U.S. economy, food consumption patterns are changing and families are spending less on health and education.

This crisis is not about domestic policy failure

Improvements in developing countries' policies since the 1990s may blunt the impact of the crisis on human development. Crises in low-income countries have often been driven by poor governance, civil conflicts, or severely distorted macroeconomic policies. (Internal shocks accounted for 89 percent of output volatility in low-income countries from the early 1960s to mid-1990s.) The failure of domestic institutions has been an important reason for the severity of past crises on human development, macroeconomic variables, and the quality of institutions.

But some indirect evidence suggests that this situation may be changing and that the impacts of the current crisis on human development could be less severe than in previous crises. Since the 1990s output volatility in low-income countries has lessened, and the influence of external shocks has intensified (box 2.5). To the extent that lower volatility and a reduced importance for internal shocks indicate improved policies, governments should be better placed to protect their people from the most severe impacts of the crisis.

Assessing the quality of policies and institutions over time is difficult, but external evidence does indicate an improvement in many developing countries since the 1990s. Inflation rates have declined substantially, fewer countries have unsustainable debt positions, more countries have access to private capital markets and have attracted substantial foreign direct investment, financial intermediation has risen as a share of output, trade barriers have come down, black market exchange rate premiums have shrunk, and civil conflict has subsided in many countries. The pace of policy reform has varied. In Latin America weak currencies, banking sectors, and poor fiscal management tended to amplify the impact of past crises, whereas improvements in the policy and institutional framework have cushioned the impact of the current crisis—a first for the region. By contrast, in Europe and Central Asia middle-income countries that were unable to halt large increases in private sector credit growth were the hardest hit by the current crisis. They had higher growth rates before the crisis but also larger declines after the crisis, and on balance they experienced lower average growth rates than countries with more modest increases in private sector credit growth.

Comparing the economic performance of countries according to the quality of their policies and institutions shows the importance of policy reform. Although there is no perfect measure of the quality of the policy and institutional environment in developing countries, the World Bank's Country Policy and Institutional Assessment (CPIA) provides a consistent framework for assessing country performance (on a scale from 1, worst, to 6, best).[25] Countries with better policies or initial fiscal positions have generally done better in the current crisis (see chapter 3). And before the crisis (2001–07), developing countries with 2008 CPIA scores of 3.2 or better grew faster than countries below this cutoff (figure 2.11). Per capita GDP growth averaged 3.9 percent for countries with good policies and 1.9 percent for fragile states with poorer policies. Countries with better policies also had lower inflation, at 5.2 percent a year, compared with 6.6 percent for countries with poorer policies. The pattern is the same for countries in Sub-Saharan Africa.[26] Before the current crisis, countries with better policies tended to have better outcomes for MDG indicators such as under-five mortality, gender equality in primary and secondary education, primary school completion, and access to an improved water source. Several empirical studies also showed that better policies and institutions improve the marginal contribution of growth to progress on human development indicators.[27]

The impact of the current crisis is still worrisome

The crisis has generated predictions of rising mortality rates and closed schools as governments reduce services in response to falling output and public revenues. These fears are

BOX 2.5 Are external shocks becoming more important than internal shocks for developing countries?

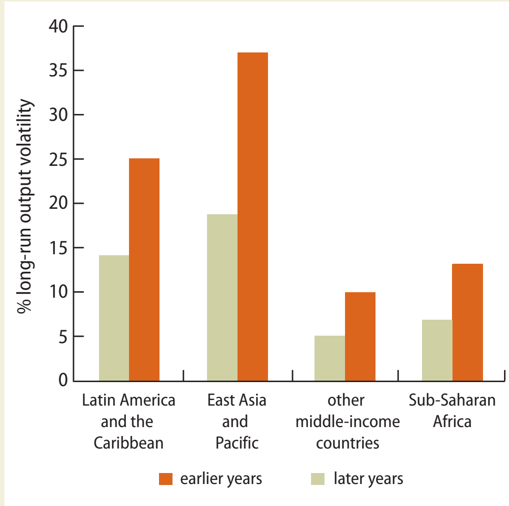
Historically, developing countries have endured greater macroeconomic volatility than have industrial economies. A simple look at the data shows that output volatility (measured as the standard deviation of real GDP growth) has been two to three times greater in developing countries than in industrial countries in the last 20 years.

Because developing countries are highly dependent on primary commodities and foreign capital and have greater exposure to natural disasters, policy makers often blame external shocks, such as terms-of-trade fluctuations, natural disasters, and aid volatility, for countries' uneven macroeconomic performance.

However, research shows that external shocks account for only a small fraction of the variance in real per capita GDP in low- and middle-income countries. Among low-income countries, external shocks, including terms-of-trade fluctuations, global economic growth, international financial conditions, natural disasters, and aid volatility, explain no more than 11 percent of output volatility. The 89 percent residual is probably related to internal conditions, such as the volatility of macroeconomic management. Among middle-income countries, external shocks account for about 20 percent of output volatility.

Since the 1990s, however, many developing countries have undergone structural transformations that may have calmed internal volatility and increased the importance of external factors. Research shows that external shocks have become more important for developing countries in several regions during the past two decades (see the figure at the right). In African countries this shift has resulted not from an increase in the volatility of external shocks, or in countries' vulnerability to them, but rather from the taming of internal sources of volatility. In these countries—among the most volatile—standard indicators of democratic accountability, economic management, and control of corruption have improved since the early 1990s. Many middle-income countries have also strengthened their fiscal position by reducing deficits and accumulating reserves; tamed inflation through independent central banks; and promoted local bond markets after the Asian and Russian financial crises of 1997–98.

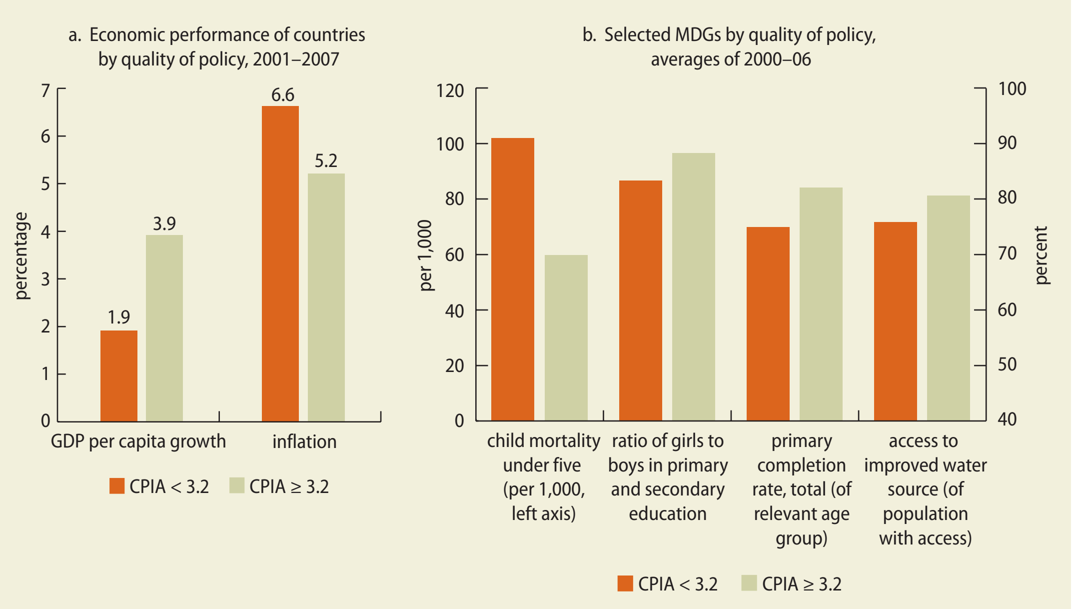
External shocks have become more important since the 1990s



