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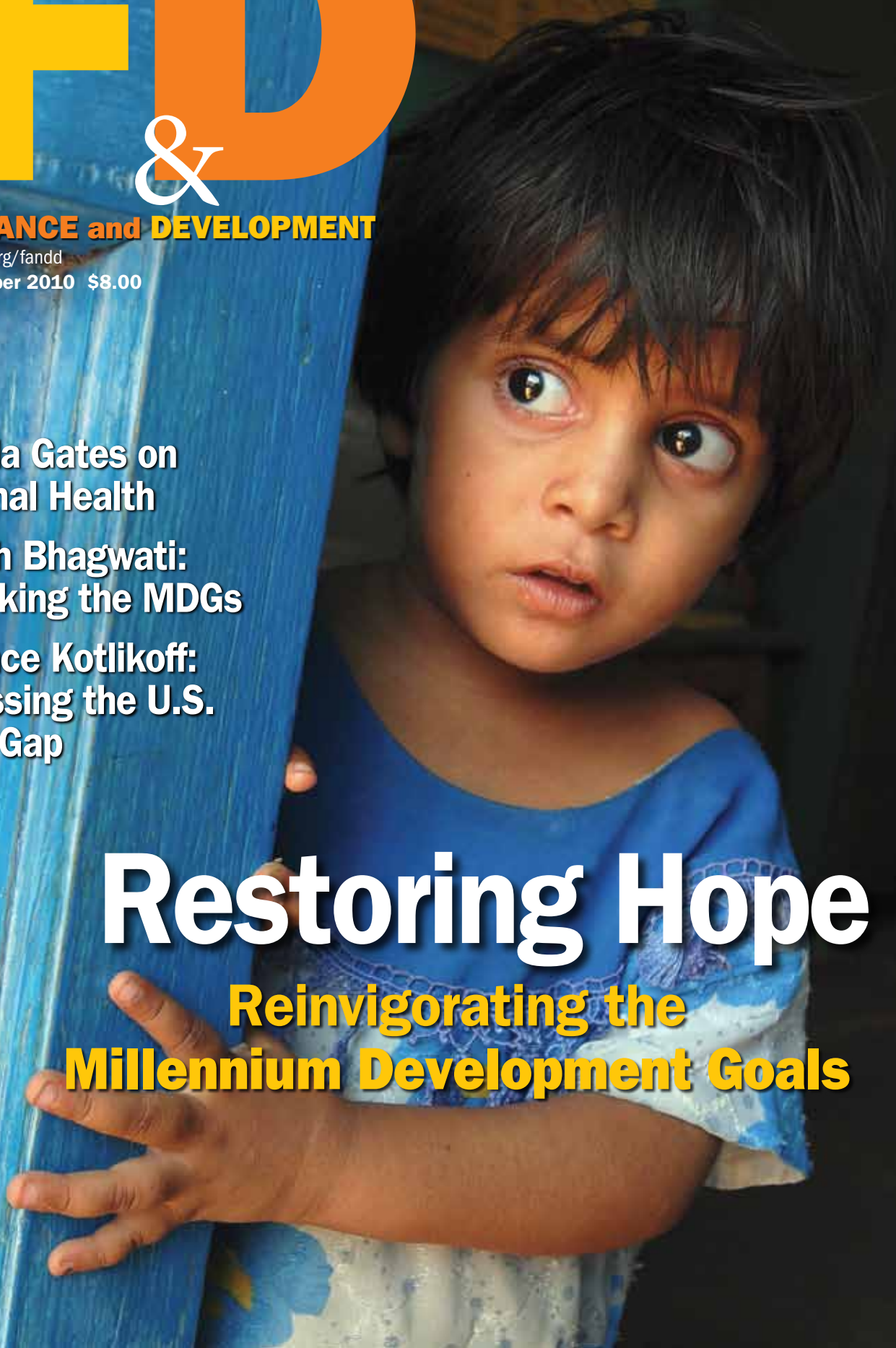
**Melinda Gates on  
Maternal Health**

**Jagdish Bhagwati:  
Rethinking the MDGs**

**Laurence Kotlikoff:  
Addressing the U.S.  
Fiscal Gap**

## Restoring Hope

**Reinvigorating the  
Millennium Development Goals**



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## The Promise of the MDGs

**T**HE Millennium Development Goals (MDGs) are eight international development targets that all 192 United Nations member states and a large number of international organizations have agreed to achieve by the year 2015. They include cutting extreme poverty, reducing child mortality rates, fighting diseases such as AIDS, and developing a global partnership for development around the world.

They provide a framework for the entire international community to work together toward a common end—making sure that human development reaches everyone, everywhere.

With five years to go until the target year, this issue of *Finance & Development* assesses how the world is doing in meeting the goals. Clearly, the global economic crisis has set back progress toward the MDGs. But as our lead article, written jointly by authors at the World Bank and the IMF, points out, extreme poverty is falling sharply around the world; the goal of universal primary education is within reach, if difficult to achieve in Africa and South Asia; and higher enrollment is shrinking the gender gap in education, with more girls than ever completing primary school. But, despite good progress on under-5 mortality rates, still far too many children and mothers die from preventable causes in parts of the world (see our article on mothers by Melinda Gates on page 13 and on children in *Picture This* on pages 20–21).

Much can be done to reinvigorate progress, including reviving and sustaining global growth, adopting better domestic

policies in developing countries to build stronger local economies, encouraging foreign direct investment and private sector-led growth, providing better access to export markets, and improving the predictability and amount of aid flows.

\* \* \* \* \*

The second major theme in this issue of *F&D* looks at a key consequence of the global financial crisis—the abrupt deterioration of fiscal positions in advanced economies, the emerging markets of central and eastern Europe, and elsewhere. Mark Horton of the IMF's Fiscal Affairs Department argues that consolidation in advanced economies should focus on spending cuts, given the already high tax burdens in many countries. But he warns that cuts will not be easy and will involve politically sensitive areas. Our article on France on page 36, for example, looks at the expensive needs of a rapidly aging population.

Emerging and developing economies face a less daunting adjustment task, but there are significant risks, particularly from further financial market turbulence and higher interest rates in advanced economies. Nevertheless, despite the uncertainties, the world's most populous country, China, is starting to improve both pensions and health care in an initiative that will enhance the livelihoods of well over a billion people.

**Jeremy Clift**  
Editor-in-Chief

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**E**CONOMIC policymaking is testing enough in today's globalized world for those who are duly elected or appointed, and are supported by the accoutrements of office. But Maria Ramos started drafting macroeconomic policy options for South Africa in the 1980s while undercover as a member of a then illegal organization, traveling between continents with hidden briefing papers. It was just another stage in her preparations to serve in South Africa's first majority government, which took office in 1994 facing the daunting task of reconciling the resources of a chronically weak economy with the expectant demands of the newly enfranchised.

Ramos joined the government a year after it gained power, when its drive to restore fiscal sustainability began to generate real friction from entrenched interest groups and big-spending ministries. First as deputy director-general for financial planning in the Finance Department, and then as director-general of the Treasury, Ramos's studied practicality and penchant for detached analysis qualified her well for a role as a planner and ideas formulator for economic ministers sorely in need of workable options.

Earlier experience as a firebrand student and academic in South Africa's liberal hothouse at the University of the Witwatersrand had laid Ramos's solid political foundations as a supporter of and activist for majority rule. When these progressive instincts combined with her subsequent endeavors as a researcher and commercial bank economist, she embodied a formidable force that promised quick results for any enterprise intrepid enough to harness it. The African National Congress (ANC), as it formed South Africa's first majority-rule government, assiduously tapped Ramos's zeal.

### Direct approach

The first entity to experience Ramos's signature direct approach to problem solving was the commercial bank where she took her first job in 1978. Born in Lisbon, Portugal, to a family that emigrated to South Africa when she was aged 6, Ramos went through school in a town 60 miles from Johannesburg. "When I started at the bank I realized that they had a great scholarship, and when I applied for it I was told it wasn't open to women," Ramos recalls. "I started a big battle with the bank about how unfair this was. Eventually there was a change of management at the bank that also changed the rules of the game. By then I had fought this for about five years, all the way up to the head office, and they decided I had caused enough chaos. They changed the rules, and I was the first woman they sent to university on that scholarship."

Exposure to the political radicalism at the University of the Witwatersrand (known as "Wits" for short) changed

# Undercover Operator

Simon Willson profiles **Maria Ramos**



Ramos. It was the mid-1980s, when international sanctions were beginning to bite South Africa and to encourage greater domestic activism against minority rule. "I went to Wits in what were some highly political years, and I got a bit involved and I certainly got very sensitized politically. And it was quite hard to come back to work at the bank after university." She returned to academic life as an economics lecturer, and connected with the ANC, the political movement that is now South Africa's ruling party but was still outlawed—"banned" under domestic laws—in the 1980s. While teaching in posts at Wits, the University of South Africa, and the London School of Economics (LSE), Ramos covertly joined the ANC's economics section.

"I was quite involved in shaping a lot of the debate as part of the economics policy team in the ANC. I spent a lot of time flying between Johannesburg and other places to do political work before the ANC was unbanned. A lot of the economic policy documentation in the ANC we wrote outside the country." Even now, Ramos does not specify where. In 1990 the ANC was unbanned, de facto leader Nelson Mandela was released from jail, and its officials prepared to govern. "It was quite a heady time: we had responsibility, we were putting things together, we were making policy as we



went along, taking pieces of the ANC's policy and trying to shape it and put it into place. I was part of a team that worked on the chapter on finance for the interim constitution, which included the independence of the central bank."

### Dual role

Ramos continued her dual role, but in the open this time. "I did a lot of commuting between London and Johannesburg, and a lot of commuting between teaching and negotiating. At one point I was teaching monetary theory to honors students and negotiating the clauses on the independence of the central bank, so it was an exciting time for me and the students. By the time we went into government there was a body of work and thinking. Of course, none of us had any experience of what it meant to run a government."

The ANC duly won South Africa's first free elections in April 1994 and formed the country's first majority government. Ramos, her work done—or so she thought—headed back to the LSE, intent on converting her research on central bank independence into a doctorate. But her erstwhile ANC colleagues wanted their hard-edged policy planner back, and approached her about a vacancy in the new government's Department of Finance. She did not take long to decide. "I

probably underestimated how difficult the separation was going to be when you had been that involved." The doctorate remains unfinished.

Alec Erwin, deputy finance minister in the first majority government, recruited Ramos to join the Treasury. "When I became deputy minister we began to look for people with experience in our own policy framework, and that is when I approached Maria," Erwin recalls. "She was a fairly clear choice, being a senior policy planner who had sat in on some of the government transition meetings, and having banking experience. I didn't have to twist her arm too hard. She had been working with all of us for a long time."

Entering government, Ramos was shocked. "The surprise for all of us was just the realization that as a country we were in pretty bad shape. Our fiscal position was fairly precarious. We were spending marginally more on education than on servicing debt. That borders on the unsustainable. If we had maintained that trajectory, our projections showed that two years down the line this would reverse and we would be spending more on debt than education in a country where that should be the other way around. We actually needed to create the fiscal space to be spending more on education, health, and social infrastructure than on anything else. Basic rationality tells you that you can't get there without taking some really tough decisions, and what's been remarkable about South Africa is that it's had the political leadership with the courage to take those really tough decisions and not to shy away when the time came."

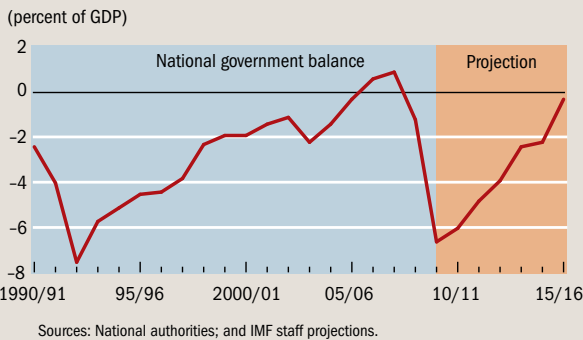
Ramos had found her niche. Someone behind the scenes had to draw up the tough policy options needed for fiscal stability, and place them before the executive branch of government. As director-general of finance, the responsibility fell to her. "Our job as civil servants was to put the options before the minister and cabinet and to work out the different choices and potential outcomes. South Africa was able to build a solid base from a tax point of view, to reform its revenue services, to put in place the institutions of fiscal governance, and shift its fiscal spending patterns away from debt servicing to actual, proper investment in social services. I often think that as South Africans we don't really recognize how hard it is for a country to do that, and in a relatively short space of time."

The scale of South Africa's fiscal rebalancing during the 1990s can be appreciated from the chart. From a national government balance of -5.7 percent of GDP when the ANC took power in 1994, the fiscal position swung to a small surplus in 2007. This achievement is all the more significant given the new government's long list of spending commitments as it sought to fulfill its campaign promises (see Box 1). Ramos and her colleagues found a way for the government to finance the Reconstruction and Development Programme on which it had fought and won the election, while at the same time tightening fiscal policy enough to aim realistically for a balanced budget within a decade.

"My job was to assemble and retain a team of really smart people," Ramos recalls. "Many of them are still there. We also changed people's perceptions of working for a government department: that it's a professional place where we do

## Path to growth

South Africa's new government quickly concluded that its ambitious economic growth target could not be reached amid fiscal instability.



things properly and build capacity. The more we achieved, the higher we set the base for our next effort. And the more we could do, the more fiscal space we had.” Ramos’s mathematical practicality lasered in on the idealism that accompanied the new administration into the corridors of power (see Box 2).

## Debt management

“I remember when I walked into the Department of Finance there was no approach to debt management,” Ramos recalls. “So we would borrow. At the beginning of the year we said ‘This is what we are going to spend, and this is what we are going to collect in taxes, and the difference is the deficit.’ So I would say ‘Okay, great: now how are we going to borrow—where on the yield curve do you want to do this?’ And the response was: ‘The yield curve—what is that?’ So I would say ‘Come on, we are the yield curve, so how are we going to shape this thing?’ But people didn’t think like that. They just took what you needed to borrow and divided it by 12.”

The Finance Department, it emerged, was carrying a cash buffer of 8–10 billion rand, or \$1.1–\$1.4 billion, a month as a contingency. The money sat on deposit at the central bank, collecting zero interest. So the government was borrowing on one side of the ledger and paying a prodigious coupon, and the proceeds were sitting unused as a pile of cash. “It was madness,” Ramos still rails. “I asked, ‘Have you ever heard of cash management? Let’s do some cash management here and let’s start slowly, so that you don’t all flip.’ We first reduced our cash buffer to R 1 billion a month and in the end we brought it down to about R 250–300 million a month, and the cost savings of that alone were enormous. This isn’t rocket science, it’s basic stuff.”

But how comfortably did a drive for fiscal sustainability sit with a government elected to right the socioeconomic wrongs of a bygone era? Was a balanced budget a justifiable goal for a country with mass unemployment and a rapidly urbanizing population? Erwin remembers hearing these questions in the corridors of power. “We were often accused of being orthodox and implementing neoliberalism, but this would be an understandable view in any country such as South Africa

that has a communist party and strong trade unions. There would have been many people who saw Maria as too orthodox a financial specialist, and on the right wing of ANC policymaking. With hindsight we would argue that the path we trod was correct.”

Tito Mboweni, convener of the pre-government ANC’s economic planning department and later governor of the South African Reserve Bank, agrees that Ramos played an important practical role in a collective civil service effort to implement the ANC’s broad economic strategy. Mboweni also goes further in justifying the policies that the party adopted once in office. “We took the position that a left-leaning political party needs to adopt a conservative macroeconomic policy because the electorate normally doesn’t trust left-leaning political parties. And if you pursue a more prudent economic policy framework you are going to be criticized. People only begin to realize the benefits of these policies one or two decades later. We can claim that the country benefited from our early policy framework by looking at how South Africa survived the global economic crisis very well.”

By the end of 2003, after nearly nine years of proselytizing the virtues of fiscal rectitude, and seeing the budget move inexorably toward balance, Ramos was ready for a change. Transnet, South Africa’s state-owned transportation com-

### Box 1

#### Campaign pledges

Ahead of South Africa’s first majority-rule elections in 1994, the African National Congress campaigned on a Reconstruction and Development Programme (RDP) that detailed spending commitments including

- “Decent, well located, and affordable shelter for all by the year 2003
- Supply 20 to 30 liters of clean water each day to every person within two years
- Two and a half million more households and all schools and clinics will have electricity by 2000
- All South Africans should have access to a modern, affordable telephone system
- The publicly owned transport systems will be improved to be safe, convenient and affordable
- The government will develop a national health system offering affordable health care
- A new social security and welfare system will be provided to all.”

The RDP also addressed the issues of the cost of and payment for its commitments specifying that

- “Most expenditure on the RDP is not new: rationalization of existing systems will unlock resources
- We must improve the capacity of the financial sector to mobilize more resources and to direct these to activities set out in the RDP
- We must ensure that electrification and telecommunications will be self financing
- Improved and reformed tax systems will collect more tax without having to raise tax levels.”

pany, was looking for a chief executive. Here was a chance to enact the same market-related reforms on a sluggish bureaucracy that she had instigated at the Finance Department.

Ramos brought with her to Transnet the principle of commercialization at a state-owned enterprise. She focused on running the parastatal along business lines, demanding the same kind of efficiency as that expected from a private business enterprise. She inculcated an ethos that only the highest standards of delivery, performance, transparency, and accountability were acceptable for the company. She urged its staff to act as though the company was listed on the stock exchange and had to answer to real, private stockholders.

“The difference was that Transnet was state owned, and its return on equity had an element of a social return,” Ramos observes. “This was most evident in terms of the length of the period you had to make the investment in your capital work. So if you are investing in rail infrastructure, for example, as a state owned enterprise you might have a much longer period

#### Box 2

#### Tough decisions

Maria Ramos and her Finance Department colleagues were charged with putting in front of South Africa’s ministers and cabinet viable options for reaching economic targets without jeopardizing financial stability. Ramos says nothing was sugar coated.

“In 1996 we had to put a fiscal policy in place that had to say to the nation that if we wanted to achieve a sustainable economic growth path of 6 percent, this was how we would get there. That was our starting point. People often think that the program of growth, employment, and redistribution was about cutting the deficit. That’s not the question we asked. We asked: ‘If we want 6 percent growth, what do we need to have in place to achieve it?’

“Very quickly, we came to the conclusion that you can’t get to 6 percent growth when you have a position of fiscal instability, because you can’t borrow your way out of a crisis. We didn’t want to go to the IMF—we didn’t think that was going to be a sustainable solution—and we were very close to that. South Africa had no reserves—in fact we had a negative reserve position because we had a net open forward position at that point of about \$26 billion. We had debt-to-GDP ratios of around 50 percent, we had debt-servicing costs reaching the point where they were unsustainably high. So the fiscal position was pretty precarious: the metrics didn’t add up.

“So if you want to get growth there, you have to fix the base. And fiscal sustainability is hard to achieve and it’s easy to lose. That’s what we placed before policymakers, before the cabinet. And I have to say that, as hard as it was, when faced with that, I never came across a politician from the president down who said: ‘No, we can’t do this because it’s going to be unpopular for me.’ What’s been remarkable for me as a civil servant to see was that politicians from the top down were able to say ‘What is in the best interests of our country? It’s going to be painful, it’s going to be hard.’ Those investments continue to pay off today.”

of time to make the returns on that work than if you were in a listed company.”

#### Private sector

After working in the civil service and then in the parastatal sector, Ramos’s next move in early 2009 took her back into private sector banking, but now as chief executive of Absa, South Africa’s biggest clearing bank. The business acumen and principles that she had brought to the rigid civil service structure at the Department of Finance and then to the hermaphroditic Transnet could now be deployed in the entirely profit-driven environment of the private sector.

Ramos pointedly observes that South Africa’s banks have been relatively untroubled by the financial turmoil that overtook the banking sectors of many bigger and more advanced economies during the global financial crisis. The country owed nothing to luck or geographical remoteness, she states. “The reason why South African banks have remained largely unscathed by the crisis compared with banks in the U.S. and the U.K. and some parts of Europe has primarily been because we have a regulator who is pretty active, and has kept very close and moved well ahead of many other regulators to increase capital requirements. Our regulator started looking at this probably 12 months ahead of the curve and started talking to the banks about pushing up capital requirements, and kept a very close eye on leverage ratios.”

Ramos acknowledges that the exchange controls that South Africa has maintained at varying levels for the past 50 years meant that individuals and companies had been unable to experiment with some of the fancier financial instruments recently available. “It’s been a combination of both but it comes down in the end to a very solid regulatory environment,” she states. She also rebuts claims that competition is restricted in South Africa’s banking sector. “It depends how you define that competition: we have competitors in different parts of the market. At entry and middle level, there are very profitable banks that have superior technology and understand that market well. They give the four clearers a run for our money in that market space.” Furthermore, she points to widening investment banking operations by big foreign banks.

Ramos remains an honorary professor of economics. Now married to former South African finance minister Trevor Manuel, Ramos is part of a power couple that must, over the kitchen table, take quiet pride in the country’s relative economic stability, even if it shows up the nation’s political and social situation as more volatile. Her ranking of ninth last year in *Fortune* magazine’s “World’s 50 Most Powerful Women in Business” will be satisfaction enough for someone so driven to make a government and then a parastatal run more like a business. ■

*Simon Willson is a Senior Editor on the staff of Finance & Development.*

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# Regaining



Family in Berdale, Somalia.