Source: Raddatz 2007, 2008a, 2008b.
Note: The data for Latin America and the Caribbean, East Asia and Pacific, and other middle-income countries correspond to 1974–1985 (earlier) and 1986–2004 (later). The bars for Africa correspond to 1963–89 (earlier) and 1990–2003 (later). External shocks explaining long-run output volatility include the state of the world business cycle, international financial conditions, terms of trade, natural disasters, and aid flows.

grounded in the experience of past crises, when, as noted earlier and in box 2.6, poverty, hunger, health outcomes, and access to education deteriorated sharply. Despite policy improvements and efforts to sustain social spending and ramp up safety nets, preliminary indications of the impact of the crisis on human development point to serious problems. An important reason is the size of the shock—it is the largest global downturn since the Great Depression. Thus while developing countries' efforts have been important in mitigating the impact of the crisis, the crisis nevertheless has been a severe setback to poverty reduction.

FIGURE 2.11 Economic performance and MDG outcomes are better with good policy



Source: World Bank staff calculations.
Note: CPIA is the World Bank's Country Policy and Institutional Assessment framework for assessing country performance; ratings range from 1 (worst) to 6 (best). Countries with a CPIA score of 3.2 or better have better policies than countries that score under 3.2.

The recent deterioration in human development indicators began with the food and fuel price shocks of 2007. In some countries food prices almost doubled with no adjustment in earnings.[28] In Mozambique incomes were almost halved and food consumption fell by a fifth; children's weight for age and body mass index were reduced with no change in height for age, indicating that the price rise has seriously compromised nutrition. The effects spilled over into the efficacy of HIV/AIDS treatment, with lower-income households showing slower improvements than households with higher incomes and better access to adequate nutrition, which reinforces the beneficial effects of antiretroviral therapies. Recent analysis finds that the 2008 global food price spike may have increased global undernourishment by some 6.8 percent, or 63 million people, relative to 2007.[29] Moreover, the analysis shows that the sharp slowdown in global growth in 2009 might have contributed to 41 million more undernourished people compared with the number there would have been without the economic crisis.

The problems were compounded by the global economic crisis. A poverty monitoring study of 13 countries suggests that in countries like the Central African Republic and Ghana, parents were forced to take their children out of school and that in other countries they scrambled to finance their children's continuing attendance.[30] In Serbia, Roma children dropped out of school because of a lack of clean clothes and soap. Poor households in Cambodia and the Philippines reported cutting overall consumption in response to income shocks to protect children's school attendance. Although little information exists on the differential impact of the crisis on women and men, recent surveys of East Asia do not show that women have been disproportionately affected (box 2.7).

Recent surveys in Armenia, Montenegro, and Turkey give a sense of how declines in income induced by the crisis are reducing household consumption.

BOX 2.6 Human development suffered severely during crises in developing countries

Household studies from past crises suggest that the impact on human development can be serious. In the lowest-income countries, poverty rises, people eat lower-quality food, school enrollments fall, health care use drops, and infant mortality rises. Even modest reductions in food consumption for children between birth and age two can have lasting deleterious effects on cognitive and physical development. In South Africa and Zimbabwe, the nutritional deprivation of young children led to lower height for age and shorter stature in adulthood.

Analysis of the effects of downturns on infant mortality in Sub-Saharan Africa shows that a 1-percent reduction in per capita GDP is associated with a rise in the infant mortality rate of 0.34–0.48 per 1,000 live births, or 34–39 percent of the average annual change in the infant mortality rate. Infant girls are more likely than boys to die during downturns, and both rural and less educated women are at higher risk of losing their infants.

For middle-income countries the picture is less consistent. In Latin America school attendance has increased during crises, possibly because children are not needed for economic activity, but infant mortality appears to have risen. In Indonesia the crisis of the late 1990s had little measurable impact on schooling or health, possibly because the country was better off and perhaps because education and health services were better protected. But the impacts of recession are far more severe for child health than for education, even in middle-income countries.

Source: Wodon and Zaman 2010; Ferreira and Schady 2009; Dinkelman 2008; Alderman, Hoddinott, and Kinsey 2006; and Gottret and others 2009.

Food consumption in Armenian households has fallen 41 percent, and health care spending is down 47 percent. Some 50–60 percent of households in the four lowest income quintiles have cut back on health care services and drug purchases. Household reductions in food consumption are inversely related to income, with 20 percent of the wealthiest households cutting back (noteworthy in itself) and more than 55 percent of the poorest 20 percent doing so. Even bigger cuts are seen in spending on entertainment and expensive foods. There is some evidence that these cutbacks have helped protect education spending.

In Montenegro unemployment figures suggest that cutbacks affect almost a quarter of households. Safety nets cover only 18 percent of the poorest 20 percent of households, and informal private transfers are disappearing as remittances shrink and informal safety nets unravel. Private investments in education, health insurance, and preventive health care have fallen, reducing resilience to further shocks (figure 2.12). Overall, 9 percent of households reduced preventive care visits, but 25 percent of poor households did, and the same percentage of poor households canceled health insurance. In education the wealthiest households cut back the most—20 percent compared with 11 percent for the lowest-income households.

In Turkey, the poorest households have experienced the largest reductions in wages and self-employment income. Some 91 percent of the poorest 20 percent of households lost income, but even the wealthiest 20 percent experienced some income loss. Safety nets cover only 20 percent of the poorest households, requiring the rest to sell assets, draw down savings, and find other informal sources of support. Among the poorest households, 75 percent have reduced children's food consumption, 29 percent have curtailed health care use, and 14 percent have cut back on education spending. Even middle-class households have trimmed spending, especially in education.