## Progress on the Millennium Development Goals has been slowed by the crisis. The rest of the world has to help

*Delfin S. Go, Richard Harmsen, and Hans Timmer*

**L**OW-INCOME countries, particularly in sub-Saharan Africa, did relatively well during the recent global economic crisis, and developing countries are now recovering better than expected. But progress on the Millennium Development Goals (MDGs; see Box 1 and Chart 1) will be slow for many years. The impressive precrisis progress in economic growth and poverty reduction will not be matched for some time, and gaps or deviations in MDG progress from the precrisis trends will persist until 2020, five years after the 2015 target date for achieving the goals.

If we let the recovery slide and old patterns of policy failures, institutional breakdowns, and growth collapses persist, history tells us the adverse impact on human development, especially for women and children, will be devastating. So this is no time to be complacent. The international financial institutions and international community, having responded quickly and strongly to the crisis, need to do more to help developing countries regain their momentum toward achieving the MDGs.

Human development indicators improved significantly before the crisis hit in 2008, thanks to the acceleration of economic growth in many developing countries after the early 1990s. Overall progress on poverty reduction was particularly strong, even in Africa. Primary education, gender parity in primary and secondary education, and reliable access to improved water gained ground as well. But the picture isn't so encouraging when it comes to the other MDGs—especially those related to health.

### Regional variations

Globally, there is considerable variation across regions, countries, and income groups. Among regions, sub-Saharan Africa lags on all the MDGs, including poverty reduction. But that is only half the story—because the region did make progress. Sub-Saharan Africa was headed in the right direction for practically all the MDGs for more than 10 years, but the path to the goals was steeper in comparison with other regions because of Africa's lower starting points. For example,



# Momentum

the distance to the poverty target was difficult for Africa to traverse, because the 1990 incomes of much of Africa's population were far below the poverty line. And Africa implemented reforms later than other regions and thus benefited later from accelerating income growth.

Progress has been slowest in fragile and conflict-affected states (see Chart 2). Wracked by conflict and hampered by weak capacity, these states—more than half of them in sub-Saharan Africa—present a difficult political and governance context for effective delivery of development financing and services. Fragile states account for close to one-fifth of the population of low-income countries but more than one-third of their poor people. Much of the challenge of achieving the MDGs will thus be concentrated in low-income countries, especially fragile states.

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. This concentrated poverty, together with large populations in some countries, means 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 non-income-related human development goals.

## Successes

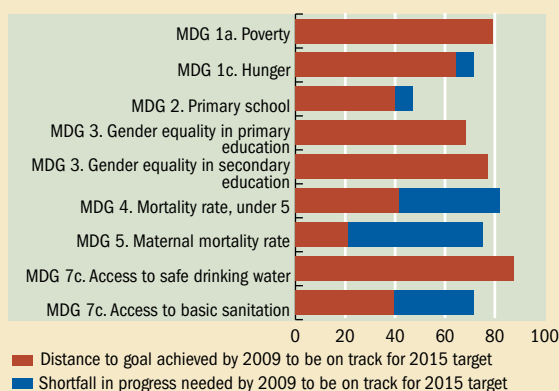
Extreme poverty is falling rapidly. Global poverty has fallen 40 percent since 1990, and the developing world is well on its

Chart 1

### Progress in parts

The world is on track to reach some targets by 2015, but falling short on others.

(percent of 2015 target)



Source: World Bank staff calculations.

Note: Based on data available as of 2009, which range from 2005 to 2009.

### Box 1

## The Millennium Development Goals and Targets

### 1. Eradicate extreme poverty and hunger

- 1a. Halve, between 1990 and 2015, the proportion of people whose income is less than \$1.25 a day.
- 1b. Achieve full and productive employment and decent work for all, including women and young people.
- 1c. Reduce by half the proportion of people who suffer from hunger.

### 2. Achieve universal primary education

- 2a. Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

### 3. Promote gender equality and empower women

- 3a. Eliminate gender disparity in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015.

### 4. Reduce child mortality

- 4a. Reduce by two-thirds, between 1990 and 2015, the under-5 mortality rate.

### 5. Improve maternal health

- 5a. Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio.
- 5b. Achieve by 2015 universal access to reproductive health.

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

- 6a. Have halted by 2015, and begun to reverse, the spread of HIV/AIDS.
- 6b. Achieve by 2010 universal access to treatment for HIV/AIDS for all those who need it.
- 6c. Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases.

### 7. Ensure environmental sustainability

- 7a. Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources.
- 7b. Reduce biodiversity loss, achieving by 2010 a significant reduction in the rate of loss.
- 7c. Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.
- 7d. Have achieved a significant improvement by 2020 in the lives of at least 100 million slum dwellers.

### 8. Develop a global partnership for development

- 8a. Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system.
- 8b. Address the special needs of the least developed countries.
- 8c. Address the special needs of landlocked developing countries and small island developing states.
- 8d. Deal comprehensively with the debt problems of developing countries through national and international measures to make debt sustainable in the long term.
- 8e. In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries.
- 8f. In cooperation with the private sector, make available the benefits of new technologies, especially information and communications.

way to reaching the global target of cutting income poverty in half by 2015 (relative to a 1990 baseline). Despite population growth, 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. Thanks to rapid growth, especially in China, east Asia has already cut extreme poverty in half. Poverty in sub-Saharan Africa has also been falling rapidly since the late 1990s, but the region is unlikely to reach the target, mainly because of its low starting point.

Universal primary education is within reach. There was an impressive increase in net enrollment rates in several low-income countries between 2000 and 2006. In more than 60 developing countries, over 90 percent of primary-school-age children are in school; the number of children not in school fell from 115 million in 2002 to 101 million in 2007, even with population growth. In 2007 the primary school completion rate reached 86 percent for all developing countries—93 percent for middle-income countries, but just 65 percent for low-income countries. For sub-Saharan Africa and south Asia, the lower ratios of 60 percent and 80 percent, respectively, in 2007 nonetheless represent advances over 1991's 51 percent and 62 percent. But with 41 million primary-school-age children out of school in sub-Saharan Africa and 31.5 million in south Asia, meeting the target remains a difficult task.

Higher enrollment is shrinking the gender gap in education. Because more girls than ever are completing primary school, almost two-thirds of developing countries had gender parity at the primary school level by 2005, and the MDG 3 target of 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. Because of rapid expansion of infrastructure spending, more than 1.6 billion people gained access to improved sources of drinking water, raising the share of people with such access from 76 percent to 86 percent

between 1990 and 2006. 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 back.

### Mixed or weak progress

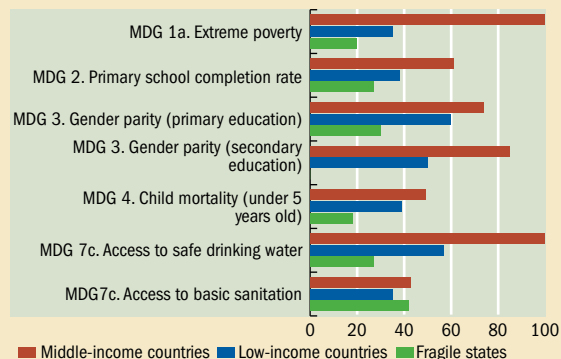
Prospects are worst for the MDGs relating to health, such as infant mortality. The under-5 mortality rate in developing countries declined from 101 deaths for every 1,000 live births to 73 between 1990 and 2008, showing notable progress though not enough to meet the goal of reducing under-5 mortality by two-thirds (MDG 4). In 2008, 9 million children died from preventable diseases, compared with 13 million in 1990. Sub-Saharan Africa has 20 percent of the world's children under age 5 but 50 percent of all child deaths. Progress in reducing infant mortality is also well short of the target in south Asia.

Maternal health is the least likely of the MDGs to meet the 2015 target. As many as 10,000 women in developing countries die every week from treatable complications of pregnancy and childbirth. But new findings from better data found a higher decline in the maternal death ratio than previously estimated (Hogan and others, 2010; see "Saving Mothers' Lives" in this issue of *F&D*). Maternal deaths fell markedly from 422 for every 100,000 live births in 1980 to 320 in 1990 and to 251 in 2008. More than half of all maternal deaths were concentrated in six countries—Afghanistan, the Democratic Republic of the Congo, Ethiopia, India, Nigeria, and Pakistan. Bolivia, China, Ecuador, and Egypt have been making rapid gains, and 23 countries are on track to reach

Chart 2

### Handle with care

Fragile states have made the least progress toward the MDGs. (progress toward MDG targets for 2009)

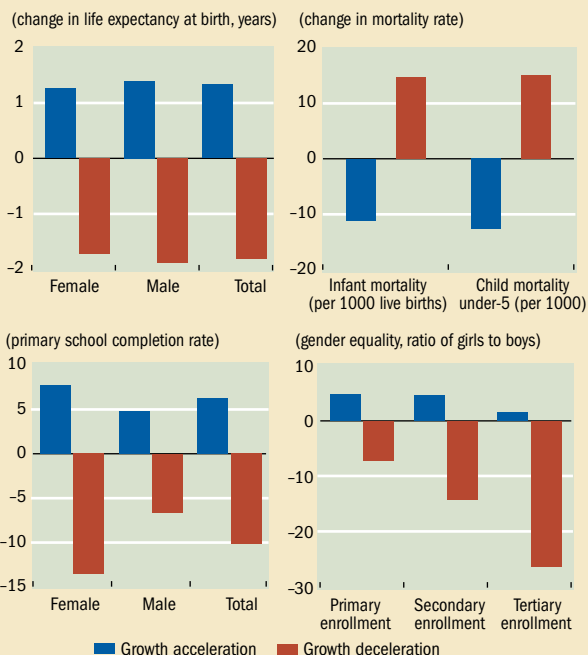


Source: World Bank staff calculations from the World Development Indicators database. Note: Most recent data as of 2009.

Chart 3

### Slower growth hammers progress

Key human development and gender indicators in sub-Saharan Africa plummet when growth slows.



Source: World Bank staff calculations based on World Development Indicators database.

this MDG. In sub-Saharan Africa, the central and eastern regions have shown some improvement since 1990, but the southern and western regions faltered because of the number of pregnant women who died from HIV infection.

The recent food crisis has complicated progress on malnutrition and hunger. The developing world is not on track to halve the proportion of people who suffer from hunger. Child malnutrition accounts for more than a third of the disease burden of children under 5. And malnutrition during pregnancy accounts for more than 20 percent of maternal mortality. The proportion of children under 5 who are underweight declined from 33 percent in developing countries in 1990 to 26 percent in 2006, much slower than is needed to halve malnutrition by 2015. Progress has been slowest in sub-Saharan Africa and south Asia, where as many as 35 percent of children under 5—more than 140 million—suffer from severely to moderately stunted growth.

Halting the spread of major communicable diseases has proved difficult too. Although the rapid rise in the spread of HIV and in HIV-related deaths began to slow in recent years, an estimated 33.4 million people were living with HIV/AIDS in 2008. In that year, there were 2.7 million new infections and about 2 million AIDS-related deaths. Sub-Saharan Africa remains most affected, accounting for more than two-thirds of all people living with HIV and for nearly three-fourths of AIDS-related deaths in 2008. The prevalence of tuberculosis, which killed 1.8 million people in 2006, has been declining in all regions except sub-Saharan Africa. Mortality from malaria remains high, at about 1 million annually, and 80 percent of those who died were children in sub-Saharan Africa.

### Vicious cycles

Historically, the impact of economic cycles on human development indicators has been highly asymmetrical. The dete-

Box 2

### Foundations for progress

Economic growth and stability are the foundation of the public spending that is needed to meet the Millennium Development Goals. So the prospects for further progress on the MDGs have to be assessed in light of macroeconomic developments in emerging and developing economies.

Despite a sharp drop in economic activity, many emerging and developing countries did better than feared at the beginning of the recent global economic crisis. In many countries, growth remained positive during 2009, and the recovery in 2010 is somewhat stronger than initially expected. Asian emerging and developing countries achieved more than 6.5 percent growth in 2009, and are projected to grow by more than 9 percent in 2010. On average, growth in the poorest countries remained positive as well last year: in sub-Saharan Africa growth remained above 2 percent, and the IMF projects that it will rise to 5 percent in 2010. On the other hand, emerging economies with large imbalances (eastern Europe) or close links to advanced economies (eastern Europe and Latin America) were more severely hit. And growth rates in many countries remain somewhat below precrisis levels, with risks on the downside because of sluggish and fragile economic activity in advanced economies.

Financial flows to emerging and developing countries are recovering as well. Sovereigns are borrowing at record levels, and emerging market bond spreads have come down to the levels of 2006 and 2007. Following a slowdown in 2009, private remittances are expected to pick up in 2010, and private sector access to financial markets has improved considerably. But overall, net financial flows to emerging and developing countries remain below precrisis levels, because bank financing and foreign direct investment have not fully recovered.

Several factors played a role in helping emerging and developing economies weather the crisis.

Countries that had strong policies before the crisis were able to post higher budget deficits than countries with more fragile debt and fiscal positions. Many countries supported domestic demand by keeping up their spending plans—including social spending—despite falling revenues. And some countries expanded their social safety net, mitigating the effect of the crisis on poverty.

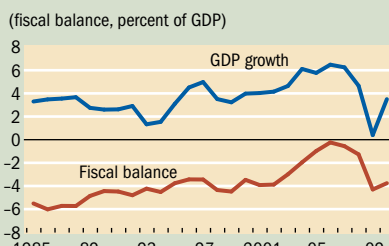
Assistance from the IMF and the World Bank also helped many countries through the crisis. The IMF increased access to financing under existing financing facilities, bolstered reserves through an allocation of Special Drawing Rights equivalent to \$250 billion, created a new facility for emerging economies with good track records (the Flexible Credit Line), reformed financing facilities for low-income countries, and streamlined conditionality. The World Bank and regional multilateral development banks increased commitments to \$115 billion in 2009 to protect core development programs, strengthen the private sector, and help poor households. And the World Bank Group supported developing country exports by providing guarantees and liquidity for trade finance.

Finally, commodity prices rose in 2009—earlier than expected—softening the impact of the crisis on commodity-exporting economies.

Rising economic growth in emerging and developing countries has been associated with improving fiscal policies over the past 15 years (see chart). In 2007, on the eve of the crisis, average budget deficits in these countries were only a fraction of those in the early 1990s, which allowed expansion of fiscal deficits in support of economic activity when the crisis hit. The developments witnessed in 2009 have underscored the importance of maintaining prudent macroeconomic policies in good times, to be able to face shocks and avoid social spending cuts during economic downturns.

### Saving for future growth

Sound fiscal policies meant countries had money to spend when the crisis hit in 2007.



Source: IMF, *World Economic Outlook*.

rioration in bad times is much greater than the improvement in good times (see Chart 3). For example, life expectancy is 2 years longer than the overall average during periods of accelerating growth, but 6.5 years shorter during deceleration. Infant mortality is 8 per 1,000 lower during acceleration and 24 per 1,000 higher during deceleration. The primary school completion rate is 4 percent higher during acceleration but 25 percent lower during deceleration. And the correlation between social indicators and periods of deceleration is stronger than the correlation between social indicators and periods of acceleration.

## Donors need to deliver on their aid commitments and improve the predictability of aid flows.

Vulnerable groups—infants and children, especially girls, and particularly in poor sub-Saharan countries—are affected disproportionately. For example, the life expectancy of girls and boys rises by 2 years during good times but falls by about 7 years for girls and 6 years for boys during bad times. The primary education completion rate rises 5 percentage points for girls and 3 percentage points for boys during good times (from their respective sample averages) but falls 29 percentage points for girls and 22 percentage points for boys during bad times. The female-to-male enrollment ratios for primary, secondary, and postsecondary education rise about 2 percentage points during growth acceleration but fall 7 percentage points (primary), 15 percentage points (secondary), and 40 percentage points (postsecondary) during deceleration. And once children are taken out of school, their future human capital is lowered permanently.

Distinguishing cause and consequence is difficult. Why are vicious circles during crises stronger than virtuous ones during prosperous times? Four reasons. The frequency of downturns, including conflicts, is high in low-income countries. The policy environment in many countries is poor, and economic indicators and political stability, voice and accountability, regulatory frameworks, rule of law, and government effectiveness tend to decline sharply during crises. Social spending shrinks in environments that lack a social safety net, and aid and its effectiveness tend to be under pressure. Declines in growth and service delivery to the poor—two basic drivers of development outcomes—appear to be critically disruptive, whereas the benefits during booms yield only gradual improvements.

This time, however, the global crisis was less devastating for poor countries, mainly because of better policies and institutions, stronger economic performance (see Box 2), higher aid, lower debt, and a beneficial external environment.

Even so, the impact of the crisis on poverty will last a long time. Poverty rates will continue to fall after the crisis, but more slowly. By 2015 the global poverty rate is projected to be 15 percent, instead of the 14.1 percent it would have been without the crisis. The crisis will leave an additional 64 mil-

lion people in extreme poverty by the end of 2010. The recovery will not make up all the lost ground. And 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. Some 25 million fewer people may have access to improved water supplies. And the ultimate example of irreversible costs is that 265,000 more infants and 1.2 million more children under 5 might die between 2009 and 2015 as a result of the crisis.

### Regaining momentum

Ultimately, achieving the MDGs depends on good policy actions in developing countries by governments, households, and firms. Broad-based economic growth needs to resurge, and macroeconomic policies have to be brought back onto a stable and sustainable path. Better domestic policies also mean improved service delivery and more domestic resources managed transparently and reasonably. Countries will have to improve the affordability, implementation, and coverage of targeted social safety nets, given their importance in supporting household incomes during times of distress. But the living conditions of poor people in low-income countries will improve only with additional resources and a favorable external environment. Donors need to deliver on their aid commitments and improve the predictability of aid flows. Healthy and expanding world trade and better market access for developing countries are also important. There is still much to do before 2015. ■

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# Making a Breakthrough

**To accelerate progress toward the Millennium Development Goals, growth must happen in sectors that directly benefit the poor, such as agriculture**

South African children on water playpump merry-go-round.

*Pedro Conceição and Selim Jahan*

**T**HE decade leading up to the 2009 global recession saw fast economic growth in most developing countries. Since the late 1990s, growth in the developing world has been consistently higher than in advanced economies. In sub-Saharan Africa this represented a break from a long period of economic stagnation, roughly lasting from the mid-1970s through the mid-1990s.

This growth was accompanied by improvements in human development outcomes and progress toward the Millennium Development Goals (MDGs; see Box 1 in “Regaining Momentum,” in this issue of *F&D*). In sub-Saharan Africa, extreme poverty rates started to drop rapidly in the late 1990s. The population living in extreme poverty (less than \$1.25 a day at purchasing power parity and 2005 prices) in sub-Saharan Africa in 1990 (the baseline year for the MDGs) was 57 percent (United Nations, 2010a). By 1999 the poverty rate actually increased by 1 percentage point, to 58 percent. But by 2005, the poverty rate had dropped to 51 percent. More recent data are not yet available, but some projections suggest that the extreme poverty rate in sub-Saharan Africa continued to drop to about 46 percent in 2008 (World Bank

and IMF, 2009). If these projections hold, between 1999 and 2008 the extreme poverty rate in sub-Saharan Africa dropped by 12 percentage points.

Still, this average performance in growth and poverty reduction masks great diversity across countries. Take Ghana. The extreme poverty headcount ratio fell from 51 percent in 1992 to 39 percent in 1998 and to 30 percent in 2006 (United Nations, 2010b). Ghana is well on its way to meeting the extreme poverty target under MDG 1. Economic growth certainly played an important role in this progress but cannot alone account for it.

By contrast, many sub-Saharan African countries, some growing much more rapidly than Ghana, have been much less successful in reducing poverty. Many of those that grew as rapidly as, or even faster than, Ghana have barely reduced poverty. In fact, on average, growth has been historically much less effective in reducing poverty in sub-Saharan Africa than elsewhere. According to some estimates, the poverty elasticity of income—the extent to which

increases in income translate into reductions in poverty—is almost one-third lower in sub-Saharan Africa than in other developing countries (Fosu, 2009).

## **Working toward inclusive growth**

Thus growth, while necessary for reducing poverty and making progress toward the MDGs, will not, on its own, be sufficient. The nature of growth matters. Growth that is inclusive and that generates income in the poorest segments of the population is much more effective in reducing poverty. In sub-Saharan Africa now—and in several other countries historically—growth in the agricultural sector is crucial, not only for poverty reduction, but also to reduce hunger. For example, in Ghana about 59 percent of the reduction in the extreme poverty headcount ratio between the early 1990s and 2006 was accounted for by reductions in rural poverty (World Bank, 2008). At the same time, the proportion of the population that is undernourished went down from 34 percent in 1991 to 8 percent in 2005 (United Nations, 2010b). When growth is inclusive, and occurs in sectors that benefit the poor, it is much more effective in reducing poverty.

A range of policies is required to make growth more inclusive and to make progress on other social indicators. The relative ineffectiveness of growth in reducing poverty in sub-Saharan Africa suggests that a “policy gap” exists that could be exploited to bring the contribution of growth in the continent at least to that of other developing countries.

What are the needed policies? Evidence from MDG country reports clearly indicates some factors that contribute to success in achieving the MDGs (UNDP, 2010a). We know from such evidence that economic growth in sectors that directly benefit the poor accompanied by targeted pro-poor policies significantly reduces poverty and hunger. Such policies include investments in expanding economic opportunities, strengthening legal rights, and enhancing the participation of women in the political process. They also comprise education and health policies that enhance access to services to all, and especially to women and girls. These kinds of policies have catalyzed progress across all the MDGs.

### Implementing an action agenda

All such evidence leads to a specific MDG action agenda for 2010–15 (UNDP, 2010b). As the earlier discussion on Africa emphasized, rapid poverty and hunger reduction results from high per capita economic growth that expands income and employment opportunities for the poor. In Africa, this often means growth that originates in the agricultural sector. This usually goes along with a more equitable distribution of income, assets, and opportunities.

Inclusive and pro-poor growth requires investments in basic social services—in schools, hospitals, and rural health centers—and in human resource development. All of these investments promote wider health coverage and improve the quality of services. Therefore, it is essential to increase public investment in education, health, water, sanitation, and infrastructure.

However, building schools and health facilities and removing fees and other barriers to access will not automatically ensure that women and girls gain access to these services. That requires targeted investments in female health and education. Constitutional and other legal reforms that directly enhance women’s political participation contribute to empowering women. Indeed, the evidence is clear that empowering women improves progress across the MDGs.

Overall policies and strategies have to be complemented by a *scaling-up of targeted interventions*, such as mass immunization and the distribution of bed nets and antiretroviral drugs, which help save lives, particularly when implemented in an integrated manner. *Social protection, cash transfers, and employment programs* are effective not only to support vulnerable populations during shocks, but can enable access to nutrition supplements, regular health check-ups, and schooling.

The MDG action agenda for 2010–15 must also address vulnerabilities arising from climate change and support the transition to jobs and economic activity that is consistent with efforts to mitigate climate change. A global agreement on climate change is urgently needed to help those with fewer resources to make such adjustments, to both adapt to climate change, and to move toward a low-carbon developmental path.

Strengthening the mobilization of domestic resources to help finance the MDG agenda is essential. Many countries are broadening their tax base and enhancing the efficiency of tax collection. The administrative capacity of national revenue authorities must be strengthened, while ensuring transparency and accountability in the use of public resources. Governments can increase the efficiency of public expenditure by lowering the unit cost of providing public services without reducing their quality or quantity, and by cutting wasteful spending.

In the context of the above action agenda, it is important to emphasize two conditions. First, achievement of the MDGs depends on countries’ commitments to the goals. This means country-led development efforts, sustained by effective governance, based on a broad national consensus and achieved through consultation and meaningful participation by all affected. Second, international cooperation needs to provide a supportive environment for achieving the MDGs. This implies delivering on official development assistance (ODA) commitments; improving the predictability and effectiveness of ODA disbursements; and concluding the Doha Round of multilateral trade talks as soon as possible with agreements that are development friendly—thus increasing support for South-South trade and regional integration.

The MDG challenges in sub-Saharan Africa are daunting. But evidence has shown that with the right kinds of policies, backed by international support, significant progress can be made on several fronts. Simultaneously, efforts must be undertaken to address some of the longer-term structural constraints to sustain this progress. We have the resources, the knowledge, and the technology to make a breakthrough on the MDGs in sub-Saharan Africa. ■

*Pedro Conceição is Chief Economist and Head of the Strategic Advisory Unit, Regional Bureau for Africa, and Selim Jahan is Director of Poverty Practice, both at the United Nations Development Programme.*

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# Saving Mothers' Lives

Countries must make maternal health a policy priority

Melinda Gates



ONE of the best pieces of news I've heard this year is that the bleak maternal health statistics we've been puzzling over for so many years appear to have been wrong.

Until the Institute for Health Metrics and Evaluation (IHME) released a new report on maternal mortality in April, we thought the world had made roughly no progress on saving mothers' lives. Now we know that, according to the best and most complete data available, maternal mortality has been going down steadily for 30 years. In 1990, the global maternal mortality ratio (the number of maternal deaths for every 100,000 live births) was 320. In 2008, it was 251.

Obviously, those numbers don't put us on pace to reach the Millennium Development Goal (MDG) target of a 75 percent reduction in the ratio, but they're a good reason to be optimistic. Add to them the Group of Eight (G-8) industrial countries' new \$7.3 billion, five-year initiative on maternal and newborn health and the ongoing effort by the United Nations (UN) to develop a comprehensive Joint Action Plan for Women's and Children's Health, and we might finally be on the cusp of having a new story to tell about maternal health.

Some of the country-level findings in the IHME report are even more exciting than the overall picture. A handful of very different countries, from Bangladesh to Bolivia to China to Egypt to Romania, have made major strides in maternal health in the past 20 or 30 years. These success stories demand further study, because they point the way to broader progress. As we determine how China decreased its maternal mortality ratio from 165 in 1980 to 40 in 2008, or why Egypt's ratio has gone down 8.5 percent annually since 1990, we will build up a bank of best practices for other countries to adapt and adopt.

The fact that some countries are doing significantly better than the average also suggests that the explanation for slow progress is not a lack of expertise or effective tools, but rather a lack of political will to apply that expertise and those tools. Enough countries are saving mothers in large enough numbers to prove that we know how to achieve our goals. Unfortunately, most countries have failed to make it a priority.

But by sharing success stories, we can build the necessary political will that will lead to much more aggressive maternal health policies. That is exactly what is happening in Malawi right now. I traveled there in January, and the walls at the hospitals were covered with a poster that said, "No mother should die during childbirth." In Malawi, those words are more than just a public health message. They represent a policy shift—a specific commitment by the government to make sure that every mother gives birth in a health facility, cared for by trained medical staff.

Malawi has also set an important example by tackling maternal, newborn, and child health together. Malawi has long been a leader in child health—it's one of the few African countries on pace to meet the MDG target on child survival—and the new maternal health commitment builds on that existing health infrastructure.

I have visited maternal health programs that are successfully persuading poor women to deliver their babies in hospitals—but with the unintended consequence of deemphasizing pre- and post-natal care. Of course, a safe, facility-based delivery of a malnourished baby to a malnourished mother is not a good health outcome. Nor is a healthy mother who would have chosen not to get pregnant if she'd had the choice.

Childbirth itself is just one of many points along a continuum of care for women and children. A woman's first need is planning her family. Right now, more than 200 million women want to use contraceptives but don't have access. If they did, experts agree that maternal deaths would decrease by at least 30 percent, and newborn deaths would decrease by 20 percent. After family planning, the continuum of care includes prenatal care, safe childbirth, essential newborn care, postnatal care, nutrition, and child health care, including immunization.

The G-8's new initiative and the UN's Joint Action Plan treat all these issues in the way mothers treat them, as equally important parts of a healthy life for themselves and their children.

The new evidence about progress on maternal health, and the example of poor countries that are taking action and having a big impact, should give economic decision makers the confidence to prioritize investments in maternal health.

The fiscal challenges facing many countries will force difficult trade-offs, but we can no longer make them at women's and children's expense. Putting resources into maternal, newborn, and child health is a great investment—in women and children, in stronger families and empowered communities, and therefore in the long-term economic productivity of developing countries.

The IMF has a special authority and responsibility on this issue. The Fund's recent, more open-minded and flexible approach to supporting health services in an efficient way that is consistent with sound fiscal management is a very important—and welcome—signal. At the Gates Foundation, we are looking forward to collaborating—and sometimes to pushing—to ensure that the world's progress on maternal health is sustained. ■

*Melinda Gates is co-chair and trustee of the Bill and Melinda Gates Foundation.*

# Time for a Rethink

**It is hard to object to the Millennium Development Goals, but that doesn't mean they lay out an effective blueprint for development**

*Jagdish Bhagwati*



Women in village of Hansdehar, Haryana, India.

**A**T the start of what became known as the Doha Round of multilateral trade negotiations, many proposed it be named the Millennium Round. But that suggestion went nowhere after a wit observed that this could mean it would take a millennium before the negotiating nations would reach consensus to close the Round.

This is not quite the problem with the Millennium Development Goals (MDGs; see Box 1 in “Regaining Momentum” in this issue of *F&D*). They are not specific commitments by nation-states whose feet would be held to the fire in case of “default” or shortfall—the way that, say, a multinational trade agreement creates obligations through the World Trade Organization (WTO). The MDGs are in fact aspirational do-good targets in selected areas, often with quantitative dimensions (for example, halving the hunger rate, not just reducing it) and have defined dates—with the exhortation that all goals be met everywhere by September 2015. But there are no repercussions on any nations if the goals are not met, as seems likely in most cases.

It is not surprising then that the MDGs have been affirmed repeatedly by consensus among all United Nations (UN) member states; one would have to be positively ghoulish—and unmindful of the fact that failure to achieve carries no penalties—to abstain or object. But this does not mean that when UN Secretary-General Kofi Annan proposed the MDG targets, based on the Millennium Report drafted by Assistant Secretary-General John Ruggie’s team, there were no objections from nations opposed to specific MDGs. For example, South Africa did not initially wish to have a reference made to HIV/AIDS. And when multilateral agencies like the World

Bank began recording progress toward the MDGs, presumably with implications for aid flows, representatives of countries like India did start recording objections to certain MDG targets. Still, there are some skeptical and even hostile questions that must be asked and answered if we are to assess the MDG initiative meaningfully on its 10th anniversary.

## **Setting priorities**

From the outset, critics of the MDGs have asked, why these specific MDGs and not other, possibly more desirable, targets? For example, many activists have been particularly concerned that the gender-related targets addressed by MDGs 3 and 5 (on gender equality and maternal health) exclude issues such as the trafficking of women. And scholars and activists concerned with gender issues deplore the fact that gender pay equality is not specifically mentioned. Although the MDGs suggest comprehensiveness, especially when the subgroups of “indicators for monitoring progress” are spelled out, they are in fact selective. And it is regrettable that the UN officials in charge of the MDGs have not explained why the chosen MDGs are more socially desirable than those that were excluded, or examined whether they ought to be reset. It appears that once the MDGs were chosen alongside the associated indicators, attention shifted to overseeing and even steering progress toward them. As a result, even the chosen MDGs have not been systematically examined in terms of social cost-benefit analysis, including trade-offs among the different MDGs—which we must confront if all MDGs cannot be achieved simultaneously.

As it happens, even within individual MDGs, there are many ways to achieve the targets. For example, the indica-



tors for MDG 3 on gender equality and empowering women lists the “proportion of seats held by women in national parliament.” Yet women’s effective representation in local governance (such as what Indians call “village panchayats”) is likely to be far more important than that in national government, if we go by several recent scholarly studies on, for example, the impact of public goods expenditure decisions when women are put on these panchayats in the state of West Bengal (Chattopadhyay and Duflo, 2004). And MDG 7 on ensuring environmental sustainability lists a number of indicators—yet as the lack of agreement at the global environmental summit in Copenhagen revealed last year, the goal faces many resource constraints.

In fact, there should be far more analysis of the ranking of all MDG targets so that meaningful choices can be made among them when everything cannot be accomplished. One dramatic exercise of this kind has come, not from the MDG bureaucrats, but from the iconoclastic Bjørn Lomborg of the Copenhagen Consensus Center. Over the years, he has put together a small group of world-class economists to assess numerous scientific and economic studies that he commissioned on alternative developmental targets, including last year’s exercise on spending an Environmental Superfund on alternative forms of mitigation and adjustment. The work of this group is an example of what needs to be done for each specific MDG instead of the cheerleading for the MDGs in general that emanates for the most part from the United Nations Development Programme (UNDP).

### Hitting the right targets

At the same time, the use of uniform MDG targets for all countries is inappropriate. A substantial reduction of extreme

poverty from its 1990 levels (MDG 1 is to halve the poverty rate between 1990 and 2015) is something that India almost certainly achieved even before the start of the MDGs 10 years ago, because of the enhanced growth rates of income resulting from “liberal” reforms that started in earnest in India in 1991 and helped pull nearly 200 million people above the poverty line. By contrast, the MDG target for poverty reduction is too optimistic for several African countries that have been handicapped by acutely bad governance for a variety of reasons. Assigning the same target to both, and then complimenting the former and condemning the latter, is not merely bad economics; it is also unhelpful.

In the same vein, it makes little sense to tell Thailand, where child prostitution and trafficking are serious problems, that the government and nongovernmental organizations (NGOs) should focus on women’s participation in the national parliament to the same degree as in India, where prostitution and trafficking are not nearly as serious.

Moreover, the MDGs are not always relevant targets: sometimes an MDG target can be fulfilled without any substantial improvement in the reality the MDG seeks to improve. For example, MDG 2 specifies universal primary education as a target. But one can get all children to go to school without significantly improving their ability to read and write, let alone do arithmetic. In India, teacher absenteeism has undermined the effect of increased school enrollment: children learn little even when they attend primary school because the teachers do not turn up.

### Targets versus instruments

A more serious problem with the MDG approach, however, is that the central task in development is not the specification

### Skilled manpower bottleneck

Just as success follows from a constellation of good policies, failure generally results from a multitude of unfavorable factors. Yet, one can usually zero in on certain critical missing elements that can cripple a developmental effort. In Africa, an overriding problem is the lack of skilled manpower.

For example, the fight against HIV/AIDS has been hampered by shortages of doctors, nurses, and community workers in many African countries, and the distribution of aid relief during famines and pestilence has often required an influx of foreign skilled personnel.

But African nationals, whether trained at home or abroad, migrate in great numbers. For example, almost 90 percent of Ghanaian doctors work abroad. It is tempting to say, as many NGOs suggest, that the rich countries should not allow the employment of doctors and other professionals from the poor countries of Africa: “stop the brain drain” is the refrain. But, aside from the fact that emigration restrictions are unacceptable today on human rights grounds, professionals forced to remain at home are unlikely to function efficiently.

Understanding these issues, the economists working on the “brain drain” issue in the 1950s and 1960s, when nationals from countries like India began to migrate abroad, shifted to the diaspora model. The objective became to maximize the benefit

from the diaspora, through programs to encourage short-term spells in home countries, incentives for remittances, and taxing citizens abroad—now known as the Bhagwati tax, like the Tobin tax on capital flows (Bhagwati and Hanson, 2009). These measures could be balanced by offering political benefits such as the right to vote.

The fact that developing countries can benefit from professionals working abroad means rich countries should keep their doors open to skilled immigrants from Africa. They should also step up training of Africans with vastly augmented scholarships and dismantle misguided roadblocks to Africans staying on in those rich countries. The diaspora would increase dramatically as a result, as would benefits to the source countries. In fact, there is no realistic alternative. If past experience is a guide, the diaspora will return once the African countries take off, just as Indians have now begun to return to India in great numbers.

The question remains: how can a country fill the need for skilled manpower until this happens? One suggestion is for the rich countries, many of which face the demographics of an aging population, to organize a Gray Peace Corps—much like the traditional U.S. Peace Corps. This corps would allow retired doctors, scientists, engineers, and businesspeople, among others, put their skills to good use in organized programs in African countries such as Botswana and Ghana.

of desirable targets (put into context for different countries based on their historical, cultural, and political circumstance) but rather the specification of policy instruments that achieve these targets. Confusion over this critical distinction between targets and instruments becomes apparent when one contrasts the first seven MDGs, which are indeed targets, with MDG 8: “Develop a global partnership for development.” Partnership is of course better than discord, but that does not turn it into a development goal. MDG 8 exhorts the private sector to advance information technology and the availability of generic drugs in poor countries, but it also advocates freer trade and increased aid (including debt relief).

The problem with including these instruments as targets is that the MDG exercise has as a result drawn criticism, not just regarding the choice of goals but also regarding the apparent embrace of policies that some activist groups identify with corporate interests, neoliberal apologetics, and the like. For example, Patrick Bond, Director of the Center for Civil Society at the University of KwaZulu-Natal, South Africa, writes, the “MDG process, the international venues for the MDGs’ elaboration, and the concrete strategies for achieving these objectives—including privatisation of basic services such as water and electricity—are doing more harm than good” (Bond, 2006; emphasis added). And Peggy Antrobus of Development Alternatives for Women in a New Era unfairly critiques the MDGs for envisaging the state as playing a principal role in achieving the MDGs, but she is also clearly turned off by “neoliberalism” as the guiding light of MDGs, a result no doubt of MDG 8. “I do not believe in MDGs. I think of them as a Major Distraction Gimmick . . . . To the extent that all the goals relate to the role of the state, one must ask how feasible it is that states weakened by the requirements of neoliberalism and whose revenues are reduced by privatization and trade liberalism can be expected to achieve the goals and the targets of the MDGs,” she said (quoted in Bond, 2006, p. 341; emphasis added).

As a “neoliberal” who has worked for decades on several aspects of free and multilateral trade, I am happy that the authors of the MDGs believe that “an open, non-discriminatory trading system” is conducive to development. But one cannot just leave it at that. Once policy preferences are stated, opposition is inevitable and must be confronted systematically. True, credible opponents of freer trade are hard to find. Yet, it should have been possible for the UNDP, where the management of MDGs was lodged by Kofi Annan, to bring in the top luminaries in the field of international trade to cut these opponents down to size. Then again, what was the point of embracing a “non-discriminatory” trading system, and then presiding indifferently over the massive proliferation of preferential trade agreements in the past decade (Bhagwati, 2008)?

Including foreign aid as an instrument of MDG 8 poses a different problem. Uncritical reliance on aid has undermined the credibility of MDGs themselves. Many African intellectuals and economists have come to denounce it and even to disown its proponents, which include Jeffrey Sachs, the Columbia University professor and UNDP-based adviser

to the UN on MDGs, and singer/activist Bono. We know now that it is the policy framework that delivers results. With a bad policy framework, neither domestic nor foreign resources, including aid, will yield high returns. India did not use aid badly, but its real growth and the resultant drop in poverty began when aid to India had virtually ended and the counterproductive framework of aid was replaced by the new “liberal” policy framework (disliked viscerally by Bond and Antrobus). Asserting that those who worry about the efficacy of aid—an issue raised by the great development economist Paul Rosenstein-Rodan in the context of absorptive capacity—are morally depraved is a lazy approach to an issue of critical importance to development in poor countries.

In addition, MDG 8 suffers from a glaring omission. Migration has become an important issue for several years. While illegal migration raises serious human rights and economic problems of its own, legal migration of skilled workers from poor to rich countries poses a different set of issues and puts other MDG targets at risk, especially in Africa. Most professionals in Africa either migrate or stay on after studying abroad: this is inevitable as African working conditions, combined with social legislation and politics, propel professionals away from home. But the continent needs a skilled workforce for virtually every problem that one can think of. The biggest challenge is how to supply that need until African development takes off and the diaspora begins to return home, as has happened with India (see box).

### Time for reorganization

The 10th anniversary of the MDGs should be an occasion for member states to contemplate new leadership in managing the goals in order to address the instruments candidly and add key nuances. The management of the chosen MDGs under their present leadership, which has been in place for almost a decade, has fallen into a technocratic pursuit of increased demands for aid flows, and advocating programs regardless of governance constraints and local contexts—an approach that diverts attention from the effective pursuit of even the chosen MDG goals. Surely we can do better. ■

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# Half Empty or Half Full

Aid worker walking over sacks of food aid in Berbera, Somalia.

Andrew Berg and Luis-Felipe Zanna

**W**HETHER foreign aid helps poor countries grow is a matter of dispute. Although there is evidence that aid has a positive effect on social indicators such as infant mortality and primary school enrollments, its effectiveness on growth is an unresolved matter among economists. “It is difficult to discern any systematic effect of aid on growth,” Rajan and Subramanian (2008) concluded, for example, while Arndt, Jones, and Tarp (2009) found that “aid has a positive and statistically causal effect on growth over the long run.”

Less controversial is the view that aid flows, and in particular aid surges, can have both positive and negative effects on recipient countries. Aid surges may induce real exchange rate appreciation, which hurts growth-promoting exporting industries (see Rajan and Subramanian, 2010), but they may also help finance much-needed public investment in infrastructure, which is necessary for growth (see Collier, 2006). What makes the mixed empirical evidence unsurprising is that the final growth impact of aid is likely to depend on a number of *country-specific* factors, such as the macroeconomic policy

response, the uses to which the aid is put, the efficiency of public investment, and various structural characteristics of the economy.

## Scenario assessments

We have embraced this country-specific view in a joint project of the IMF and the United Nations Development Programme (UNDP) that provides macroeconomic assessments of scenarios that involve increases in aid for several African economies. The IMF was asked to provide macroeconomic assessments of scenarios that correspond to the commitments made by the Group of Eight industrial countries (G-8) at Gleneagles, Scotland, in 2005 to double aid to Africa by 2010. The scenarios and spending plans are based on sector-level analyses that the UNDP prepared in coordination with the World Bank, the African Development Bank, and country authorities. So far, 10 scenarios have been conducted—for Benin, Central African Republic, Ghana, Liberia, Niger, Rwanda, Sierra Leone, Togo, Tanzania, and Zambia. Five more assessments are to be completed in the coming months. (Three of these cases are available at [www.imf.org/external/np/pp/eng/2008/091908a.pdf](http://www.imf.org/external/np/pp/eng/2008/091908a.pdf); the rest will be published soon.)