The data now available on the impact of the crisis on human development are still much too limited to draw any conclusions on the overall impact. But there is certainly evidence of suffering as a result of the severe global

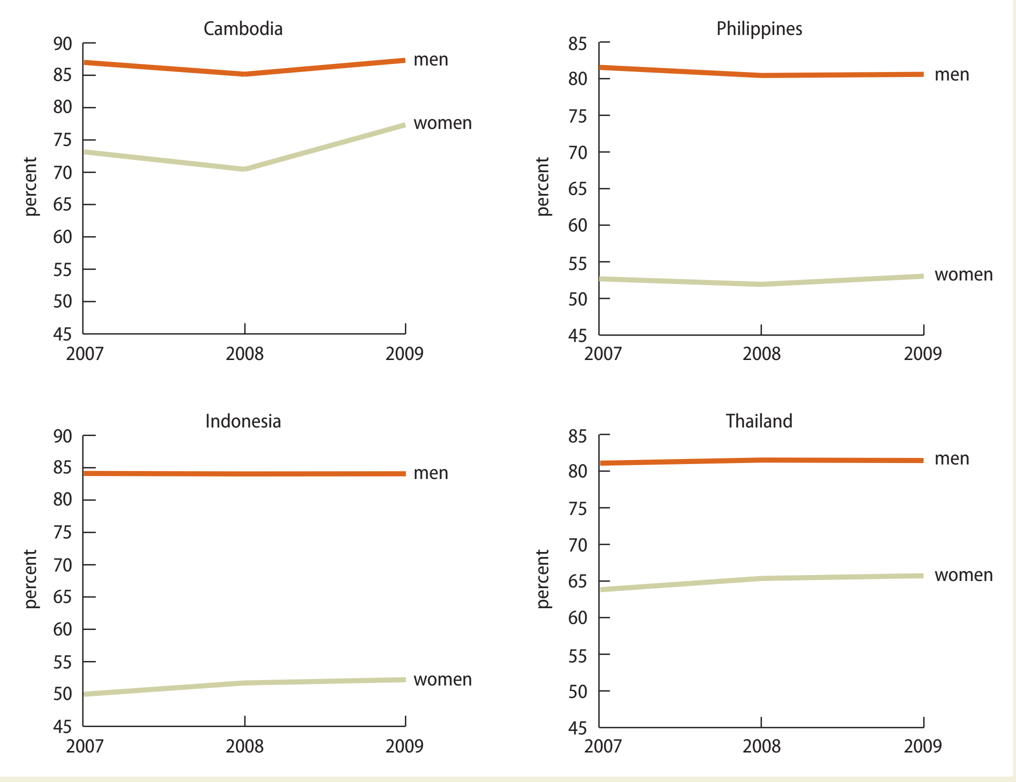
BOX 2.7 Gender differences in impacts of the crisis: Evidence from East Asia

Although the effects of the crisis have clear gender dimensions, it is not clear that women in East Asia have been disproportionately affected. Gender-specific impacts would be expected because of the gender division of labor in the labor market and in the home, gender disparities in access to productive resources, and gender dimensions of household resource allocation. But precise impacts are unclear because they depend on multiple factors including the size of the shock, the economic structure of the country, the nature of government responses, and the speed of economic recovery. Identifying the gender impacts of the crisis is thus an empirical issue.

Empirical analysis is complicated by a lack of data. High-frequency data on the social impacts of the crisis is generally not available, and the lack is particularly intense for gender-disaggregated data. Thus multifaceted approaches are needed, such as rapid qualitative assessments (including focus group discussions), ex ante simulations using precrisis household survey data, analysis of labor force survey data as available, and triangulation across data sources.

Data indicate that unemployment in East Asia has barely changed during the crisis, for men or women, but that women's participation has tended to rise. In some countries unemployment has fallen more for women than for men, while increases in labor force participation have been more marked for women than for men (see the figures below), particularly in poorer countries, where female labor has shifted from unpaid work to self-employment. Both quantitative and qualitative data indicate longer working hours as men and women take on additional jobs to compensate for falling earnings from primary jobs.

Labor force participation by gender in selected East Asian countries, 2007–09



Source: World Bank staff calculations.

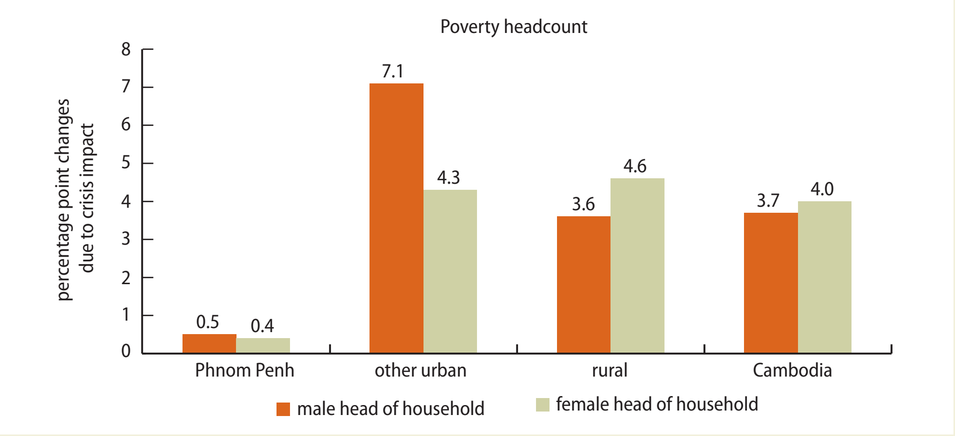
BOX 2.7 (continued)

The impact of labor market shocks is driven by several factors, of which gender is only one. Both quantitative and qualitative findings suggest that simple interpretations of labor market data may be misleading. As an example, well-publicized data show layoffs from enterprises producing garments and other products for export to shrinking markets, sectors where female employment tends to dominate. Less well-documented is the contraction in hours and earnings in sectors serving domestic markets, where purchasing power is closely linked to the health of the export sector. These sectors may be dominated by men. Women laid off from formal sector work may be better off than men facing highly restricted earnings in informal sector jobs. Quantitative and qualitative evidence from Cambodia suggests that more male workers in the construction sector have been affected by the crisis than female workers in the garment sector. Moreover, male construction workers are more likely to be poor and have fewer economic fallbacks than female garment workers.

There is no consistent cross-country pattern in differences in hours of paid work by gender. In some countries, such as Cambodia, both men and women have greatly increased their hours of paid work. In other countries, such as Indonesia, women have overtaken men in hours of paid work in the past two years. And in other countries, such as the Philippines, men and women appear to work the same number of paid hours. However, focus group discussions suggest that women's total work burden (paid plus unpaid domestic work) has increased over the past year. In urban Thailand, women explain that their time on unpaid domestic work has declined a little but not enough to offset rising labor market hours. In rural Cambodia and the Philippines, research teams noted that an increased dependence on common property resources, including firewood, has increased women's time on domestic chores.