**Does aid work?  
The net impact  
of aid surges  
depends on  
country-specific  
factors**

The assessments use a common framework that was developed at the IMF (see Berg and others, 2010). The framework is based on a dynamic small-open-economy quantitative model that can be useful for both policymakers and IMF staff by supporting more coherent policy discussion and macroeconomic analysis. The model is designed to capture the main mechanisms and policy issues in low-income countries experiencing aid surges. The framework focuses on the short- and medium-term macroeconomic effects of aid surges to shed light on aggregate measurements such as inflation and real exchange rate and medium-term productivity and growth. The assessments suggest that, depending on country-specific factors and policy responses, increased aid can have a positive medium-term impact on economic growth and that the negative effects on inflation and real exchange rates can be manageable.

The framework is designed to capture the key macroeconomic issues facing aid recipient countries. First, a larger traded sector can make for faster productivity growth. The idea is that there may be a “learning-by-doing” effect, or externality, whereby firms that compete in export markets learn (say, about manufacturing and management techniques) and this learning spills over to other firms. This special role for the traded sector means that a real exchange rate appreciation, associated with the aid surge, may harm productivity and growth. Second, public capital is important in production, so that government investment spending can raise output, both directly and by raising the return to private investment (and hence encouraging more). However, public investment spending is not always efficient, and not all government investment spending becomes useful public capital. Third, on the policy front, the framework allows for separate fiscal spending and reserve accumulation responses to aid surges, permitting a variety of policy combinations. It distinguishes between spending the aid, which is controlled by the fiscal authority, and absorbing the aid—financing a higher current account deficit—which is influenced by the central bank’s reserve accumulation policies.

The application of the model to specific cases requires “calibration”—the use of available empirical evidence to assign values to the parameters that determine the behavior of the model. For example, firm- and sectoral-level analyses are available on the strength of learning-by-doing externalities. Studies have also estimated the efficiency and determinants of rates of return to public investment. However, the available information is partial, and substantial judgment is required in filling in the gaps. More generally, the model is incomplete in many ways, and by itself it does not produce accurate forecasts. But the “Gleneagles aid scaling-up scenarios” project has shown that such a model can help organize thinking, offer a way to systematically incorporate various sorts of empirical evidence, and provide a vehicle for transparently producing alternative aid scaling-up scenarios and comparing results across countries.

### Aid lessons

Even though the model embeds country-specific factors, a few critical lessons from its application to different countries

have emerged. We believe these lessons are applicable to all countries.

First, it is important to distinguish between the efficiency of public investment based on aid-surge funds and the historical efficiency of public investment. We find that it is the efficiency of the aid-surge-related public investment *relative to historical investment efficiency* that determines how much impact aid-financed public investment has on growth. Low aid-surge-related investment means that the aid will create only a small amount of additional public capital. But low historical efficiency also means that there was very little public capital to begin with, so even this small addition to public capital can make a big difference to output.

This result has interesting implications. If a country has a lot of trouble converting investment spending into useful capital—in other words, both historical and aid-related investment efficiency are low—this may not influence the growth effects of a given aid surge. But it matters a lot if a country’s investment efficiency declines with the aid surge (for example, because it cannot handle the larger aid volume) or increases (for example, because it or the donors improve management practices).

Second, a real exchange rate appreciation and a reduction in the size of the traded sector are generally natural and appropriate counterparts to the aid surge. These changes shift resources from the traded sector, which now is less competitive internationally, to the nontraded sector, which is mainly local. In other words, such an appreciation puts those resources to work at home while also allowing the import of much-needed capital. And even with the appreciation and reduction in the traded sector that accompanies the use of the aid, the result is a higher public capital stock, more private investment, and higher output.

However, this real appreciation raises the specter of “Dutch disease,” whereby the associated shrinkage of the traded goods sector may harm overall growth because there is less learning through international competition and exporting.

These learning externalities do not necessarily make aid harmful. But they raise the stakes for aid efficiency as they cut both ways: if aid is invested well, the externalities raise the productivity of the traded sector, so aid can produce even greater gains in terms of growth—producing what we term *Dutch vigor*. If it is not invested well, the externalities induce declines in productivity relative to the no-aid-surge baseline, and the aid can indeed harm growth. The chart illustrates this conclusion. It compares the effects of aid on real gross domestic product (GDP) when there are moderate positive externalities associated with the traded sector (left panel) and under strong externalities (right panel), while varying the efficiency of public investment. The chart assumes a temporary but persistent increase in aid equivalent to 6 percentage points of GDP, on average, that subsides to its previous level for the following five years. In addition, the aid surge is assumed to be fully spent and absorbed.

Under moderate externalities, as might be consistent with standard firm-level studies, the aid surge induces higher

growth—more so with higher relative efficiency. When the traded sector is especially important for productivity growth and aid is efficiently used, we see Dutch vigor. Higher public capital accumulation induces higher private investment, which eventually helps raise output in the traded sector above its trend despite a real exchange rate appreciation. This higher traded sector output amplifies the positive medium-term effect of public and private capital investment. On the other hand, when aid is poorly used, strong externalities lead to a short-term drop in GDP, and the brunt of this drop falls on the traded sector, which loses competitiveness. Traded sector productivity growth falls as a result. Meanwhile, there is no boost in investment and productivity, because without much new public capital there is no increase in private investment. In this Dutch disease scenario, aid actually reduces growth.

Third, concerns about competitiveness and real appreciation have frequently caused authorities to accumulate some of the aid flows as international reserves while still spending the local currency counterpart of these flows (see Berg and others, 2007). This response mitigates the appreciation pressures on the domestic currency, because by holding on to the aid-related reserves the central bank lowers the supply of foreign currency in the foreign exchange market. But holding reserves crowds out private consumption and investment, hurting medium-term growth. The underlying cause of the crowding out is the attempt to use the same aid resources twice. When the government spends the local currency counterpart to the aid flows, the aid dollars can be used to buy up (sterilize) this monetary emission, thereby in effect financing the spending. If the aid dollars stay in reserves, then the central bank needs to sell bonds instead and these bond sales amount to domestic financing of the spending, with the attendant risk of crowding out.

Fourth, in circumstances of low efficiency and strong externalities that affect traded sector productivity, accumulating some of the aid flows in reserves may be justified despite crowding out the private sector; but better options are available. In these circumstances, aid is bad for growth, and a reserve accumulation policy can mitigate the Dutch-disease-

type effects of appreciation and contraction of traded sector output. Such a policy more than compensates for private sector crowding out. However, there are better ways to respond to aid surges. The reserve accumulation policy could be accompanied by partial spending of aid. And if aid were used more efficiently, or allocated more toward investment that helps the traded goods sector, then the GDP effect of scaled-up aid would always be positive—more so if the government does not accumulate reserves.

### Natural resources

The analysis we describe here can be extended to examine surges in other sorts of resource flows, including those that—unlike aid—are materializing in many countries. Natural resource discoveries have many features in common with aid surges. The usual *developed* country analysis of natural resource discoveries assumes that the country can always borrow to finance public investment, so there is no link between this investment and the resource discovery. But such a link can be crucial in credit-constrained *developing* countries, and has been analyzed using a variant of the model described here (see Dagher, Gottschalk, and Portillo, 2010). Meanwhile, many countries are considering increased use of nonconcessional foreign borrowing to finance needed public investment. Ongoing work is adapting the framework to look at this problem and the debt sustainability problems that may arise. ■

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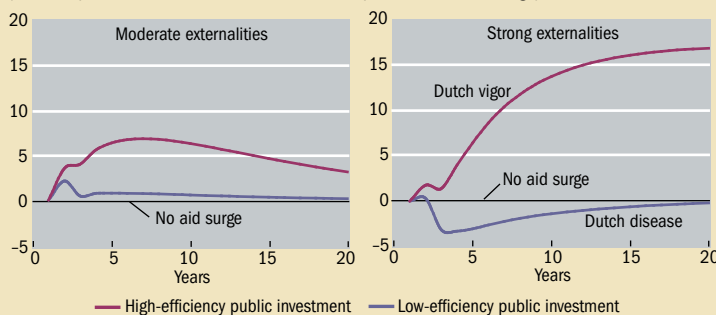
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### What happens to growth when aid surges?

When exports drive productivity growth, the stakes are higher.

(real GDP, percent deviation from baseline due to 6 percent of GDP aid surge)



Source: IMF staff model simulations.

# Reducing Child

**Despite progress, under-5 mortality rates remain unacceptably high**

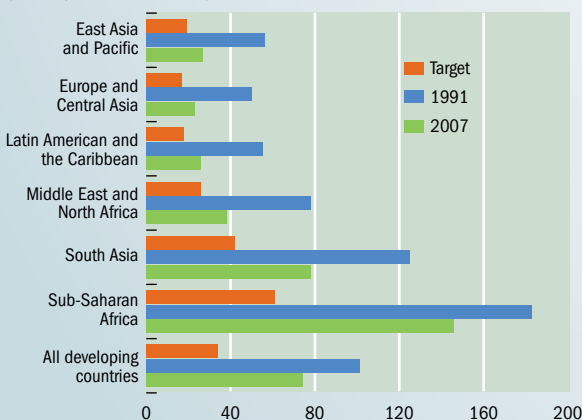
**T**HE under-5 child mortality rate declined by more than 25 percent—from 101 deaths per 1,000 live births to 73 between 1990 and 2008—showing notable progress, but still not enough to meet the Millennium Development Goal (MDG) of reducing child death rates by two-thirds by 2015. In 2006, the number of children who died before age 5 from preventable causes fell below 10 million for the first time, down from 13 million in 1990. The good news is that 10,000 fewer children died each day than in 1990. Even so, the aggregate number is still terribly high, or about one-fifth of the world's deaths annually. A child in a developing country is still 10 times more likely to die before age 5 than a child in a developed country. This MDG (MDG 4, along with MDG 5 on maternal health) is one of the targets most off track.

### Uneven progress

While all regions have made progress in reducing under-5 mortality rates, disparities between and within regions continue to grow. Many countries in sub-Saharan Africa have made little progress. There, one child in seven dies before his or her fifth birthday. This region has 20 percent of the world's children under age 5 but 50 percent of all child deaths. The odds are a little better in south Asia, where one child in 13 dies before age 5. These two regions continue to be the priorities for preventive interventions, such as immunization, mosquito nets, clean water, and exclusive breastfeeding.

### Sub-Saharan Africa and South Asia are likely to fall most short of the child mortality target.

(deaths per 1,000 live births)

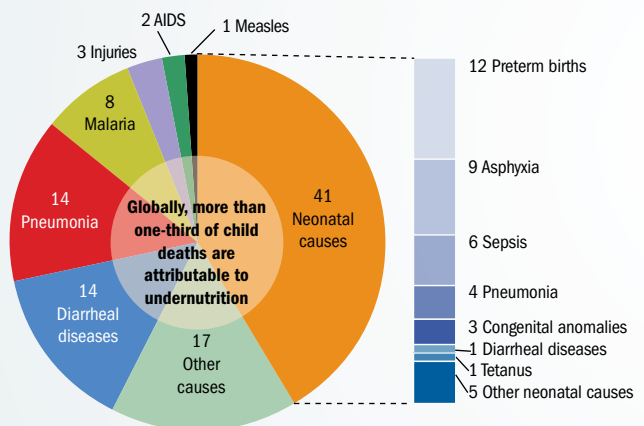


### Major causes

Undernutrition is the fundamental cause of over a third of all under-5 deaths. Despite some progress, one in four children under 5 in developing countries is underweight. Children are most vulnerable during their first four weeks of life, when 4 in 10 child deaths occur. Nearly forty percent of all deaths in children under 5 in 2008 were attributable to just four preventable diseases—pneumonia, diarrhea, malaria, and HIV/AIDS.

### Undernutrition and infectious diseases are the major causes of child deaths.

(percent, 2008)



Source: United Nations, *The Millennium Development Goals Report 2010*.



# Mortality

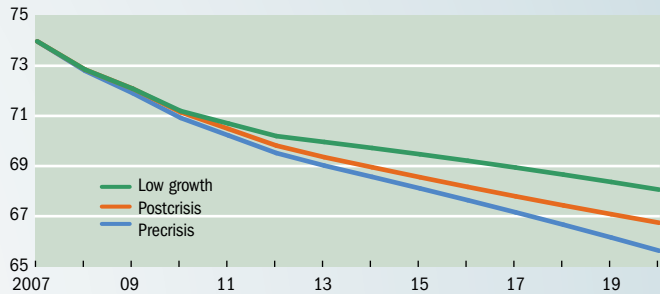


## Progress interrupted

Even before the crisis, progress on reaching the MDG target for child mortality was lagging. Now, as a result of the recent financial and food crises, it is estimated that an additional 1.2 million children under 5 might die between 2009 and 2015. There is hope, however. Thirty-nine countries, which account for half the population of low- and middle-income economies, are on track to reduce under-5 child mortality rates by two-thirds or more by 2015. Some of the poorest countries are overcoming great odds, making remarkable progress in reducing child death rates or the absolute number—namely, Bangladesh, Bolivia, Eritrea, Lao P.D.R., Malawi, Mongolia, Mozambique, Nepal, and Niger.

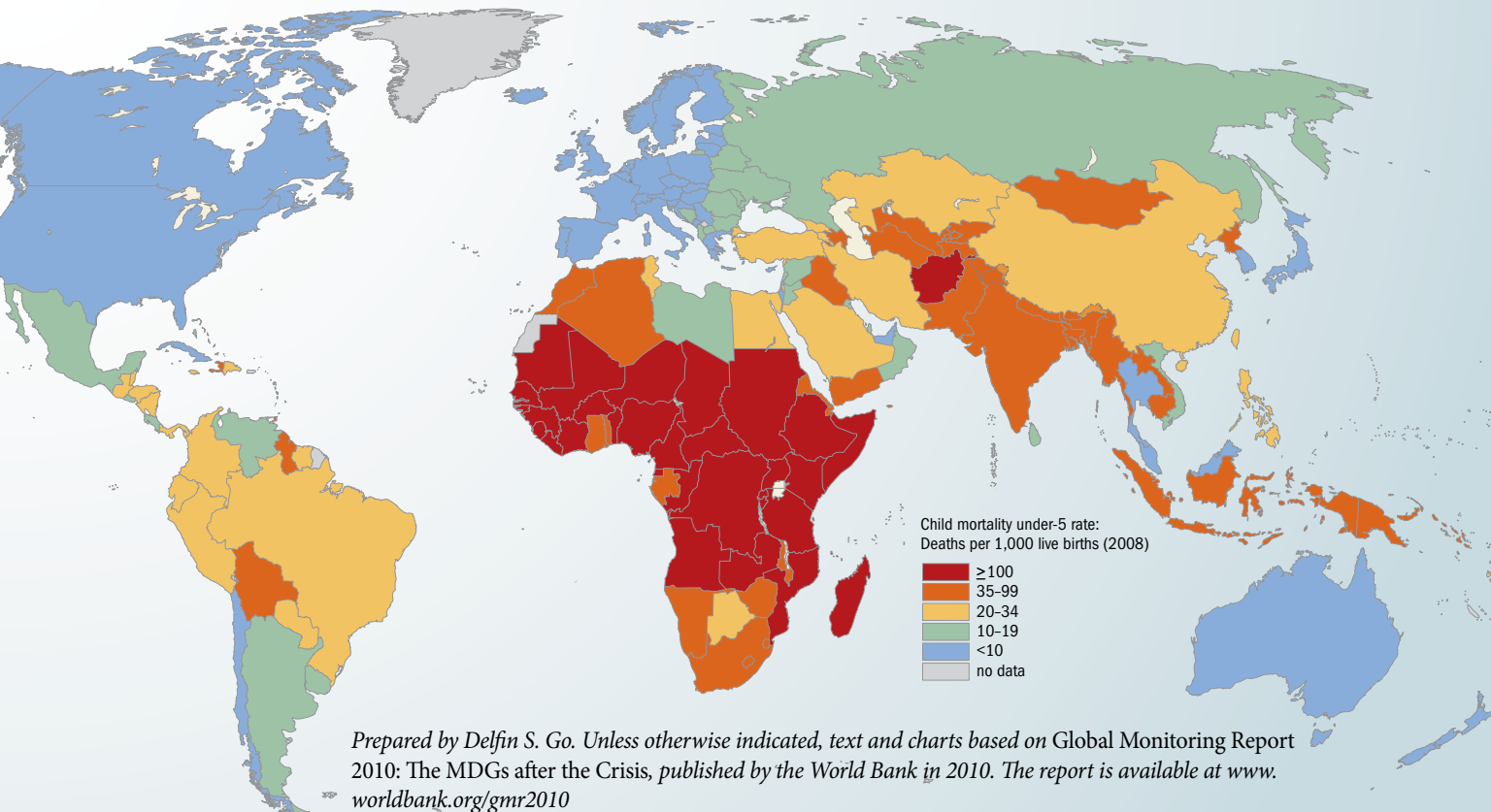
## The long-run effects of slower growth on child mortality are worrisome.

(child mortality under 5, deaths per 1,000 live births)



Note: The *Global Monitoring Report 2010* analyzes risks to the MDGs under three alternative scenarios for GDP growth in developing countries after the financial crisis: a postcrisis trend; a high-growth or precrisis trend; and a low-growth scenario.

**In 2008, about 9 million young children died before their fifth birthday.**



# Growing out of Poverty

**Economic expansion reduces poverty by creating employment opportunities and making anti-poverty programs fiscally feasible**

*Arvind Panagariya*

**T**HERE can be little hope of making a major dent in poverty in low-income countries—many of them in South Asia and Africa—without sustained rapid growth. Rapid growth provides gainful employment to many while generating swiftly rising tax revenues to finance anti-poverty programs. Critics assert that growth barely trickles down to the poor, ignoring the reality that without it, low-income countries would lack fiscal resources for redistribution on a sustained basis.

Poverty alleviation has been a top priority for Indian leaders since the launch of the country's development program in 1950. Yet, for decades, India's anti-poverty programs were grossly underfunded because the country was poor and grew very slowly. That low income and slow growth denied the country's poor both the direct benefits of growth—increased employment opportunities—and the indirect benefits—well funded anti-poverty programs. In contrast, countries such as the Republic of Korea and Taiwan Province of China, which managed to launch their economies into high-growth orbits in the early 1960s, quickly pulled their entire populations out of poverty. More recently, China has moved in the same direction.

In India, it was the accumulation of slow growth for three decades followed by some acceleration that finally began to make a dent in poverty. But it was only after another two to three decades of approximately 6 percent annual growth that the country could afford to introduce large-scale social programs, such as the employment guarantee scheme for rural households and effective rights to education and food security. That these programs remain poorly conceived with possible adverse consequences for growth is, of course, another matter.

While growth is crucial to generating the resources needed to finance large-scale anti-poverty programs, its direct contribution to poverty alleviation should not be underestimated either. In the Republic of Korea and Taiwan Province of China in the 1960s and more recently in China and Vietnam, rapid growth of labor-intensive industry pulled large proportions of agricultural workers into well paid manufacturing jobs. For example, 9.4 percent of the Korean workforce was employed in industry in 1965, compared with 21.6 percent in 1980, while agricultural employment fell from 58.6 percent to 34 percent over the same period. Reflecting rising productivity, average real wages

rose at an annual rate exceeding 10 percent during this period.

Symmetrically, the poor are helped less when policies hinder the growth of labor-intensive industry. For a long time, India limited the production of virtually all labor-intensive products, such as apparel, footwear, toys, and light consumer goods, to enterprises with an investment ceiling of approximately \$100,000 (later revised to \$250,000). This resulted in the proliferation of highly inefficient tiny enterprises with limited ability to exploit the vast world markets in labor-intensive products. Indian toys never made it into the world markets, and the country's share in the U.S. apparel market today is about the same as that of much smaller Bangladesh. Although this practice has been virtually eliminated, stringent labor laws in the formal sector still inhibit the entry of large-scale manufacturing firms in the labor-intensive industries. Growth in India has been led by capital- and skilled-labor-intensive sectors, such as automobiles, auto parts, petroleum refining, steel, information technology, and pharmaceuticals. The result has been an extremely slow shift of India's workforce from agriculture to industry and, therefore, a failure to exploit fully the potential direct impact of growth on poverty reduction. This has



Laundry drying on satellite dish, Branquinha, Brazil.



naturally placed a greater burden on anti-poverty programs. Unfortunately, these programs require the poor to stay where they are to receive benefits, which inhibits migration out of low-productivity employment such as agriculture.

### Measuring inequality

When confronted with the evidence that no country has been able to cut poverty drastically without growth, critics shift the debate to inequality. They argue that even if growth helps reduce poverty, it should be moderated so that it does not increase inequality. It is harder to pin down the critics when it comes to inequality, because there are many alternative measures of it and they need not move in the same direction.

For example, we could look at the relationship of growth to the overall distribution of income across the national population as measured by the Gini coefficient (which ranges from 0 for total equality of income distribution to 1 for total inequality). Alternatively, we could worry about the average income of the top 5 percent of the population relative to the bottom 5 percent. It is possible—indeed, likely under plausible conditions—that even as the former measure shows declining inequality, the latter exhibits the opposite.

Inequality can also be measured in terms of the differences between average urban and rural incomes. We could also be concerned about regional inequality as measured by the differences in per capita incomes across states. Then there is wage inequality between skilled and unskilled workers, and between workers in the formal and informal sectors. The list goes on.

There are good reasons why inequality according to some of these measures would be rising with growth. For example, the ratio of the income of the top 5 percent to the bottom 5 percent of individuals is almost certain to increase in a rapidly growing economy. For sustained rapid growth to occur, a handful of entrepreneurs must create a lot of wealth through legitimate means. These entrepreneurs are bound to end up with a significant proportion of that wealth. After all, it is the prospect of keeping a significant share of the wealth they create that motivates individuals to create wealth in the first place. Similarly, in the early stages of growth, rapid growth often concentrates in a few urban enclaves, which may increase urban-rural as well as regional inequality.

### Relative wealth

Therefore, the real question is not whether rapid growth increases inequality, but whether the form of inequality that citizens find offensive is rising and, if so, what to do about it. Inequality that results in abject poverty for a portion of the population is reprehensible, and the fight against it must take precedence. As long as abject poverty exists, the largest gains in fighting the most offensive forms of inequality are likely to accrue from poverty alleviation. For instance, because the poor are concentrated in rural areas, raising rural incomes through anti-poverty programs and also through worker migration to urban areas would automatically reduce urban-rural inequality. The poor also tend to be concentrated in particular regions, so concentrating anti-poverty programs in those regions will alleviate regional inequality.

Ironically, the measure of inequality on which economists most commonly focus—the Gini coefficient calculated for the entire nation or a specific region—has perhaps the least relevance to an individual citizen's perception of his or her welfare. Try asking a villager whether he knows the direction of movement of the Gini coefficient in his state or country in the previous 10 years, or whether the 10 percent increase in the national or provincial Gini in the past 10 years bothers him. You can be sure that he will not understand the question. On the other hand, as I learned on a recent visit to my ancestral village, the villager will be concerned about why the incomes in his village have not risen as rapidly as those in the city next door. When it comes to inequality, individuals evaluate themselves within their immediate context, often limited to their neighbors, friends, coworkers, and nearby municipalities.

There are two final points:

- First, inequality is certainly more tolerable in a growing economy. When everyone is moving up on an escalator, the fact that some manage to walk or run up on it is less bothersome than if the escalator is stuck, leaving some with no hope of reaching the top.

- Second, if wealth accumulation through legitimate means takes place in an open and competitive environment, inequality can have an inspirational effect. In 1997, when Bill Gates—who had become a multibillionaire within a matter of years—first visited India, he inspired awe among young Indians. But 10 years later, in 2007, when *Forbes* magazine reported as many as 54 billionaires within India, many among the young said to themselves: they are no different than me—if they can do it, I can do it!

Azim Premji—chairman of the information technology multinational Wipro and a self-made billionaire who maintains a modest lifestyle, flying economy class and driving a Toyota—put it this way to a British Broadcasting Corporation correspondent in 2007: “With the attention I got on my wealth, I thought I would have become a source of resentment, but it is just the other way around—it just generates that much more ambition in many people.”

This same inspirational impact also works at the collective level. When Korea, China, and Taiwan Province of China grew rapidly, politicians in India would say, “We cannot do what they do; they are Chinese and we are Indians!” When the Indian regions of Haryana, Maharashtra, and Gujarat grew similarly rapidly, politicians in Bihar and Orissa could no longer make the same excuse. Instead, they were obliged to rethink policies in their states.

Less than five years ago, the Indian press was filled with warnings of impending revolution due to rising regional inequalities. Today, the same space is filled with the stories of how the chief ministers of Bihar and Orissa have turned their states around, delivering growth rates of 8 to 9 percent. ■

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# Inequality Is Untenable

**If policymakers neglect income distribution, the consequences for individuals and society can be grave**

*Rodney Ramcharan*



Pastoralist women in Malkona, Kenya.

**S**HOULD policymakers care about rising inequality? Or should they focus on fostering growth in output—gross domestic product (GDP)—in the belief that a rising tide lifts all boats? Economic theory and a growing body of empirical evidence suggest that inequality should be an important policy concern.

A case in point is the United States: After emerging from recession in 1982, the United States enjoyed one of the longest periods of economic growth in the post-World War II era—marred by only two brief downturns in the early 1990s and 2001. But it was not a shared prosperity. Even as economic activity accelerated during the Internet boom of the 1990s, there were winners and losers. In fact, during the 25 years of boom between 1982 and the onset of the global economic crisis in 2007, inequality rose sharply in the United States. From 1980 to 2004, the aggregate share of after-tax income held by the top 10 percent of earners increased from 7.5 percent to 14 percent (CBO, 2006). But more specific data over a longer time span suggest a starker rise in inequality. In 1976, the top 1 percent of households accounted for just 9 percent of income in the United States; by 2007, that share rose to about 24 percent. Similarly, the Gini index—a common measure of inequality that is 0 if everyone has identical incomes and 1 if a single person has all the income—rose by about 25 percent during the same period.

Inequality is far worse in many countries than it is in the United States. South Africa also enjoyed robust growth from 2000 to 2005, but inequality worsened dramatically. During those five years, South Africa's Gini index increased by about 12 percent to 0.58, making it one of the most unequal countries in the world.

## The toll of risks

High inequality within a society can have significant economic and social costs both for individuals and, more broadly, for the society. Life is risky, and income inequality can determine how individuals manage risk. Business ventures can fail, and poor health can make it difficult to work. In a world with well developed capital markets—easily accessible banking systems and available insurance opportunities—individuals can insure themselves against misfortune, either through their own savings or by purchasing insurance contracts. But, as the recent debate over health care in the United States underscored, access to credit and insurance is imperfect in advanced economies. It is even more limited in less developed economies. Such limited credit access means that in many situations, individuals may have to bear fully most of life's risks—and that responsibility is more pronounced in less developed economies.

Therefore, in highly unequal societies, when an adverse shock such as illness or business failure strikes, a large chunk of the population may not have either the credit access or the personal wealth to replace lost income or smooth the impact of the shock on consumption. Hence, although per capita economic growth, a concept that measures the change in the income of the average person, might be growing, the income gap could continue to widen as relatively more income goes to the top earners. So even when per capita income is growing, the wellbeing of most people could be little changed or worse, even during a boom.

For a society as a whole, the combination of high income inequality and limited credit access can hinder economic development. Education, for example, is generally considered a key

ingredient for economic development. But acquiring an education takes significant time and money, including the income an individual forgoes while in school. Likewise, entrepreneurship is also important for development, but turning a business idea into an actual business often requires a significant up-front investment. Rising inequality, which leaves much of the population unable to undertake these investments, can thus lay the foundation for much weaker growth. Moreover, high levels of inequality might also increase calls from the disadvantaged for a redistribution of income—through potentially inefficient methods of transfer payments or taxes—which could result in lower growth. The pressure for inefficient policies could take even more insidious forms. Rajan (2010), for example, argues that politicians in the United States might have been tempted to support economically risky policies such as the over-expansion of bank credit to help ameliorate the welfare cost of high inequality, thereby paving the way for a damaging credit bust.

### Political consequences

But perhaps the most pernicious cost of inequality is its impact on the political system. In highly unequal societies, a small minority of the population not only controls a significant share of economic resources, but also is likely to organize more effectively and act with a single, coherent voice in the political process. In other words, the rich can more easily act collectively than can poorer segments of society. This combination of large resources and effective collective action can give the rich an outsized voice in the political process, which can engender economic policies that benefit a few at the expense of the majority.

Consider the provision of public goods, such as education. Because education has broad social value, many governments mandate that all children attend school for some period, and fund public education through taxation. But while the less well off disproportionately benefit from public education, the cost is often borne by higher income earners, who often opt out of the public education system but must still pay taxes. Therefore, high levels of inequality that strengthen the political voice of the rich at the expense of those lower down in the income distribution ranks can result in the underfunding of education and other important public goods (Ramcharan, 2010). Indeed, some economists have argued that because education mainly benefits some types of production such as manufacturing, land-owning elites in some countries may have persuaded governments to purposefully withhold funding for public schooling, delaying economic development (Galor, Moav, and Vollrath, 2009).

Financial sector policies are another sphere in which inequality and political capture can delay economic development. The contestability of markets is a sign of a well developed financial system. In such a system, markets are open and competitive and individuals can access credit easily. But potential market entrants can threaten the economic rents and political power of incumbent businesses. So in highly unequal societies, these incumbents, often the economic elite, can more easily use the political process to block financial development. Concentrated interests can, for example, push for the passage of restrictive financial legislation, as seen in

past battles over banking in the United States (see Rajan and Ramcharan, 2010a and 2010b). Or, these groups may press for banks to remain under state control, with lending directed to a handful of connected firms. In either case, the resulting collateral damage to the economy can often be severe as inefficient firms persist and innovation slows. Of course, once an elite group solves the collective action problem and learns to influence the political process, its impact can extend far more broadly. Alston and Ferrie (1993), for example, argue that until the mechanization of cotton production made unskilled agricultural labor redundant in the 1940s, a small group of Southern landowners used their influence in Congress to delay the development of social welfare in the United States to maintain their hold on unskilled labor.

### Societal welfare at stake

In sum, when economic growth is positive, society might be better off when compared with the past. But economic policies that simply focus on average growth rates could be dangerously naïve, especially in countries with high existing levels of inequality. The costs of high inequality to the wellbeing of society can be very high, especially when credit markets are underdeveloped, and can also limit growth-enhancing physical and human capital investments and increase calls for possibly inefficient redistribution. But high inequality also has the potential to alter the political process, giving the rich a relatively greater voice than the less homogenous majority. This imbalance of power can produce policies and economic institutions that benefit a few at the expense of the broader society. These policies can in turn further skew the income distribution and ossify the political system, leading to even graver political and economic consequences in the long run. ■

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Job seekers at career fair in New York, United States.

# How Grim a Fiscal Future?

Mark Horton

**For most advanced economies, both the near term and the longer term are tight, but there are ways to ease budget pressures**

**T**HE abrupt deterioration of fiscal positions in advanced economies, emerging markets in central and eastern Europe, and elsewhere has been a key consequence of the global financial crisis. These large budget deficits have caused a sharp rise in public debt in advanced economies that likely will continue through the next five years, pushing government debt well above levels seen at any time since the end of World War II (see chart).

Sharply elevated deficit and debt levels may well place pressure on interest rates and undermine economic growth in these economies and could spill over to other emerging and developing economies. Financial markets have become increasingly unsettled both by the surge in debt and by uncertainties about future taxation and expenditure policies, particularly in Europe. To preserve the recovery, markets must be reassured. In the short run, policymakers face a crucial dilemma. If they consolidate too soon—that is, they take actions to reduce budget deficits in the near term—they could kill the recovery. But inaction or policy mistakes could lead to concerns about further debt accumulation and ultimately reignite a crisis.

Those are the short-run problems. The longer-run issues may be even more difficult. A major consolidation—reining in spending and increasing revenue—will be needed to restore fiscal positions and to reduce debt to more prudent levels to ease pressures on interest rates and growth. The need for fiscal adjustment is particularly acute in advanced economies, but consolidation is also needed for many emerging and developing economies. The path will be steeper in many countries where intense spending pressures will arise from aging populations (see “A Hidden Fiscal Crisis,” in this issue of *F&D*).

## Hit hard by the crisis

Budget deficits worldwide have grown dramatically as a result of the global financial crisis. The crisis hammered economic activity in advanced economies and devastated trade and financial flows to emerging and developing economies (although capital inflows have recovered in some regions and emerging market countries). In the mid-2000s, some country authorities reacted to exceptionally buoyant tax revenues by cutting taxes or by increasing spending in sensitive categories, such as wages and transfer payments, includ-

ing pensions. The falloff in economic activity during the crisis caused tax revenues to decline markedly, and many countries also increased spending to shore up their economies. In the advanced economies, budget deficits rose, on average, about 8 percentage points, from 1 percent of gross domestic product (GDP) in 2007 to nearly 9 percent of GDP in 2009. Deficits exceeded 10 percent of GDP in several countries—Greece, Iceland, Ireland, Japan, Spain, the United Kingdom, and the United States. Advanced economy fiscal balances are likely to worsen further in 2010, driven by continued weaknesses in revenue collections and stepped-up stimulus in Germany and the United States (and higher U.S. defense spending).

Fiscal positions should begin to improve in 2011, as the recovery continues and crisis-related stimulus is withdrawn. Beyond the withdrawal of stimulus, other adjustment measures are planned in most countries. However, on average, budget deficits in advanced economies will remain substantial—5 percent of GDP or higher through 2015—unless further measures are taken. The persistence of sizable deficits reflects, in large part, sustained revenue losses from the steep decline of potential GDP during the crisis—with the financial and real estate sectors taking a permanent hit. Higher spending on health, pensions, and interest payments is another factor underlying the high deficits. The result will be a nearly 40 percentage-point rise in advanced economy public debt ratios during 2007–15, two-thirds of which is linked to the output collapse and the hit on tax revenues.

### Doing better than advanced economies

The impact of the crisis on public finances in emerging and developing economies has been more muted, except for economies in central and eastern Europe. For emerging economies as a whole, deficits widened with the crisis by 5 percentage points of GDP from 2007 to 2009. In Asia, the deterioration was just over 4 percentage points, on average; in Latin America, it was 2½ percentage points. In developing economies, deficit ratios fared even better than those in most emerging markets—worsening by just 2 percentage points during the

crisis. On average, the crisis-spawned increase in deficit ratios should begin to reverse this year. In some regions the improvement will be traced to the strong recovery of activity; in others, particularly eastern Europe, it will be dictated by pressure from financial markets to reduce the deficit.

Like advanced economies, many emerging and some developing economies suffered revenue losses and provided fiscal stimulus, but emerging market and developing countries in general entered the crisis in better positions than did their advanced country counterparts. On the whole, emerging market and developing economies enjoyed sustained favorable economic performance and institutional improvements that contributed to deficit and debt reduction from the early 2000s, in contrast to advanced economies where debt ratios increased steadily. Developing countries also benefited from debt relief and lower interest payments. This divergence from advanced economies is expected to continue. Because emerging and developing economies have more favorable demographics and better growth prospects, their fiscal positions are expected to recover from the crisis relatively quickly, with debt paths stabilizing and resuming precrisis declining trends. However, the potential remains for renewed turmoil in advanced economies that would spill over to the rest of the world—this time arising not from financial excess but from fiscal stress.

Over the next few years, governments in many advanced economies will have exceptionally high financing needs to cover big budget deficits and to refinance maturing debt. Gross borrowing will reach 20 percent of GDP this year in Canada, France, Italy, the United Kingdom, and the United States. Financing needs have also reached that level for a handful of European countries that have been the focus of intense financial market scrutiny—Greece, Ireland, Portugal, and Spain. By contrast, only a few emerging market countries have financing needs of a similar magnitude.

With elevated financing needs and market concerns about future policies, average maturities on government securities in advanced economies have shortened and spreads have risen sharply in some countries—including Greece, Portugal, Ireland, and Spain—raising borrowing costs and adding to fiscal strain. Greece has called on exceptionally large financial support from the IMF, European Union (EU) institutions, and EU member countries to support an aggressive fiscal consolidation plan, while a number of other European countries have announced adjustment measures.

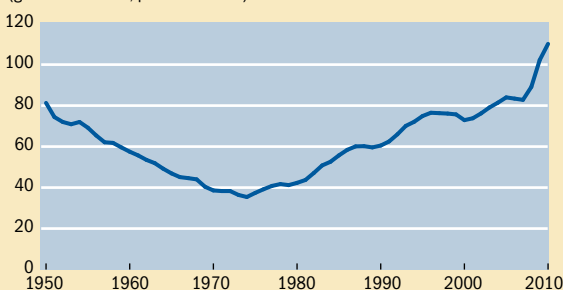
### Facing a tighter spending environment

By 2015, gross public debt ratios in advanced economies are projected to reach an average of 110 percent of GDP (when weighted by economy size)—with the United States joining Belgium, Greece, Italy, and Japan as advanced economies with triple-digit debt levels. In some advanced economies, debt levels will still be rising in 2015, and in only a handful—Australia and Korea, plus a few smaller ones in Scandinavia and central Europe—will gross debt levels stay below 60 percent of GDP, the approximate median (unweighted) level that prevailed for advanced economies before the crisis.

#### Rising debt

As a percent of gross domestic product, government debt in major advanced economies has risen to levels not seen since the end of World War II.

(government debt, percent of GDP)



Source: Government debt database, IMF Fiscal Affairs Department.

Note: Weighted by purchasing power parity. Advanced economies include Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States.

Reducing public debt to more prudent levels—say to the 60 percent precrisis median—will require a sizable and sustained belt-tightening in many advanced economies. Economists tend to focus on the controllable deficit—the so-called primary deficit, which excludes interest expense. They are also interested in the underlying fiscal position, adjusted for the effects of the business cycle on revenues and spending. IMF staff projections suggest that, on average, if the cyclically adjusted primary balance improves by nearly 9 percentage points of GDP over the next 10 years and is then kept unchanged for another 10 years, debt levels will return to 60 percent of GDP by 2030. Primary deficits are expected to average 4½ to 5 percent of GDP in 2010. The adjustment will involve turning it into a sustained surplus of 4 percent of GDP from 2020 onward. Adjustment requirements vary; they are driven by starting deficit and debt levels. This consolidation would be on top of any automatic gains from higher revenues and lower spending on unemployment benefits and other social safety net programs that will come with recovery from the crisis.

### Those most in need of tightening

As of July 2010, the largest consolidations among advanced economies to reach the 60 percent debt level by 2030 appear to be needed in Greece (17 percent of GDP, 7½ percentage points of which are planned for this year) and Japan (13 percent of GDP). The United States also faces a big adjustment need—nearly 11 percentage points. This is more than twice the consolidation needed in Belgium or Italy, two countries long saddled with high public debt.

Why is the necessary fiscal adjustment so large in the United States? A number of factors are at play:

- the more significant impact of the crisis on output and revenues in the United States than in many other countries,
- the major U.S. fiscal stimulus provided since 2008 and continuing in 2010,
- stepped-up U.S. social spending (e.g., unemployment benefits and food stamps) linked to the crisis, and
- other U.S. spending pressures, including higher defense outlays and continuing and accelerating spending on health and social security.

These factors have combined to leave the United States with a very large *underlying primary deficit* (the deficit adjusted to take into account changes in revenue and spending that stem from the business cycle) of 6½ percent of GDP. The underlying primary deficit in Belgium is just 1 percent of GDP and in Italy there is a surplus of 1 percent of GDP. These high-debt countries provided less stimulus.

At the other end of the belt-tightening spectrum, some advanced economies already have debt levels well below the 60 percent threshold—including Australia, Denmark, Finland, Hong Kong SAR, New Zealand, Norway, Sweden, and Switzerland. Several of these countries also have substantial government assets that could be used to repay debt, if needed.

### Consolidation outside advanced economies

For emerging economies, the challenge is less daunting. For them, debt levels viewed as prudent are lower than in

advanced economies—possibly 40 percent of GDP—but many are already there. The emerging economy average is 38 percent of GDP. But several important countries—Brazil, Hungary, India, Malaysia, Pakistan, Poland, and Thailand among them—have debt above 40 percent. A reduction in the structural primary balance of about 3 percentage points of GDP on average must be reached by 2020, and maintained until 2030, to bring debt levels below 40 percent of GDP. Moreover, emerging market circumstances vary widely. Some with relatively high debt levels, such as Brazil and Hungary, also have sizable primary surpluses, limiting their adjustment needs if they can maintain the surpluses. Others, such as India and South Africa, have benefited from relatively deep domestic sources of financing. Some Eastern European countries have been hard hit by the crisis—Latvia, Lithuania, and Poland—while others, including Bulgaria and Estonia, entered the crisis with lower debt levels and stronger fiscal positions.

Developing countries also confronted the crisis with sharply reduced deficit and debt levels than they had at the start of the decade. For a group of 43 developing countries, debt levels dropped, on average, from over 80 percent of GDP in 2000 to under 40 percent of GDP in 2007. The improvement was helped by debt relief and by improved fiscal positions, as deficits were cut from 4 percent of GDP in 2000 to less than 2 percent, on average, in 2005–07. Stronger fiscal positions and lower debt created room for an active response to the crisis, which helped lessen the impact and duration of the downturn compared with past crises. The IMF helped, providing \$5 billion of financing to sub-Saharan Africa in 2009, five times more than in 2008. The allocation of new Special Drawing Rights to these countries in 2009 gave them an additional \$21 billion in reserve assets.

Developing country budget deficits fell back to an average of 4 percent of GDP as a result of the crisis, reversing the gains made over the 2000s. However, as global growth is restored and countercyclical fiscal support is withdrawn, budget deficits should decline gradually to 2½ percent of GDP by 2015, with debt stabilizing and then trending down. For some developing countries, however, improvements in fiscal balances brought about by the restoration of growth will not be sufficient to stabilize public debt levels and further adjustment—or sustained mobilization of highly concessional donor support or grants—will be needed. In sub-Saharan Africa, for example, this includes a handful of countries in west Africa (Burkina Faso, Mali, and Niger) and a few natural-resource-producing countries (Botswana, Chad, and Nigeria), whose prospects could change rapidly should international commodity prices increase.