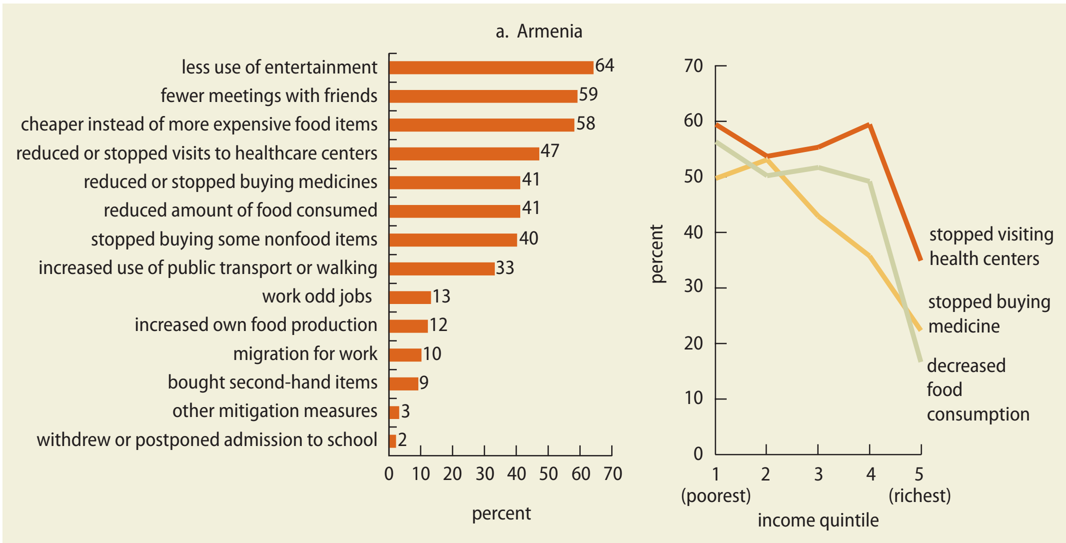
The welfare impacts of the crisis, by gender, also appear to be nuanced. Microsimulations of the poverty impacts of the crisis in Cambodia suggest that male-headed households were more affected in urban areas, while female-headed households were more affected in rural areas (see the figure below). For urban male-headed households, this finding likely reflects the impacts of the crisis on male jobs in construction and tourism. The effects for rural female-headed households appear to reflect the loss of remittance income in addition to more direct crisis impacts on household earnings. Findings from rapid assessments in rural Cambodia indicate that female-headed households commonly cut back consumption sharply and increased their indebtedness to cope with loss of income as remittances from urban areas fell. Male migrant workers—often migrant spouses—reported being unable to return home as often as before because of increased transportation costs and reduced earnings, meaning less male labor on the farm during peak periods.

Impacts of the global financial crisis on male- and female-headed households in Cambodia

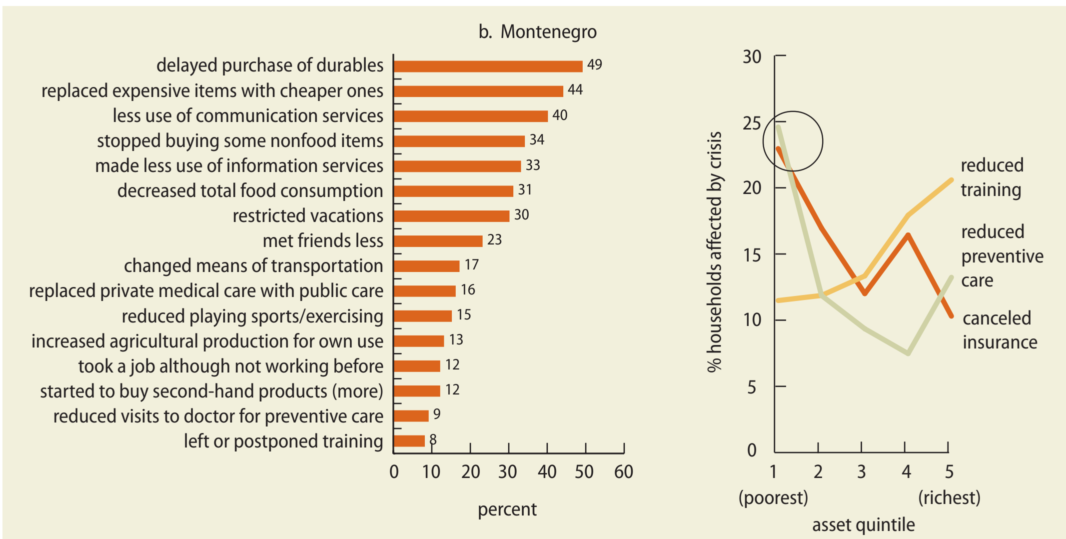


Source: Bruni and others forthcoming.

FIGURE 2.12 Spending cutbacks in crisis-affected households are jeopardizing future welfare in Armenia, Montenegro, and Turkey



Source: Armenia Integrated Living Conditions Survey 2009. See Ersado, forthcoming.

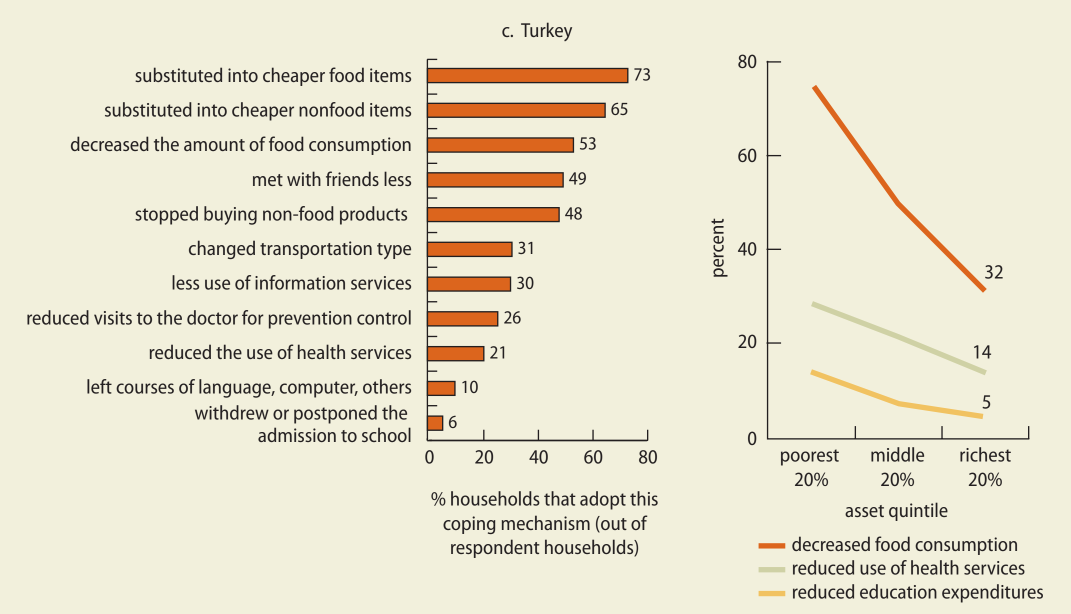


Source: Montenegro Crisis Monitoring Survey 2009. See Hirshleifer and Azam, forthcoming.

downturn. Even if the deterioration in human development indicators has not been as severe as in previous crises (as speculated above), the human suffering will be considerable.