Problems in advanced economies, however, could threaten this scenario. Developing country budgets continue to receive sizable grants (4 percent of GDP, on average) and concessional financing from advanced countries. If cash-strapped advanced economies reduce support—and growth slows and interest rates rise—developing economy debt could resume a sharply upward trend and either force cuts in spending or threaten the gains made in the precrisis period.

## Aging populations add to the adjustment burden

Expected spending pressure from aging populations makes adjustment in advanced economies more complex. On average, spending on health and pensions is projected to increase by 5 percentage points of GDP or more over the next 20 years. This would continue the trend of age-related spending increases of the past few decades, with health spending accounting for most of the change. Key drivers have been new, more expensive diagnostic and treatment technology; aging populations, which need more health care; and higher incomes, which result in greater demand for health care.

Belgium, Finland, Germany, the Netherlands, Russia, Slovenia, and the United States face aging-related spending pressures in excess of 5 percentage points of GDP over the next 20 years. France, Greece, Ireland, Spain, the United States, and the United Kingdom all confront difficult dual problems: high adjustment requirements of 8 percentage points or more to reduce public debt to precrisis levels and additional health and pension spending pressures of 4 percent of GDP or more.

Confronted with the prospect of higher taxes and massive spending cuts, country authorities might naturally reach for a less demanding adjustment target and borrow the difference. After all, they might reason, Italy and Japan have lived with higher debt levels for many years. But high debt levels would ultimately translate to higher interest rates and slow growth, even assuming the debt can be easily rolled over. IMF estimates suggest that the nearly 40 percentage-point rise in the debt-to-GDP ratio that has occurred could lead to an increase in interest rates of about 2 percentage points over the next several years, with adverse consequences for emerging and developing economies. Further estimates suggest that the 40 percentage-point increase in debt could lead to a slowdown of growth by a half to a full percentage point per year. Indeed, if governments fail to adjust, the combination of higher interest rates and lower growth would increase the required consolidation effort at the same time that age-related spending was growing. Of course, failure to roll over the debt would lead to more dire consequences.

## Approaching adjustment

Although the global economy is recovering, the pace varies across regions and downside risks persist. Recent adverse market developments have mostly reflected fiscal uncertainties. To preserve the recovery, authorities in many advanced economies should reassure markets by communicating concrete and ambitious fiscal consolidation strategies with a visible anchor, in terms of an average adjustment pace or a fiscal target to be achieved over the medium term.

Advanced economies are planning an adjustment of about 1¼ percentage points of GDP in 2011. This seems broadly adequate, although some countries must commence tightening already this year because of market concerns. Fiscal adjustment should be accompanied by reform of goods, labor, and financial markets to boost economic growth—including reducing barriers to competition in retail distribution and network industries, such as tele-

communications; reforming employment insurance; and decentralizing wage bargaining. Strong growth is key to successful adjustment.

What should the consolidation for advanced economies look like? The adjustment should focus on spending cuts, given already high tax burdens in many countries, although tax increases will be necessary for countries with lower tax rates and larger adjustments. There is likely to be substantial potential to eliminate exemptions from the value-added tax (VAT) in many countries—or to raise the VAT rate in Japan and to introduce such a tax in the United States—and to increase significantly revenues from taxation of tobacco, alcohol, and carbon emissions.

Expenditure policy could aim to freeze per capita spending outside of health and pensions, with a focus on total government wages (the “wage bill”) and transfers as well as cuts in agriculture and energy subsidies. Spending cuts will not be easy and will involve touching politically sensitive areas, such as entitlement spending and civil service wages in some countries, and cuts in military spending in others. Measures to ease pension-related spending pressures should focus on raising statutory retirement ages (somewhat faster than rising life expectancy, to generate savings), increasing contributions, and reducing benefits. A range of approaches could be taken to target health spending pressures, including improving information technology and reimbursement mechanisms to improve efficiency and tighten provision of services, increasing cost sharing, reducing subsidies for private health insurance, and strengthening the evaluation of the cost-effectiveness of medical treatments and technologies.

Emerging and developing economies face a less daunting adjustment path, but there are also significant risks, particularly from financial market turbulence and higher interest rates in advanced countries. Emerging and developing economies should ensure that crisis-related fiscal stimulus does not become permanent, and where necessary, take further measures to promote budget flexibility and ensure that debt is on a downward path. Fiscal consolidation may also moderate the impact of capital inflows and appreciation pressures on local currencies. Some emerging economies like China plan to spend more on health and education (see “Building a Social Safety Net” in this issue of *F&D*). Of course, emerging market and developing countries with relatively large initial primary deficits or elevated debt levels must do more. In contrast to advanced economies, there may be greater potential for emerging and developing economies to raise revenues—both by improving tax instruments and by strengthening revenue administrations. ■

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*This article draws on two IMF publications: “Fiscal Monitor: Navigating the Fiscal Challenges Ahead” (May 2010) and “From Stimulus to Consolidation: Revenue and Expenditure Policies in Advanced and Emerging Economies” (April 2010).*



# A Hidden Fiscal Crisis

**A noted U.S. economist says debt figures seriously understate long-term budget problems in the United States**

*Laurence J. Kotlikoff*

this borrowing (minus a future tax if the benefits fall short of principal plus interest). This alternative—but no less natural—language describes the same underlying reality: taxes are much lower and the projected 2010 deficit is 15 percent, not 9 percent, of GDP.

The Chilean pension “reform” of the early 1980s illustrates the arbitrary nature of fiscal labels. The reform funneled receipts, which had been called payroll taxes, into private pension funds, which the government then borrowed to cover pension payments. The same money was still flowing from workers to retirees, but was called borrowing.

If the standard debt-to-GDP ratio fails to measure a country’s long-term fiscal prospects, what does? The answer is the *fiscal gap*, whose value is the same no matter which labeling convention a country adopts. The size of the U.S. fiscal gap, as recently measured by the IMF (IMF, 2010) indicates that the United States is in terrible fiscal shape.

The fiscal gap measures how close a government is to satisfying its *inter-temporal budget constraint*. That constraint requires that the present value

**E**VEN as the United States experiences continuing fallout from a terrible financial crisis, a more alarming fiscal problem looms. The world’s largest economy faces a daunting combination of high and rising costs for health care and pension benefits and constrained sources of revenue that will put enormous pressure on its fiscal soundness.

So far, the markets seem to be focusing on U.S. official government debt relative to its gross domestic product (GDP). That number stands at 60 percent, roughly half that, say, of beleaguered Greece. Consequently, the financial wolves are circling Greece, not the United States—driving up yields on Greek securities and driving down yields on U.S. treasury securities.

But the debt-to-GDP ratio is not a useful guide to a country’s true fiscal position. Because of something economists call the *labeling problem*, every dollar a government takes in and pays out can be labeled in an economically arbitrary manner. So what is reported as the size of a deficit or surplus is independent of a country’s actual underlying fiscal policy (see box).

## All in a name

For example, take payroll taxes targeted to pay future pension and health care benefits in the United States. These receipts, now labeled taxes, could just as well be labeled borrowing. And the future benefits could be called repayment (with interest) on

of government payments—the purchase of goods and services, transfer payments, and principal and interest payments on officially reported debt—not exceed the present value of its receipts, such as taxes and interest earned on government assets. In other words, a government’s spending over the long term should not exceed the revenue it receives.

The fiscal gap is the difference between the present value of government payments and receipts. It measures the extent to which current policy violates the government’s intertemporal budget. If the intertemporal budget constraint is not satisfied, current policy is unsustainable. And if the present value of payments far exceeds the present value of receipts, major and immediate policy changes are needed to prevent future generations from experiencing a much different, and less pleasant, fiscal and economic environment than today’s generations. Short-term fiscal policy cannot be assessed independently from long-term policy, because labeling can make the short-run fiscal policy appear to be anything labelers like. Moreover, fiscal policy is a zero sum game being played across all current and future generations. Bills not paid by current generations will, of necessity, have to be covered by future generations.

## A large fiscal gap

How large is the U.S. fiscal gap? According to the recent IMF report, “The U.S. fiscal gap associated with today’s federal fis-



cal policy is huge for plausible discount rates,” which are rates applied to future receipts or payments to determine their present value. “Closing the fiscal gap requires a permanent annual fiscal adjustment equal to about 14 percent of U.S. GDP?”

Data from the U.S. Congressional Budget Office (CBO) long-term alternative fiscal scenario confirm the IMF’s findings. Based on the CBO data, closing the fiscal gap requires an annual fiscal adjustment of roughly 12 percent of GDP. This is based on a 3 percent real discount rate. Using a 6 percent real discount rate lowers this figure to about 8 percent of GDP. The comparable figures for Greece are slightly lower than those for the United States, according to unpublished calculations by Stephan Moog, Christian Hagist, and Bernd Raffelheuschen of the University of Freiburg.

What would it take to raise 8 percent, let alone 12 or 14 percent, of GDP? In 2009, federal personal income taxes totaled 7.4 percent of GDP in the United States. To achieve present value fiscal balance would require a change in the present value of the government’s net cash flow equivalent to at least an immediate and permanent doubling of income taxes.

The CBO forecast actually is more pessimistic than the IMF’s. That’s because the CBO already builds in a 50 percent increase in personal income tax payments as a share of GDP. In addition, the CBO assumes that growth in the benefit levels of Medicare and Medicaid—government programs that provide health care to the elderly and poor, respectively—will fall by about one-third in the short term and two-thirds in the long term. Moreover, both CBO scenarios are implausible.

### What’s in a name?

The labeling problem attached to government deficits is a matter of theory, not simply practice. Consider the equations of any economic model with rational agents—that is, agents who pay no attention to language and instead make decisions based on fundamentals. Whether these equations are talked about by French, English, or Chinese speakers will not affect the model’s behavior, which is dictated by the math.

Attaching particular fiscal labels to a model’s variables is simply a matter of choosing an internally consistent language to discuss the equations. But each internally consistent labeling choice produces a different measure of *the debt* and its changes over time—*the deficit*.

In a recent paper, Jerry Green and I referred to the labeling problem as “the general relativity of fiscal language,” to emphasize that in economics, as in physics, certain concepts aren’t well defined (see Green and Kotlikoff, 2009). Time and distance aren’t well defined in physics, and government debt and the deficit aren’t well defined in economics. Nor for that matter are taxes, transfer payments, private net wealth, disposable income, private savings, and personal savings.

All deficit accounting, then, is inherently arbitrary. Substituting one set of arbitrary fiscal labels for another will not tell us anything worth knowing if we continue to act as if government debt measures a fiscal fundamental rather than what it really does: reflect our nomenclature.

Take the CBO’s projected rise in income taxes relative to GDP. This projection reflects primarily the automatic increase in taxes that occurs because the income tax is indexed to prices, not real wages, and the CBO assumes no adjustment for real wage growth in the graduated tax brackets. Under this projection, as real wages rise, workers move into higher income-tax brackets. It seems politically unlikely that the U.S. Congress would allow this to continue for even a decade, which is what the CBO assumes.

Spending projections appear optimistic too. There is no concrete policy in place to keep a lid on growth in Medicare and Medicaid benefit levels. Since 1970, real federal spending per person on Medicare and Medicaid has grown at an average annual rate of 6.4 percent, whereas real per capita GDP has grown at an annual rate of only 1.8 percent. The CBO assumes a significant slowdown in the nondemographic component of this differential. Given the 40-year failure to control growth in Medicare and Medicaid benefits per beneficiary, the CBO’s assumption seems optimistic.

Moreover, there is a significant possibility that employer-based health insurance will unravel, which is not envisaged in the CBO projections. The new health care reform law passed this year includes large subsidies for low-income workers who seek to buy insurance coverage under a health insurance exchange, and imposes relatively minor penalties on employers who stop offering coverage. The availability of Medicare has effectively eliminated private provision of basic health insurance coverage for the elderly. Given the mix of incentives for employers and low-income employees, we should expect the same ultimate result for low-income workers.

Were the CBO to forecast without its strong assumptions, the U.S. fiscal gap in relationship to GDP would be substantially larger than that of Greece—and of most, if not all, the advanced economies that are members of the Organization for Economic Cooperation and Development. And unlike in Greece, where the government has just publicly debated and legislated major, if still insufficient, fiscal reforms, the CBO’s assumptions about how things will evolve have yet to be publicly discussed or, indeed, even contemplated in U.S. political discourse.

### Social security

The government-sponsored pay-as-you-go retirement plan, Social Security, is also a major contributor to the overall U.S. fiscal gap. Social Security trustees estimate that when calculated to infinity (the infinite horizon) the retirement system’s fiscal gap is now \$16.1 trillion—an estimate more than 2 trillion dollars higher than the 2008 projection—largely because of the recession.

The long run is very long and highly uncertain. If we are serious about assessing the current value of the government’s intertemporal budget, we must properly discount (adjust for future inflation) the government’s uncertain net cash flows using the appropriate risk-adjusted discount factors (see Lucas and McDonald, 2006; Geanakoplos and Zeldes, 2007; and Blocker, Kotlikoff, and Ross, 2008). Because economists don’t know how to make proper risk-adjusted calculations

of future net cash flows, they measure infinite-horizon fiscal gaps using various discount rates.

Unfortunately, in the case of the United States, applying even a high discount rate does not change the underlying message that America's fiscal gap is massive. It is so massive that closing it appears impossible without immediate and radical reforms to its health care, tax, and Social Security systems as well as military and other discretionary spending cuts.

### Taking stock

How did the United States reach its current state of what could effectively be considered bankruptcy? It spent six decades transferring ever more resources from the young to the elderly, under a variety of different programs described with a variety of labels. Many policies across many administrations from Eisenhower's to Obama's—cutting taxes, growing Social Security, enacting Medicare and Medicaid, spending to combat recession, and financing wars—added to the nation's financial problems.

That is not to say that the policies financed were not worthwhile. Many were. But each left the fiscal gap larger than it had been and redistributed massive sums from future generations to current generations.

The implied lifetime net tax burden on America's children, if they are forced to cover the fiscal gap on their own, is far beyond their capacity to pay.

The United States is hardly alone. Europe and Japan are also reaching the tipping point thanks to decades-long policies of passing the generational buck (see "The Long Run Is Near," in this issue of *F&D*). And China, with its own rapidly aging population, is increasingly following the Western model of taking from the young and giving to the old (see "Building a Social Safety Net," also in this issue).

But the U.S. situation may be worse than that of other advanced economies—not because of demographics, but because it has been less able to control growth in the benefit levels of government health care programs. Federal Medicare and Medicaid spending that grows for 40 years at a rate that is 4.6 percentage points higher than per capita GDP growth is a prescription for a fiscal nightmare—especially given the impending retirement of baby boomers and the potential for subsidies to lower-income people who buy insurance policies on health exchanges to become another huge unfunded health care entitlement.

### Meltdown?

The potential for the U.S. fiscal crisis to kick off a global financial meltdown is significant. The market is now betting against small countries, which appear fiscally weakest. But appearances, when based on official debt numbers, are misleading.

Once the world catches on to the true extent of U.S. fiscal insolvency, the ability of the United States to continue to finance its government borrowing could come to a halt. If, when, and how fast are the operative questions. The United States is not Greece—or any other country, for that matter. Because it issues the world's reserve currency, it undoubtedly will be able to borrow longer and at lower rates than

most countries. But at some point that exorbitant privilege (as former French President Valéry Giscard d'Estaing called it nearly five decades ago, when he was finance minister) is bound to end.

What will happen then? One possibility, of course, is that the U.S. government will have come to grips with its fiscal problems.

Another is that the government will print enormous quantities of money to cover its bills—with concomitant high inflation, declining confidence in banks and money market funds, and a serious test for deposit insurance. This scenario is extreme, but not improbable. Countries that cannot pay their bills end up making money by printing money. And because the United States has explicitly or implicitly pledged to cover so many private sector financial liabilities—from bank deposits, to money market funds, to bank debt, to corporate bonds, to recreational vehicle loans—it has created a situation of *multiple equilibria*.

In multiple equilibria, an economy can flip from one position to another, seemingly at random. Consider an unlikely and extreme possibility, but one that would have devastating implications for the real economy:

A minor trade dispute between the United States and China could make some people think that other people are going to sell U.S. treasury bonds. That belief, coupled with major concern about inflation, could lead to a sell-off of government bonds that causes the public to withdraw their bank deposits and buy durable goods (which will retain their value). The run on the banks could trigger a run on money market funds and insurance company reserves (as policy holders cash in the surrender value of their policies). In a short period of time, the Federal Reserve would have to print trillions of dollars to cover its explicit and implicit guarantees. All that new money could produce strong inflation, perhaps hyperinflation. Even though at the outset there might have been no serious inflation problem, the self-fulfilling aspects of multiple equilibria can take over and cause this outcome. Deposit insurance would be little help in preventing bank runs because it covers the nominal value of deposits and does not guarantee the purchasing power of those funds—which would be sharply eroded by heavy inflation.

There are other less apocalyptic, perhaps more plausible, but still quite unpleasant, scenarios that could result from multiple equilibria.

### Getting to economic safety

The news isn't all bad: it is not too late to fix the interconnected U.S. fiscal and financial problems. Let me briefly outline four proposals (see Kotlikoff, 2010) that together would contain costs and raise revenue:

- Require all incorporated financial intermediaries (including banks, insurance companies, and hedge funds) to operate strictly as mutual fund companies that take in and invest money in return for ownership shares. Share values depend on investments, with only cash mutual funds backed to the buck. That way, no mutual fund would ever fail, which would avoid all the attendant costs. Bank runs,

including those triggered by fiscal problems, would be a thing of the past. A single regulator—the Federal Financial Authority—would oversee full disclosure, verification, and rating of the mutual fund securities. This financial fix makes Wall Street safe for Main Street and limits the potential for financial meltdown.

- Give every American an annual voucher whose value depends on the recipient's preexisting medical conditions. Recipients would buy a basic health plan sold by insurers who cannot turn anyone down. What's covered by the basic plan is determined by an independent panel of doctors subject to a budget constraint—the cost of all vouchers cannot exceed 10 percent of GDP.

- Establish government-sponsored personal retirement accounts, with government-matched contributions for the poor and unemployed and those with disabilities to allow the system to be as progressive as possible. All contributions would be invested in a global index fund, so all participants receive the same rate of return. The government guarantees a zero real return on contributions (that is, no losses). Between ages 57 and 67, a worker's balances would gradually be swapped for inflation-indexed annuities sold by the government.

- Replace federal personal, corporate, payroll, estate, and gift taxes with an 18 percent tax on *all consumption*, including the housing services homeowners consume (imputed rent). A monthly per person rebate would assure progressivity.

These proposals would go a long way toward eliminating America's fiscal gap, ensuring financial stability, and giving the country the confidence to get back to work. ■

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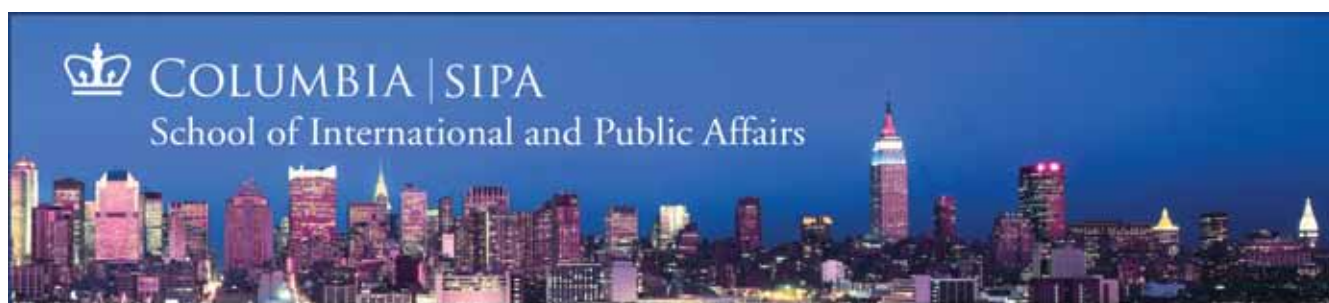
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# Building a Social Safety Net

**China embarks on an effort to improve both pensions and health care in the world's most populous nation**

*Steve Barnett and Nigel Chalk*

The global financial crisis had many casualties. Banks failed. Markets seized. Recessions ensued. Out of this chaos, however, has emerged one potentially positive development: a concerted effort by China to strengthen its social safety net.

When the global economy collapsed and external demand for Chinese products dried up, especially from advanced economies, the Chinese government looked inward for domestic sources of demand. It put in place a major program of fiscal expansion with a heavy emphasis on infrastructure spending. But a not insignificant amount came from policies aimed at improving China's pension system and putting in place a better, more effective health care system aimed at covering all of the Chinese people. China's recent steps were but the beginning of its renewed efforts to put in place a social safety net that lessens income inequality and improves the livelihoods of well over a billion people. China's reforms come at a time when advanced economies, including the United States and much of Europe, are grappling with their long-term pension and health care costs.

## Reducing the need for Chinese saving

Just about everyone in China saves (see Chart 1). Corporate saving is high. The government is a net saver. And households save. Not only do households save, it is the young and the elderly who are the biggest savers—age groups that, by contrast, are usually the least prone to saving in advanced economies (see Chart 2). A large part of the saving by older Chinese has been linked to a strong precautionary motive, borne out of concern that, given the long lifespan of the average Chinese, either living costs or health care costs may exhaust a person's means and leave them destitute in their old age. Even younger households face the risk of a costly catastrophic or chronic illness. Because the market for private health insurance and private annuities is underdeveloped, it is very difficult for Chinese citizens to insure against such individual-specific risks. Households, therefore, have a strong incentive to save more than they need to, in order to self-insure. A stronger social insurance system would reduce the need for this type of precautionary saving and thereby boost private consumption.

The boost to consumption is in many respects a beneficial by-product to reforms that are justified in their own right to protect the poor and improve livelihoods. Moreover, it will also have positive spillovers to the rest of the world: some of the increase in China's consumption will be from imports, which will help reduce global imbalances.

## Improving a pension system

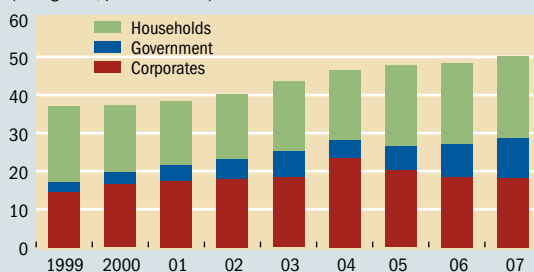
China has struggled for years with a fragmented and complex pension system that neither covers a large share of the population nor offers a convincing support system for those who are covered. There are significant differences in the pension systems across provinces; between rural, migrant, and urban residents; and even across professions. Transitioning from this tangled web to a more coherent system has long been a challenge. However, in recent years, there has been significant progress.

Most important, in the midst of the global crisis, the government rolled out a new rural pension scheme that already has more than 55 million enrollees and by the end of this year will cover some 23 percent of rural counties. The program provides a basic monthly pension of between 60 and 300 renminbi, depending on the region and size of an individual's

Chart 1  
**Socketing it away**

Between 1999 and 2007, total savings in China grew from less than 40 percent of gross domestic product to more than 50 percent.

(savings rate, percent of GDP)



Source: IMF staff estimates.

account. Participation is voluntary and requires individuals to make an annual contribution typically in the range of 100 to 500 renminbi. Additional funding comes from a mix of central, local, and provincial governments, but the central government covers most of the costs in the lower-income western and interior provinces. This reform will help support consumption by reducing precautionary saving and, even more directly, by boosting the income of those who enroll—already more than 16 million people have claimed benefits.

At the same time that the scope of the basic pension has been expanded, efforts are also under way to improve the workings of the existing urban pensions. The government has introduced a program to allow these pensions to be portable across provinces and for contributions in one province to count as credit toward retirement, even if the person subsequently moves to a different province. These reforms should help facilitate labor mobility. In addition, many provinces are working to increase risk pooling by aggregating the pension fund contributions and outlays across the whole province.

While the changes introduced in the wake of the global crisis go a long way toward improving the existing system, there is still much to be done. In particular, efforts can be made to make pension schemes more uniform across the country to facilitate portability and ensure equality across geographic areas. In addition, simplification of the current system of provincial, national, and occupational pension schemes is warranted. The authorities should also work toward the ultimate goal of national-level pooling of risk to ensure that the Chinese pension system evolves into a truly effective safety net that ensures a minimum standard of living for all China's elderly and, in doing so, lessens their motivation for high levels of precautionary savings. At the same time, China also has the opportunity to learn from the missteps of the advanced economies and ensure that the short- and long-run fiscal costs of pension reform are manageable.

### Expanding health coverage

In addition to changes social security, in 2009 China announced a comprehensive, three-year reform of its health

care system with the aim of ensuring reliable and affordable health care for the whole population by 2020. The principal goals are to:

- *Make health care more equitable* by substantially building up health care services in rural areas, broadening access to health insurance schemes, and reducing households' copayments. Rural households, for example, now get reimbursed for 55 percent of expenses, which shows both the substantial progress in recent years—the rate was less than 30 percent in 2004—and the scope for further improvement.
- *Reduce costs* through a range of programs to revamp medicine and medical services pricing and to remove incentives for overuse of medical procedures and drugs. Over time, the system would move away from fees for individual medical services toward lump sum payments to providers that are priced according to illness.
- *Increase risk pooling* by increased participation in health insurance plans and greater portability of insurance programs.
- *Improve quality* by increasing training and research; improving the supervision, regulation, and quality standards for doctors, hospitals, and pharmaceuticals; boosting disease control, preventative, maternal, and childcare services; and increasing the availability of publicly funded health education.

As part of this effort, public spending on health care will be increased by almost 3 percent of GDP in 2009–11. About two-thirds of this additional financing will be directed toward expanding insurance coverage in rural areas and for retirees, the unemployed, university students, and migrant workers living in urban areas. By the end of 2011, the government intends to cover 90 percent of the population by some form of health insurance scheme. Part of this increase in coverage will be higher subsidies to rural households that pay into health insurance schemes. Additional funds will also be deployed to ensure that all rural regions have access to county hospitals, township health centers, and village clinics. To achieve this, the government intends to build 29,000 township health centers and 2,000 county hospitals over the next three years. The government will also train 1.4 million new health care professionals to staff these facilities.

While it is still too early to assess outcomes, the government has made it a high priority to strengthen the health care system and do so in a way that is sustainable and avoids the fiscal problems that escalating health care costs are causing in many advanced economies. It is clear that China has a reinvigorated commitment to making high quality health care and a universal basic pension available to all China's citizens. This should lessen risks for the elderly and, over time, as credibility is established that good quality health care is provided by the government and is widely available, will reduce the motivation behind high levels of household precautionary saving. ■

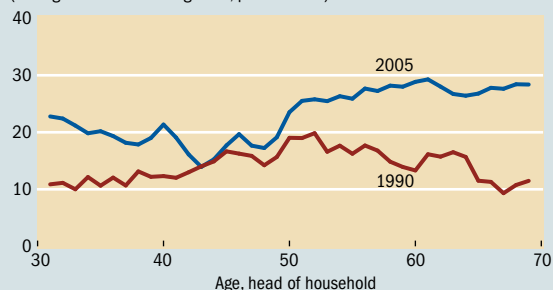
Steve Barnett is a Deputy Division Chief and Nigel Chalk is a Senior Advisor in the IMF's Asia and Pacific Department.

Chart 2

#### Old and young

In China, households headed by the elderly and by the young are the biggest savers.

(average household savings rate, percent GDP)



Sources: Chinese authorities; and IMF staff estimates.

# The Long Run Is Near

**France, like many advanced economies, confronts the expensive needs of a rapidly aging population**

*Kevin Cheng, Erik De Vrijer, and Irina Yakadina*



Men playing boules in Bretagne, France.

France has begun to recover from the Great Recession earlier than most advanced European countries. However, weak domestic demand, as well as the low recovery in its main trading partners in Europe and elsewhere, has resulted in a sluggish rebound with high unemployment. Turbulence in European debt markets and the possible spillovers are also weighing on the short-term economic outlook.

But if the near-term prospects are less than stellar, the longer-term fiscal prospects are perhaps more clouded. Not only are public finances feeling the adverse effects of the recession, an aging population with its attendant health and pension costs will put increasing pressure on France's fiscal future—as they will in most advanced economies (See “How Grim a Fiscal Future?” in this issue).

The government is left with a delicate balancing act. On the one hand, it is wary of taking steps to reduce the budget deficit too rapidly for fear of derailing the fragile recovery. On the other, it cannot delay instituting policies that aim at getting revenue and spending in line over the longer term. The government has announced a sizable fiscal consolidation over 2011–13 to pave the way for such fiscal sustainability. Among the items in this medium- and long-term consolidation is a politically controversial reform of the pension system.

## A weakened fiscal position

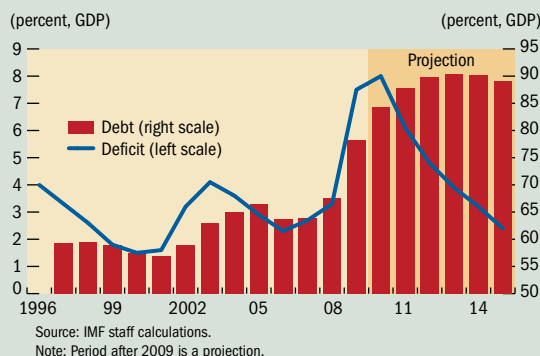
France's fiscal challenges have both acute and chronic causes. The acute dimension is the recession, which exacted a large toll, both direct and indirect, on public finances. The direct impact includes the cost of the fiscal stimulus package that replaced private demand with public demand and support for the financial sector. The indirect impact includes the crisis-related revenue loss (mainly taxes and social security contributions), the cost of automatic stabilizers (such as unemployment benefits), and the loss in output—which makes the public debt larger relative to the national income.

As a result of the crisis, France's fiscal position has weakened (see chart). After shrinking from 4.1 percent of gross domestic product (GDP) in 2003 to 2.3 percent in 2006, the overall deficit began to climb again in 2007, and spending is expected to exceed revenue by about 8 percent of GDP in 2010. Under current policies, the ratio of public debt (which represents accumulated deficits) to GDP could grow within a few years by more than 25 percentage points above its pre-crisis level—to 90 percent of GDP.

Population aging is the most deep-seated of the chronic issues confronting France. According to a study by the Organization for Economic Cooperation and Development (OECD), France's old-age dependency ratio—the ratio of citizens over age 65 to the working-age population—was about 27 percent in 2007. This ratio is projected to rise to 42 percent by 2025 and 58 percent by 2050. This is a serious aging problem shared by other advanced countries. Likewise, the number of persons between ages 20 and 64

### On the rise

France's public debt as a percentage of GDP began to grow sharply in 2008 and is projected to rise for the near future.



Source: IMF staff calculations.  
Note: Period after 2009 is a projection.



for every person over age 65 is expected to decline from 3.5 in 2010 to just 2 by 2040, increasing pressure on the current pay-as-you-go pension system. Simply put, the elderly are going to consume an increasingly large amount of France's resources. Large-scale retirements have already begun and will likely intensify in the years to come.

But it is not just demographics that cause the old-age fiscal burden. A number of features of France's pension system are also at play. First, public transfers—in the form of pensions and safety-net benefits—provide more than 85 percent of the income for people over age 65. This is the second highest level in OECD countries, where the average is about 60 percent. Given that French public finances have been in deficit over the past 30 years, increasing deficits in the pension system

aggravate the fiscal concerns. Second, France's current legal retirement age is 60 years, which is among the lowest in the European Union. Consequently, French people have the longest retirement in Europe, averaging 28 years for women and 24 for men. That long payout period exacerbates the problem.

Without significant changes in policy, large spending pressures from pensions, as well as the rising health costs that accompany an aging population, will require increased spending and public borrowing to support that spending—raising public debt to unsustainable levels over the longer term. But it is not only health and pensions that burden France's fiscal future. Over the past decade, local government spending has been growing quickly, partly due to an extensive fiscal decentralization process. The government is taking steps to limit that growth.

### France's policy options

Maintaining the status quo is not an attractive option. The potential fiscal consequences are too grave. Policies that aim at streamlining public spending in the medium and long term while protecting expenditures that help maintain domestic demand are in order. Such policies, which in economic parlance are aimed at achieving "fiscal sustainability," should focus on three areas.

- **Pension reform.** The government has proposed pension reforms aimed at achieving financial equilibrium by 2018. It is an ambitious goal because the deficit in the pensions system now is almost 1.5 percent of GDP. The reform, which the National Assembly must approve, would overhaul the system in a number of major ways. It would gradually raise the legal retirement age from 60 to 62 years, a measure that is vigorously opposed by the labor unions. Full pension benefits, now available at age 65, would be pushed back until age 67. The proposed changes would also raise the ceiling on social contributions for high-income earners, remove some contribution exemptions, and gradually align the pension system of

civil servants with that of the private sector. The government has already lengthened the contribution period from 37.5 to 41 years, effective in 2012. These measures, taken together, would lead to a tangible increase in the effective retirement age and allow for better synchronizing retirement policies with life expectancy at retirement.

- **Health care.** A number of measures have been proposed to limit hospital and drug costs and to better enforce the planned reduction of the existing national spending norm. Still, in contrast to the proposed pension changes, the health care reform agenda is still being developed, and significant further modifications will be needed to contain medical spending without jeopardizing the quality of medical services.

- **Controlling local government spending.** The significant decentralization that began in the 1980s brought rapid growth in local government spending and increasing transfers from the central government. But a freeze on central government transfers to local governments that will start in 2011 could encourage efficiency gains, including by reducing the duplication of responsibilities for different layers of government.

### Needed: a fiscal rule

Under any circumstances, the requisite fiscal restraint will be difficult to achieve. Enhanced fiscal discipline would help. Toward that end, a so-called fiscal rule—a permanent constraint on taxing and spending policies, typically defined in terms of an indicator of overall fiscal performance—would significantly strengthen the credibility of the announced fiscal consolidation. Such a rule would lock in France's commitment to achieving equilibrium in its public finances and could instill discipline at all levels of government. In addition, France's adoption of a fiscal rule would likely strengthen the implementation of the Stability and Growth Pact—the European Union agreement that caps a country's deficit at 3 percent of GDP and its public debt at 60 percent of GDP—and boost fiscal discipline in the euro area, given France's prominent role.

In June, a working group on fiscal rules—headed by former IMF Managing Director Michel Camdessus—proposed to enshrine in the constitution a strengthened multiyear budgetary framework (see "By the Rule" in this issue). Such a framework would include a binding trajectory toward a zero structural deficit—the government deficit adjusted for the business cycle—of the general government and reinforce national belief in the fiscal objectives of France's stability programs. The working group also called for creation of an independent fiscal council to increase the realism of the macroeconomic assumptions underlying the budgetary framework and to strengthen the government's accountability.

A sizable consolidation over the coming years is needed to keep France's public finances sound. Although this is challenging, such an adjustment can be achieved provided the country can must a strong public belief in and commitment to the medium- and long-term fiscal objectives. ■

*Kevin Cheng is a Senior Economist, Erik De Vrijer is an Assistant Director, and Irina Yakadina is an Economist in the IMF's European Department.*



Michel Camdessus and Renaud Guidée

# By the Rule

In France, a commission proposes a rule-based framework to set the country on a path to balanced budgets

**F**RANCE, facing the same unsettling long-term fiscal prospects as most advanced economies, set up a high-level working group in early 2010 to design a rule-based framework for fiscal consolidation to achieve the public budget balance that was enshrined in the French Constitution in 2008.

The working group, chaired by former IMF Managing Director Michel Camdessus, had 15 members: four from Parliament, seven top-ranking civil servants (including Banque de France Governor Christian Noyer), and four academics.

There is more to achieving debt sustainability—that is, bringing down deficits and debt ratios to prudent levels—than merely winding down the stimulus that France undertook during the recent economic crisis. Like other advanced economies, France will have to cope in future budgets with the rising pension and health costs of an aging population (see “The Long Run Is Near” in this issue of *F&D*). While part of the policy response will come from the major overhaul that the French pension system is undergoing, the rule-based framework proposed by the working group should be a critical complement.

Rules play a role in instilling fiscal discipline in France. They include the *Stability and Growth Pact*—the European Union-wide agreement that caps deficit and debt levels—and a set of expenditure rules at the national level that prohibit general government current spending from rising in volume year over year.

However effective, though, expenditure rules “are not linked directly to the debt sustainability objective since they do not constrain the revenue side,” according to a recent paper (IMF, 2009) the working group took into consideration. The working group aimed to join the missing links in the existing rules framework, by designing a comprehensive rule that would bind policymakers to medium-term objectives and provide operational tools to undertake the required fiscal adjustment.

The key provision is designed to ensure that the budget acts passed year after year are consistent with reaching the ultimate target of a balanced budget. To achieve that objec-

tive, the working group suggested that lawmakers commit to a mandatory multiyear framework for budget programming, which would bind future yearly budget acts by setting *milestones* those budgets would have to meet to reach eventual fiscal adjustment.

The fiscal rule, though, must be flexible enough to respond to shocks and allow the government to avoid policies that push in the same direction as the business cycle. Each milestone could typically be defined in terms of structural balance—in which expected revenues and expected spending match up. But there are hurdles to this approach. First, the structural balance is an estimate, not a firm number. It relies on computation of the *output gap*—the difference between what a country could produce and what it actually produces. Moreover, revisions of estimates of gross domestic product in earlier periods could affect current output gap estimates. Such after-the-fact revisions can jeopardize the very ability to comply with the rule in a time-consistent manner.

Second, estimating revenue elasticity—how taxes respond to changes in the business cycle—can be challenging. As noted in the IMF paper, “an important issue relates to the impact of cycles in corporate profits and asset prices on revenues, which may not be adequately captured by changes in output. The magnitude of this impact can be significant, and in principle should be taken into account. In practice, however, adjusting for these effects is challenging and has seldom been systematically undertaken.”

So the working group suggested isolating the *nondiscretionary* component of the change in the structural balance—that portion of spending and revenue over which legislators have no control—including the impact of volatility in tax revenue elasticity. Conversely, the scope of the rule would encompass government revenues and spending over which *discretionary* policy and management have an influence. This scheme echoes earlier works by Duchêne and Lévy (2003) and Guyon and Sorbe (2009), from the French Treasury.

To lawmakers, the rule would be binding on what they can control. Matching controllability by policymaking and accountability of policymakers should foster appropriation



and enforcement of the rule. For the rule to focus on the discretionary component of the change in the structural balance, not only should factors over which lawmakers have no control be isolated, but so should items that depend on the business cycle—commonly known as *automatic stabilizers*. According to the Stability and Growth Pact, automatic stabilizers include tax revenues and unemployment benefits. These items would then fall outside the scope of the rule. However, fine-tuning of tax revenues can still be considered: whereas the year-over-year change in the amounts collected from taxpayers on the basis of established applicable law cannot be deemed the result of policy decisions, the same is not true of amendments to legislation, which affect government revenues, other things being equal.

To target discretionary structural measures comprehensively, the binding milestones must apply both to the net cost or the revenue of newly enacted tax law and to all government expenses except unemployment compensation. This captures, in structural terms, the policymaking action to put consecutive budgets on the path to balance.

The rule should bind not only yearly budget acts, but also the implementation of the budget and response to deviations from the budget. A procedure would be set up to monitor execution, with the aim of detecting early on any significant slippage during the budget year: specific amendments should then return the budget to its predefined path. If deviations are detected at the end of the year, the working group suggests automatically tightening the numerical milestones applicable to future budget acts.

Commitment by authorities is key to the credibility, effectiveness, and sustainability of the rule. The working group included the chairs and chief sponsors of the budget committees of the National Assembly and the Senate—that is, members from the majority as well as the minority. They unanimously favored enshrining the proposed rule in higher-level legislation, showing that they share an awareness of the challenges ahead, a sense of duty, and a willingness to act.

A fiscal responsibility law enacted by the French parliament in 2001 had already gathered wide support. By strengthening its set of rules, France will give clear evidence of its commitment to fiscal consolidation and discipline. ■

*Michel Camdessus, a former IMF Managing Director, chaired the fiscal consolidation commission and Renaud Guidée served as its Secretary-General.*

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# After the

# Supernova

**Crisis management lessons from the IMF's assessment of the U.S. financial system**

*Ashok Vir Bhatia*

**T**he shock waves from the collapse of investment banking group Lehman Brothers were still reverberating around the world when, in early 2009, the U.S. authorities invited the International Monetary Fund (IMF) to conduct an assessment of the U.S. financial system.

The United States was in the midst of one of the most devastating and costly financial crises in a century, in terms of job and output losses, public debt, and damaging spillovers to the rest of the world.

The U.S. policy response had been bold and aggressive, helping to forestall a total systemic collapse. The U.S. authorities had provided extraordinary liquidity support to a wide swath of the financial system, and debate had begun on landmark legislative reforms to strengthen regulation and supervision. The timing of the IMF's assessment represented an unusual challenge for both the IMF staff and the U.S. officials who participated, but also an important opportunity to learn from the crisis and help shape the reform agenda.

The IMF and World Bank had launched their joint Financial Sector Assessment Program (FSAP) in the wake of

the Asian financial crisis of the late 1990s and, although more than 120 countries had already participated, this was the first time the United States was doing so.

To meet the challenge of assessing the world's most complex financial system, the IMF assembled a large team led by its Monetary and Capital Markets Department. The team held more than 150 meetings between October 2009 and March 2010 involving U.S. congressional staff, essentially all U.S. federal financial regulatory bodies, several state regulators, and many private market participants. In June, the assessment was delivered to the U.S. authorities and was discussed in meetings between IMF Managing Director Dominique Strauss-Kahn, Chairman of the Board of Governors of the Federal Reserve System (Fed) Benjamin Bernanke, and Secretary of the Treasury Timothy Geithner. In July the FSAP's findings were discussed by the IMF's Executive Board, and its final reports were published.