Although many people in middle-income countries are above the threshold of the poverty MDG, they are also the hardest hit by adjustments in wage earnings and employment.[31] Early evidence in 41 middle-income countries indicates that the impact on the labor market has been severe, especially in wealthier middle-income countries of the Europe and Central Asia region. Although the number of jobs and their growth have been negatively affected, the impact has been mostly on the quality and earnings of employment (figure 2.13).

FIGURE 2.12 (continued)



Source: TEPAV, UNICEF, and World Bank 2009; Turkey Welfare Monitoring Survey.

- Three-quarters of the labor market adjustment stems from slower growth in take-home pay, only one-quarter from less job creation.
- Earnings in most middle-income countries are falling mainly because people are working fewer hours. Hourly wages have changed little except in Europe and Central Asia, where they have declined.
- The crisis severely affected labor markets, with few countries spared. It caused a sharp slowdown in wage-bill growth, which fell by an average of 8 percentage points. The exceptions were Argentina, China, and the former Yugoslav Republic of Macedonia, where wage-bill growth accelerated.
- Employment has shifted away from industrial employment into services, where jobs tend to be of lower productivity and offer lower wages.
- For a given decline in GDP growth, the labor market impact was more severe in upper-middle-income countries and in countries with fixed exchange rates.

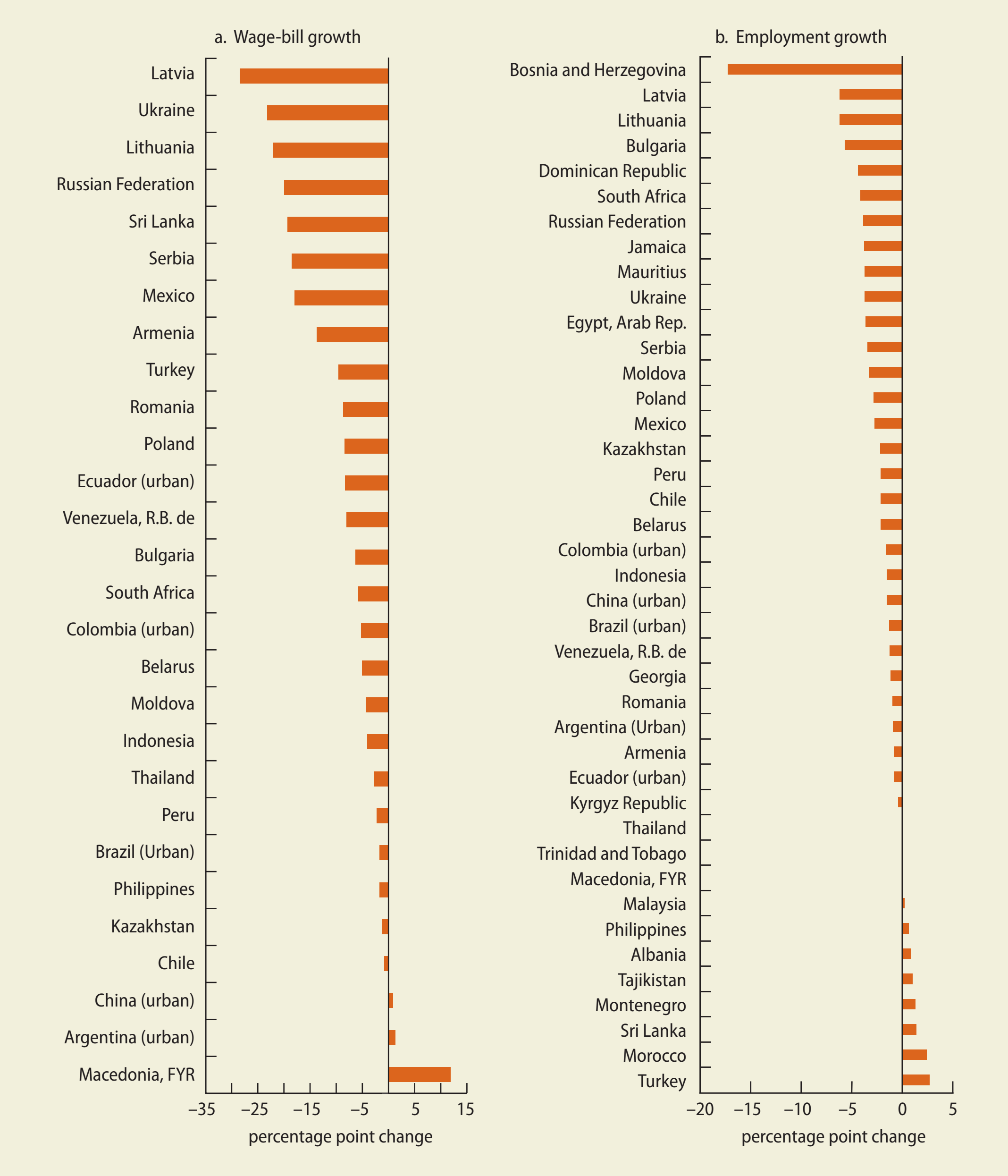
The large impact in Europe and Central Asia resulted mainly from sharp drops in GDP growth. But fixed exchange rates worsen the labor market impact. On average, countries with fixed currency regimes witnessed a decline in employment of 1.7 percentage points, compared with only 0.4 in countries with floating rates. The slowdown in the wage-bill growth was also less severe for the countries with moderate levels of development.

The nature of recent labor market adjustments in these countries suggests that effective policy packages should also focus on supporting earnings and household income, not just generating employment. Responses taken in developed European countries—such as partial unemployment insurance, expanded cash transfers to poor workers, and temporary wage subsidies—may be priority interventions in those countries where hours and earnings adjustments dominated.

Conclusions

Because crises have very negative effects on human development indicators, good policies and institutions are essential in developing countries to avert downturns in the first

FIGURE 2.13 **The crisis sharply reduced wage earnings in middle-income countries**



Source: Khanna, Newhouse, and Paci, forthcoming.

place, dampen their negative effects when they do occur, and reduce the potential for reversal of reforms. Policy failures, particularly in low-income countries affected by corruption and violent conflict, have been a major reason for the sharp deterioration in human development indicators in past crises.

There are some reasons for hope that the current crisis may be different for low-income countries. A great deal of social spending has been protected so far. Policies and institutions had improved before the crisis. And external shocks, not domestic policy failures, were the main causes of the current crisis. Nonetheless, the impacts on progress toward the MDGs are already worrisome.

While recovery of the global economy appears to be stronger than expected, small reductions in growth could still have lasting negative consequences for poverty and human development. The contraction was so sharp that a long period of strong growth is needed to undo the damage inflicted on development outcomes. The next chapter examines the growth outlook and macroeconomic challenges, including the fiscal tensions created by temporary stimulus measures and protection of social spending.

Annex 2.1 Human and economic indicators during growth cycles

This annex presents more detailed information on the asymmetric impact of growth decelerations on human development indicators, macroeconomic variables, and institutional quality in developing countries. Tables 2A.–2A.3 show the average level of each indicator during growth accelerations, growth decelerations, other periods, and across all times. Tests for differences in the means of these variables between growth accelerations, decelerations, and all country-year observations show that they are all statistically significant at the 1 percent level.

The conclusion that these indicators tend to deteriorate more in bad times than they improve in good times does not stem from composition effects. It is important to examine these effects because the averages for each period (accelerations, decelerations, and other) do not reflect the same number of observations or equal participation by different income groups—there are more accelerations than decelerations, and low-income countries have greater representation in the sample means during bad times because of the higher frequency of decelerations in these countries (see main text). Because

TABLE 2A.1 Differences between sample averages: Human development and gender indicators

Variable	Growth acceleration	Growth deceleration	Otherwise (not in acceleration or deceleration)	Sample period
Life expectancy at birth, women (years)	72.1	63.4	69.4	70.0
Life expectancy at birth, men (years)	66.6	58.1	64.2	64.7
Life expectancy at birth, total (years)	69.2	60.7	66.7	67.3
Infant mortality rate (per 1000 live births)	27.7	59.7	39.9	35.9
Child mortality under-five rate (per 1,000)	42.4	96.3	59.3	54.3
Primary completion rate, girls (% of relevant age group)	83.2	49.8	76.3	78.6
Primary completion rate, boys (% of relevant age group)	84.5	59.6	80.2	81.4
Primary completion rate, total (% of relevant age group)	84.4	54.8	78.1	80.2
Ratio of girls to boys, primary enrollment	95.6	86.1	92.5	93.6
Ratio of girls to boys, secondary enrollment	96.9	80.7	94.8	95.3
Ratio of women to men, tertiary enrollment	107.3	65.1	106.2	105.4

Source: World Bank staff calculations based on data from World Development Indicators.
Note: Tests for differences in the means of these variables between growth accelerations, decelerations, and all country-year observations show that they are all statistically significant at the 1-percent level.

TABLE 2A.2 Differences between sample averages: Sub-Saharan Africa

Variable	Growth acceleration	Growth deceleration	Otherwise (not in acceleration or deceleration)	Sample period
Life expectancy at birth, girls (years)	55.2	52.3	53.4	54.0
Life expectancy at birth, boys (years)	52.2	48.9	50.1	50.8
Life expectancy at birth, total (years)	53.7	50.5	51.7	52.3
Infant mortality rate (per 1.000 live births)	80.7	106.6	97.3	91.9
Child mortality under-five rate (per 1,000)	133.5	161.3	154.3	146.2
Primary completion rate, girls (% of relevant age group)	55.1	33.8	42.1	47.4
Primary completion rate, boys (% of relevant age group)	59.8	48.4	50.9	55.0
Primary completion rate, total (% of relevant age group)	57.4	41.0	46.5	51.1
Ratio of girls to boys, primary enrollment	89.7	77.9	82.4	85.0
Ratio of girls to boys, secondary enrollment	82.3	63.6	76.1	77.7
Ratio of women to men, tertiary enrollment	60.2	32.5	64.4	58.7

Source: World Bank staff calculations based on data from World Development Indicators.
Note: Tests for differences in the means of these variables between growth accelerations, decelerations, and all country-year observations show that they are all statistically significant at the 1-percent level.

TABLE 2A.3 Differences between sample averages: Economic and institutional indicators

Variable	Growth acceleration	Growth deceleration	Otherwise (not in acceleration or deceleration)	Sample period
Final consumption (% GDP)	81.45	88.78	83.74	83.30
Government consumption (% GDP)	15.41	16.68	16.61	16.10
Gross capital formation (% GDP)	23.76	18.57	23.35	23.10
Gross domestic savings (% GDP)	18.58	11.23	16.26	16.70
Gross fixed capital formation private sector (% GDP)	16.35	10.43	13.75	14.40
Imports (% GDP)	45.80	37.45	43.85	44.10
Exports (% GDP)	40.43	30.05	36.52	37.60
Trade (% GDP)	86.23	67.50	80.37	81.70
Foreign direct investment. net inflows (% GDP)	4.48	2.07	3.56	4.00
Private capital flows, total (% GDP)	2.99	1.40	2.03	2.40
CPI inflation (%)	14.88	251.32	37.90	43.90
Institutions (–2.5 to 2.5)				
Political stability	–0.16	–0.65	0.03	–0.10
Voice and accountability	–0.07	–0.47	0.09	–0.02
Regulatory framework	–0.03	–0.82	0.15	0.01
Rule of law	–0.14	–0.90	0.12	–0.07
Government effectiveness	–0.04	–0.96	0.14	0.00
Frequency of conflicts (Sub-Saharan Africa)	0.13	0.23		
Aid to poor countries (Sub-Saharan Africa)				
ODA (% GDP)	13.80	12.10		
ODA per capita (US$)	69.50	41.80		

Source: World Bank staff calculations. Data for Sub-Saharan Africa from Arbache, Go, and Page (2008). Indicators on institutions are from the World Bank Institute's Worldwide Governance Indicators database, which relies on 33 sources, including surveys of enterprises and citizens, and expert polls, gathered from 30 organizations around the world; they each range from –2.5 (worst) to 2.5 (best).
Note: Tests for differences in the means of these variables between growth accelerations, decelerations, and all country-year observations show that they are all statistically significant at the 1 percent level. ODA = official development assistance.

human development indicators are generally lower in low-income than in middle-income countries, the greater frequency of low-income country observations drops the averages for decelerations, which could account for the asymmetric relationship. However, even after controlling for the sample composition effects by comparing the sample means of countries undergoing growth decelerations and accelerations with their own sample means when not in growth decelerations (the column "otherwise" in the three tables), decelerations still have an asymmetric effect.[32] Furthermore, the averages for periods not in acceleration or deceleration (normal times) are close to the averages for the entire sample (the last column in each table), providing evidence that the economic cycles are being correctly identified.

Annex 2.2 The special case of HIV/AIDS spending

Large increases in funding have made HIV/AIDS (human immunodeficiency virus/acquired immune deficiency syndrome) one of the most important items on the development agenda. In less than a decade the international community has mobilized talent and financing to address HIV/AIDS with new institutions and long-term financial commitments to countries suffering from an established and growing epidemic. This attention and financing have produced data that outstrip that available for health care generally, allowing a more thorough examination of trends. The 2008–09 recession is the first global crisis to affect international support for HIV/AIDS spending, and the responses are instructive.

Roughly 33 million people have HIV/AIDS, but only a third of those are on antiretroviral therapy that will extend their life. There is no cure for AIDS. Discontinuities in treatment create resistance to the basic ("first line") antiretroviral treatment, which can lead to broader drug resistance. The alternative "second line" treatment is 10–20 times more expensive. Thus antiretroviral therapy is central to meeting the MDG 6A to combat HIV/AIDS. Equally important to treating those who have contracted HIV/AIDS is strengthening prevention—the only way to stem the pandemic.

Likely short-term effects of the crisis

Funding for HIV/AIDS has risen sharply over the past decade. During 2001–05, aid commitments for HIV/AIDS programs rose almost 30 percent ($4.75 billion), fueled by the establishment of the Global Fund and by philanthropic efforts by the Clinton Foundation, the Bill & Melinda Gates Foundation, and others. New sources of funding have come onstream since 2005 with the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and UNITAID, which disburses much of its resources through the Global Fund.

In 2008 public and private entities allocated $15.8 billion for global HIV/AIDS programs, $6.7 billion of it from bilateral and European Union contributions.[33] Pledges to the Global Fund rose from $2.5 billion in 2007 to $3.0 billion in 2008, and then declined to $2.6 billion in 2009. In the last funding cycle (Round 9), demand from countries also fell.[34] The U.S. PEPFAR program increased its contributions from $4.5 billion in 2007 to $6.2 billion in 2008 and has subsequently increased its annual budgets. The 2010 fiscal year allocation is just shy of $7 billion, suggesting that U.S. support is continuing.[35]

Fueled largely by increased donor resources, public health spending in the high-prevalence countries of eastern and southern Africa has risen rapidly in absolute and per capita terms (see map 1.2). As a share of GDP, the increases have gone disproportionately to people with HIV/AIDS.[36] Government spending in countries that formerly had high HIV/AIDS prevalence, like Brazil and Thailand, has financed both prevention and treatment. Other countries, such as Ghana, have legally binding commitments ensuring treatment for people with AIDS.

Of 77 countries recently surveyed, most indicated that they had adequate funding from governments, donors, and other sources to finance their current HIV/AIDS programs, but they raised concerns about the future.[37] Prevention was identified as the likely victim if funding fell. A further concern was the increased cost of imported drugs and supplies resulting from currency devaluations in some countries.[38] The Clinton Foundation recently obtained price concessions from manufacturers that could compensate for the exchange rate penalty.

The impact of the current downturn is not entirely clear, but the uptick in donor spending in 2008 and 2009, when the economic crisis was accelerating in donor countries, is encouraging. The Global Fund disburses quickly once allocations are decided, but recipient country spending has been slow. Almost 40 percent of the Global Fund resources remain undisbursed, a possible source of additional resources if there is a shortfall or delay in funding flows. Almost half the allocations to Sub-Saharan Africa are undisbursed (see figure 2.9). The $900 million allocated in late 2009 under Round 9 is unlikely to have been disbursed yet.[39]

Although countries may appear to have "adequate" funding for HIV/AIDS, the situation is more nuanced: Some donor funds cannot be applied flexibly, leaving countries with important gaps even when they appear to be highly funded in aggregate terms. This is where the unearmarked flexibility of the International Development Association becomes critical.

The highest-prevalence regions of Africa receive the bulk of external funding (figure 2A.1), but financing per current AIDS patient paints a different picture (figure 2A.2). Although there is a general correlation between the number of patients and funding across countries, financing available for each patient still lags in the highest-prevalence regions of Africa.

Greater efficiency is imperative because the agenda has broadened and the pace of infection has not slowed. Targeting high-risk groups and improving management and efficiency in delivery can raise quality and efficiency. The Bahamas plan greater use of generic drugs, better patient adherence to treatment protocols, and a sharper focus on the cost effectiveness of purchases and service delivery. While not costless, such improvements will boost effectiveness and reduce waste, which are equivalent to reducing costs. They also raise the quality of services including health care services.

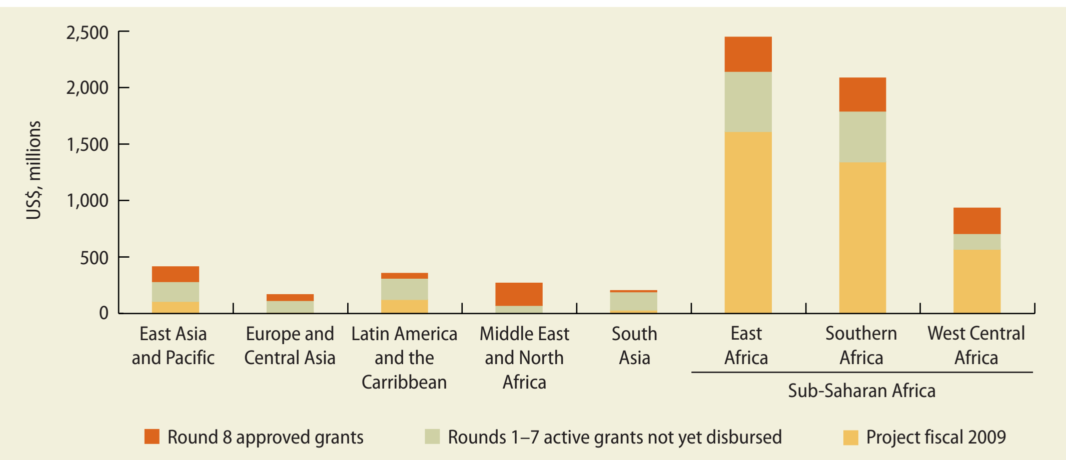
And what of prevention?

Most international resources are earmarked for treatment. But the only way to stem the need for treatment and save lives is to expand prevention initiatives.

An in-depth evaluation of the U.S. PEPFAR program concluded that it reduced deaths by 5 percent but had no effect on prevention.[40] The recent multimillion dollar evaluation of the Global Fund noted the organization's neglect of prevention.[41] A more modest assessment of the programs of the World Bank, Global Fund, and PEPFAR also concluded that prevention was the weak link.[42] The challenge is that for every HIV/AIDS patient placed on treatment, two or three newly infected people will need treatment for life.[43]

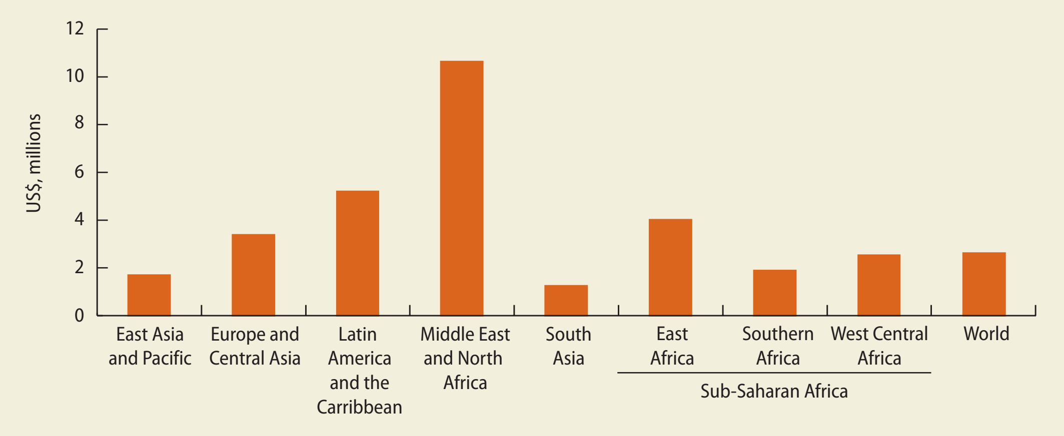
Countries that have prioritized prevention—Brazil, Rwanda, and Thailand—have seen prevalence decline or remain low, despite spiraling levels in the early 1990s. Prevalence rates in these countries contrast with those in Botswana and Swaziland, which have struggled to initiate effective prevention programs as prevalence reached epidemic proportions. The long-term trends reflect lack of attention to prevention 5–10 years ago. But current prevention efforts remain inadequate, and the crisis could further curtail such efforts if constrained

FIGURE 2A.1 Projected Global Fund to Fight AIDS, Tuberculosis, and Malaria and U.S. PEPFAR HIV/AIDS grants as of April 2009



Source: Lewis 2009.

FIGURE 2A.2 Projected Global Fund to Fight AIDS, Tuberculosis, and Malaria and U.S. PEPFAR HIV/AIDS grants per AIDS patient as of April 2009



Source: Lewis 2009.

budgets force cutbacks in prevention. It is a dynamic problem; new infections occur daily, and so a continuous, uninterrupted response is required. It may take 7–10 years for a person to become symptomatic, but even people without evident symptoms can pass on the virus and infect others. Actions now will reduce the rate at which people with the virus can pass it on, underscoring the importance of antiretroviral therapy as a prevention measure.

The Bill & Melinda Gates Foundation and others are financing extensive efforts in prevention technologies, and considerable ongoing research is exploring how to discourage risky behaviors. But equal attention must go to actually promoting behavior change and rolling out promising approaches where prevention lags. Because programs for prevention are dwarfed by those for treatment, the balance deserves some recalibration to spare those not yet infected. While neither simple nor easy, a push to expand prevention is warranted if there is to be progress on Goal 6A: halting the spread of HIV/AIDS by 2015.

Notes

1. Arbache, Go, and Korman 2010. Although the aggregate figures show girls' education is affected by growth cycles, there is still a lack of microstudies that show girls are disproportionately more likely to be pulled out of schools during covariate shocks. However, some of these more adverse effects may be occurring in conflict or disastrous situations with institutional breakdowns so that microstudies are not available.
2. For the entire sample of developing countries, 47 percent of the 4,415 country-year observations are classified as growth accelerations while 11 percent are classified as growth decelerations. The remaining 42 percent of observations are for years in which countries experienced neither growth acceleration nor deceleration episodes.
3. To some extent this pattern may be endogenous, because average income per capita tends to rise in countries with more frequent growth accelerations and fall in countries with more frequent collapses.
4. Arbache and Page 2007.
5. Arbache and Page 2010.
6. Arbache, Go, and Page 2008. The inflation figure would have been higher had Zimbabwe been included; it was excluded from the analysis because of missing data for other variables.
7. The analysis is taken from Lewis and Verhoeven (2010) and relies on data from the International Monetary Fund (IMF), the World Bank, United National Educational, Scientific, and Cultural Organization (UNESCO, education spending), and the World Health Organization (WHO) National Health Accounts (health spending).
8. The absence of a consistent time series in education spending data required the integra-

tion of data from UNESCO, the IMF, and the World Bank. This is in contrast to the consistent and much higher quality data from WHO National Health Accounts.

9. Dang, Knack, and Rogers 2009.
10. Gottret and others 2009.
11. Grosh and others 2008.
12. Blomquist and others 2002.
13. Ferreira and Schady 2009.
14. World Bank forthcoming.
15. IMF 2009.
16. High-Level Seminar on Africa Fiscal Policy for Growth in Light of the Global Crisis, Maputo, December 2009, sponsored by the World Bank and various governments.
17. Turk 2009.
18. Global Fund (www.theglobalfund.org/programs/search/?lang=en&round=9).
19. Wodon and Zaman 2010.
20. These data do not include safety net and nutrition interventions under the World Bank's Global Food Crisis Response Program, which has funded an estimated $380 million for safety net interventions in 21 countries, including grant funding for small, targeted projects in 17 low-income IDA-eligible countries (totaling $95 million).
21. See Grosh and others (2008) for detailed discussion of the design and implementation challenges of effective safety nets.
22. World Bank 2006.
23. Ratha, Mohapatra, and Silwayl 2009.
24. World Food Programme 2009. The study analyzes 126 countries and focuses on five case studies.
25. Countries are rated according to performance in 16 areas grouped into four clusters: economic management, structural policies, policies for social inclusion and equity, and public sector management and institutions.
26. Arbache, Go, and Page 2008.
27. See, for examples, Wagstaff and Claeson (2004); Rajkumar and Swaroop (2008); and Filmer and Pritchett (1999).
28. de Walque and others 2010.
29. Tiwari and Zaman 2010.
30. Turk and Mason 2009.
31. Khanna, Newhouse, and Paci, forthcoming.
32. See Arbache, Go, and Korman (2010) for more discussion.
33. The figure includes international and domestic philanthropic contributions, World Bank financing, government expenditures, and household spending, but it excludes other multilateral and private sector funding.
34. The Global Fund has initiated a new $2.6 billion funding window for the next two years, which it estimates is insufficient. These requirements are not addressed here because the focus is on financing HIV/AIDS prevention and treatment.
35. Kaiser Family Foundation (2009) and www.KKF.org provide updates of spending.
36. Case and Paxson 2009.
37. A survey of UNAIDS and WHO country offices by the World Bank, UNAIDS, and WHO (2009) asked about possible issues as the crisis evolved and the likely impact on HIV/AIDS programs over the next 6–12 months.
38. UNAIDS 2009.
39. Global Fund (www.theglobalfund.org/programs/search/?lang=en&round=9).
40. Bendavid and Bhattacharya 2009.
41. Sherry, Mookherji, and Ryan 2009.
42. Ooman, Bernstein, and Rosenzweig 2007.
43. Revenga and others 2006.

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