Although the FSAP assessment covered a broad range of issues—stress tests of key financial institutions, a review of the quality of regulatory oversight against international standards,

and an evaluation of arrangements for systemic liquidity and crisis management—this retrospective focuses on some of the major crisis events of 2008 and how they informed the team's judgments on U.S. crisis management arrangements.

### **Casting a wider net**

Much of the IMF's policy advice on financial safety nets and resolution mechanisms, colored by hours of discussions with officials recounting their experiences and actions during the crisis, was shaped by one critical and recurring theme: U.S. officials repeatedly found themselves without appropriate legal powers to deal with failing or struggling nonbank financial firms such as Lehman Brothers and Bear Stearns.

The challenge, in short, was to extend crisis management tools for commercial banks to nonbanks, including holding companies of large, complex, financial groups with the potential to destabilize the system as a whole.

Bear Stearns provided the first warning that investment banking groups fully compliant with capital and liquidity regulations could nonetheless abruptly lose access to the short-term "repo" funding that was their lifeblood. Repo is a form of financing in which securities are sold for cash, often at a discount known as a "haircut," under agreements to repurchase at a price differential amounting to interest, often the next day. On Thursday, March 13, 2008, haircuts charged to Bear Stearns on its repo borrowing jumped sharply, effectively rendering the group illiquid.

Until then, the secured nature of repo transactions had been thought to make such funding stable and reliable. With the benefit of hindsight, however, it became clear that even the repo market is vulnerable to sudden losses of confidence.

Events leading to the illiquidity of Bear Stearns raised the first questions about the U.S. central bank's emergency lending tool kit. On Tuesday, March 11, 2008, the Fed had announced a program to increase liquidity in the mortgage markets, its so-called Term Securities Lending Facility. This was the first of many new liquidity facilities authorized under emergency central bank powers that required two-thirds of the Fed's board to concur that circumstances were "unusual and exigent." Coincidentally or not, two days later Bear Stearns came under intense funding pressure.

By Friday, March 14, the investment bank was staring at imminent bankruptcy—with the risk of dangerous consequences for the rest of the system, given its heavy derivative market involvement and key role as a financier of hedge funds.

As a bridge to the weekend, the Federal Reserve Bank of New York (New York Fed) provided a \$13 billion loan through the discount window to Bear Stearns's presumptive acquirer, JPMorgan Chase, which extended a back-to-back loan of the same amount to Bear Stearns (JPMorgan Chase owned several large U.S. commercial banks with standing access to the discount window). On Sunday, motivated by concerns for the other large investment banks and for the functioning of the repo market on which they depended, the Fed approved the Primary Dealer Credit Facility (PDCF), to become operational on Monday morning.

Whereas the U.S. systemic liquidity tool kit going into the crisis had always reserved lender-of-last-resort privileges for retail deposit-taking institutions, the PDCF amounted to a discount window for large securities dealers. It thus marked a major widening of the federal financial safety net.

Although JPMorgan Chase had committed to stand behind Bear Stearns's obligations the same Sunday that the PDCF was announced, it was not until Monday, March 24, that final terms for the acquisition were announced. The New York Fed agreed to provide financing support for the transaction, in the form of a \$29 billion loan to a special purpose vehicle called "Maiden Lane," which, in turn, would purchase Bear Stearns assets. The structure allowed the central bank to execute an asset purchase as a collateralized loan authorized under its emergency powers, a device that would be used repeatedly in the coming months.

### **Striking a balance**

In the IMF team's discussions with the official and private sectors, the Bear Stearns experience raised important issues and questions about liquidity arrangements. One key question was whether the safety net merited a permanent expansion, for instance by keeping the PDCF active indefinitely, or whether that would unduly increase moral hazard in the system. Another was whether the barrier to activating the Fed's emergency powers was set too high, with the risk that the "unusual and exigent" criterion would further unsettle financial markets. A further question was whether it was appropriate for a central bank to provide loans to individual nonbank financial firms.

On balance, the team agreed that the emergency liquidity facilities could be retired and reactivated as conditions demanded. Striking a balance between rules and discretion, it recommended greater articulation of principles governing future Fed lending to nonbanks, with continued flexibility to improvise as situations demanded, including the ability to provide liquidity support to individual firms in extremis.

With the benefit of hindsight, the near-collapse of Bear Stearns signaled a critical gap in the official tool kit—the absence of a resolution regime for systemic but failing investment banks. A disorderly outcome was averted only because JPMorgan Chase had been willing to acquire Bear Stearns and to guarantee its obligations while terms were being negotiated.

The Bear Stearns experience also provided critical insights into the Fed's crisis management capacity. Legal and operational constraints were navigated adroitly—evidence the innovative special purpose vehicle structure and the effective support that was provided to the repo market through the launch of the PDCF over a weekend. But the complex interventions also posed difficult communication challenges, including about where and how the line is drawn between liquidity and solvency support.

### **Collateral, collateral**

The inadequacy of U.S. crisis management arrangements was laid bare six months later. On Friday, September 12, 2008, weakened by the ongoing economy-wide credit deterioration

and continued fire sales of financial assets, Lehman became the second large U.S. investment banking group to abruptly lose access to market funding.

The Fed could not provide emergency lending to Lehman, which was legally required to be zero-loss—a condition the group could not satisfy because it had insufficient unencumbered collateral. Instead, the New York Fed assembled a syndicate of large banks and sought to persuade them to finance a purchase of Lehman. After Bank of America chose to merge with Merrill Lynch, the sole potential acquirer was Barclays of the United Kingdom. Although terms had been agreed by Sunday morning, the deal fell apart when Barclays

## If ever proof were needed that a single financial firm could be profoundly systemic, Lehman was it.

reported that it could not immediately guarantee Lehman's existing trading obligations. Under U.K. law this would require either a shareholder vote or a waiver from the U.K. regulatory authority, neither of which could be obtained that day.

With the Fed lacking authority to issue the guarantee, Lehman was left with no choice but to file for bankruptcy on Monday, September 15, 2008. If ever proof were needed that a single financial firm could be profoundly systemic, Lehman was it. The entire global economy tipped into recession.

Lehman demonstrated that the systemic consequences of the failure of financial firms can be multiplied by their cross-border activities and inconsistencies in bankruptcy regimes. In the United States, the New York Fed was able to continue lending to Lehman's broker-dealer subsidiaries, helping them remain open for three business days after the holding company's bankruptcy filing, preserving value and making the windup somewhat less disorderly. In the United Kingdom, by contrast, Lehman's London subsidiary had to be placed into administration, complete with an immediate stay on all transactions, which fueled panic. The resulting margin calls helped to bring down another domino in the global financial system: American International Group (AIG).

Lehman's bankruptcy filing undermined any hope of organizing private sector support for AIG. With AIG having issued some \$500 billion of credit insurance to financial intermediaries in the United States and Europe, the Fed decided to provide funding. In the Fed's judgment, AIG, unlike Lehman, *did* have adequate collateral, in the form of a large number of solvent subsidiaries. The initial \$85 billion New York Fed loan to AIG, announced on Tuesday, September 16, was secured by essentially all of AIG's assets.

The IMF team viewed these developments as offering important lessons for reshaping U.S. crisis management arrangements. In particular, the team noted, if *some* U.S.

authority had had the power to issue a bridging guarantee to Lehman's holding company, the outcome might have been different, including for AIG. Moreover, resolution powers over securities dealers—in contrast to those covering U.S. commercial banks—were clearly not well suited to addressing systemic needs. Both these factors argued strongly for a new resolution mechanism.

The default by Lehman on a large volume of debt securities had also triggered an institutional run on the money fund industry, which was arrested on its third day when the U.S. Treasury offered to guarantee all money market funds. The IMF team generally applauded the guarantee—noting that it was analogous to extending federal deposit insurance to money market mutual funds—but argued that the core problem was a set of regulations that allowed money funds to operate in a manner that was effectively bank-like, something that needed to be redressed in the future.

The sharp deterioration of confidence in money market participants' ability to honor their overnight financing obligations also argued for steps to widen the range of eligible collateral and counterparties used for open market operations, the latter to include key commercial banks. In this way, the central bank would have greater ability to distribute systemic liquidity in times of market stress.

### Opening the floodgates

With Bear Stearns and Merrill Lynch bought and Lehman gone, Goldman Sachs and Morgan Stanley came under intense market pressure and averted collapse that September largely thanks to a series of extraordinary actions by the Fed to further increase systemic liquidity.

On Sunday, September 14, 2008, as Lehman hurtled toward bankruptcy, the central bank announced an easing of limits on depository institutions' lending to their nonbank affiliates for assets typically funded in the repo market and expanded the PDCF collateral schedule to encompass all securities used in repo. A week later, the New York Fed was authorized to lend to *all* U.S. broker-dealer subsidiaries of Goldman, Morgan, and Merrill (not just their flagship primary dealers) as well as to their London broker-dealers. These actions allowed the New York Fed to step in and essentially backstop the entire repo market, with the decision to lend across the Atlantic appearing to have reflected an assessment that collateral owned by U.S. subsidiaries might not have met the groups' financing needs.

In a related action on October 7, the Fed announced the creation of the Commercial Paper Funding Facility, which authorized the New York Fed to effectively purchase—again using a special purpose vehicle structure—highly rated asset backed and unsecured (financial or nonfinancial) commercial paper. The program, which would become the most heavily drawn of all the broadly available emergency liquidity facilities, marked another watershed: the first time the central bank had offered to finance nonfinancial firms.

The IMF team noted that by early October 2008 the surviving large U.S. investment banks were able to access central bank liquidity through their (small) depository institution

subsidiaries, their (large) U.S. and U.K. broker-dealer subsidiaries, and their holding companies, which could issue short-term debt to the New York Fed directly. It was a critical policy effort, and one that—again—underscored the systemic importance of key firms and markets normally outside the safety net.

### Systemic risk exception

The IMF team studied the well-defined resolution powers and procedures that existed for commercial banks, unlike for investment banks. When Wachovia suffered a catastrophic run on its uninsured funding on Friday, September 26, less than two weeks after Lehman had collapsed, mechanisms were in place. Wachovia was not an investment bank; it was the sixth largest U.S. bank holding company, with a vast retail deposit-taking network. Yet it too imploded faster than remedial plans could be formulated.

In another weekend of high drama, the U.S. authorities decided, for the first time, to invoke the “systemic risk exception” to the general requirement that the Federal Deposit Insurance Corporation (FDIC) execute bank resolutions at least cost to the taxpayer. Invoking the exception required concurrence by two-thirds of the Fed’s Board, two-thirds of the FDIC’s Board, and the Treasury Secretary in consultation with the President of the United States. All this was done in the early hours of Monday, September 29, allowing the FDIC to guarantee a pool of some \$300 billion of Wachovia’s assets, after which Citi (then the second largest U.S. bank holding company) agreed to stand behind Wachovia’s liquidity.

The systemic risk exception was invoked on a total of four occasions. One was on Tuesday, October 14, when the FDIC announced perhaps the most powerful policy measure of the crisis: the Temporary Liquidity Guarantee Program. This had two elements, a guarantee on all non-interest-bearing transaction account balances at FDIC-insured depository institutions and a guarantee on debt rollovers by these institutions as well as their holding companies. This was the only time the U.S. authorities used the exception to authorize a broadly available facility.

The FDIC’s guarantee program and related actions helped turn the tide. Wachovia was the last big liquidity event of the crisis. Once the guarantee facility was in place, the cycle moved back to regulatory capital failures, which were typically slower moving and gave the FDIC time to corral potential bidders for failing institutions.

Undoubtedly, the existence of the U.S. systemic risk exception helped save the global financial system from worse disaster. To the IMF team, this experience illustrated the importance of not tying crisis managers too tightly to the mast of a least-cost resolution approach applied to individual firms. When financial stability is in peril, taxpayer cost needs to be weighed against the potential damage of a systemic meltdown.

### Providing new powers

The IMF team viewed the U.S. system as having had essentially two crisis management tools going into the crisis: Fed lending and FDIC bank resolution. To be sure, the team noted, the existing U.S. bank resolution regime was far

superior to those in countries where banks were subject to general bankruptcy. But it had its limitations, including the absence of powers to intervene at the holding company level. The IMF supported proposals to create new resolution powers reaching the ultimate holding companies of (all) FDIC-insured depository institutions, while retaining the least-cost resolution requirement for nonsystemic situations and the automaticity of “prompt corrective action” intervention triggers.

But if finessing bank resolution processes was difficult, creating a new resolution mechanism for large complex

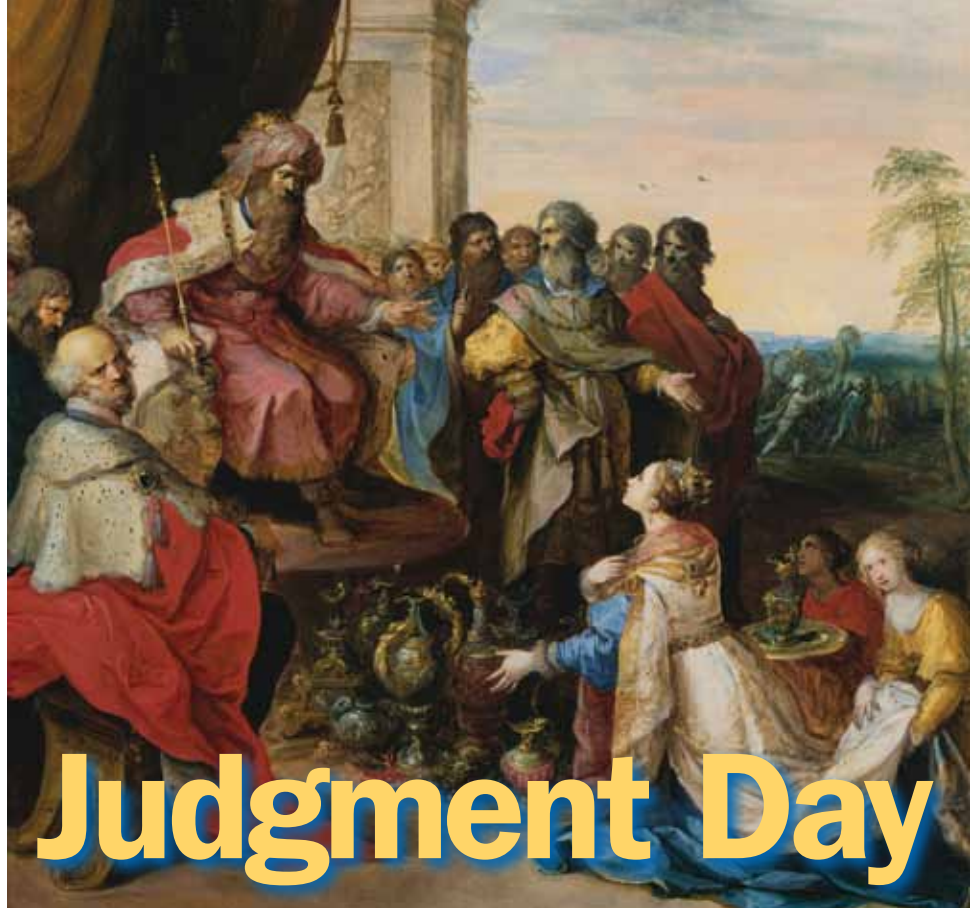
## When financial stability is in peril, taxpayer cost needs to be weighed against the potential damage of a systemic meltdown.

financial groups was the ultimate challenge. Here, as in other areas, U.S. reform legislation was taking shape while the FSAP assessment progressed. The IMF team supported extending the U.S. bank resolution process to nonbank financial firms of importance to the system as a whole to preserve continuity of key financial services in the interest of financial stability. Indeed, this whole process of “special resolution” of systemically important groups would be triggered by legal procedures modeled on the systemic risk exception.

The team cautioned, however, that effective application of the new authority would require careful planning and preparation. The relevant financial groups would have to be assessed continuously with the goal of understanding inter- and intra-group dependencies and identifying which activities and subsidiaries were systemic and which were not. This would need to be supported by assertive supervisory actions to meaningfully simplify group structures. In a special resolution, systemic activities would be transferred to a temporary, government-backed “bridge structure,” and legal entities deemed less important would be left to their own devices outside the bridge—akin to a holding company divesting a subsidiary.

Many of the IMF’s recommendations on crisis management—as indeed in other areas not covered above—were included in the sweeping reforms to U.S. financial regulation signed into law on July 21, 2010. The Dodd-Frank Act includes a pathbreaking section on special resolution, requires that rules be set to guide future Fed lending to non-banks, and much more. While this legislation is an important first step toward creating a more robust tool kit, the devil will be in the details of the large mass of new regulations yet to be written to give force to the law. ■

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S. Raihan Zamil

**Changing the rules alone cannot make the financial system safe. The judgment of banking supervisors is crucial**

In the wake of the global financial crisis, there have been numerous proposals to reform the oversight of the global financial system—from the Group of 20 advanced and emerging economies (G-20) and international standards setters. Nearly all of the proposed reforms focus on strengthening bank-centered regulations, such as capital, liquidity, loan loss provisioning, or compensation arrangements. These enhancements, particularly higher capital and liquidity buffers, should make the global financial system better able to absorb and provide more tangible backstops to curb excessive risk-taking at banks.

Still, changing rules alone is insufficient to foster financial stability, *if* the quality of their application—that is, supervision—is not effective. The business of banking supervision—and the risk management practices of banks—remains inherently subjective, regardless of the imposition of new, or tightening of existing, rules. For this reason, the proposed regulatory reforms are akin to “trying to prevent another outbreak of H1N1 through high level epidemiological planning, without involving the doctors and health workers on the ground” (Palmer, 2009).

Strengthening micro-prudential supervision should be at the forefront of the global

reform agenda and is the linchpin in fostering financial system stability. Enhancements to macro-prudential supervision (which focuses on an assessment of common shocks affecting the broader financial system), although necessary, are beyond the scope of this article.

### **Two sides of a coin**

*Regulation* and *supervision* are often used interchangeably when describing the official sector’s role in the oversight of the banking system. In practice, regulation and supervision serve two distinct but related functions:

- Laws and regulations are the collective set of rules that provide the banking authority with powers to license banks, set minimum operating and risk management standards for banks, and take necessary corrective measures—including revocation of banking licenses—in problem bank situations. The main intent is to require bank management to behave prudently because banks are the guardians of depositor funds.

- Supervision is the authorities’ means of implementing these rules through ongoing off-site surveillance and periodic on-site examinations of individual banks. Supervisors carry out these tasks by evaluating banks’ corporate governance, internal controls, and risk management practices;

their financial capacity; and their compliance with various laws and regulations. Based on their risk assessments, supervisors are also responsible for taking timely actions against problem banks or problems in banks.

Supervision traditionally has taken a backseat to regulation within the international reform agenda for two main reasons. First, its application is local and context driven. Second, it is a far more complex “fix” than strengthening regulations. Regardless, the lack of international focus on the practice of supervision has unintended consequences.

An example is the formulation and implementation of the Basel II capital accord, whose stated objective is to strengthen financial stability through enhanced capital requirements, better supervision, and robust market discipline. In practice, the overwhelming focus of Basel II was on the technical construct of regulatory capital, with limited emphasis placed on strong supervision until very late in the process.

Because the architect of Basel II (the Basel Committee on Banking Supervision) is also the international standards-setting body for bank regulatory and supervisory standards, the relative importance *it* places on supervision often influences—or in many cases reinforces—the pre-existing biases within some national regulatory bodies that regulatory policy development is a more important function than the activities of front-line supervisors. This perspective, if widely held, has significant implications for both resource allocation and the prioritization of internal reforms within each jurisdiction. Thus, the starting point in the reform agenda begins with changing *our collective mindsets* on the importance of strong supervision in fostering financial system stability.

### Judgment is essential

Strong supervision is premised on the *ability* and *willingness* of supervisors to take timely actions (Viñals and Fietcher, 2010), according to an IMF staff position note. To have the ability to act, supervisors must possess sufficient legal authority and resources, a clear strategy, and strong working relationships with other regulators. To have the willingness to act, supervisors must have a clear mandate, operational independence, accountability, skilled staff, and a healthy relationship with the banking industry that still is distant enough to avoid regulatory capture (in which the regulator identifies more strongly with the regulated than the public interest).

Beyond these critical elements, perhaps a more fundamental reason why good supervision remains elusive is because it relies heavily on the ability of supervisors to exercise *sound judgment*, often on complex issues that are neither black nor white. This innate characteristic of supervision has been amplified by deregulation across major financial centers, where banking laws or regulations no longer prohibit or prescribe explicit constraints on the scope or size of a bank's risk-taking activities, as long as banks and their management are judged—by supervisors—to have robust risk management systems and sufficient capital to support the underlying risks.

Herein lies the hidden risk in the prevailing construct of banking system oversight: there is no benchmark as to what constitutes *sound risk management* or *adequate capi-*

*tal*—arguably the two most critical factors to constrain the excessive risk-taking activities of banks. This, in turn, highlights the critical role of informed supervisory judgment in fostering a safe and sound banking system. Any time the effectiveness of a profession hinges on its ability and willingness to exercise sound judgment, the likelihood grows that vested interests—the industry, politicians, and the regulatory authority itself (interference from the top)—can influence the decision-making process.

### Not a mechanical exercise

Little known outside of the arcane world of banking regulation is that nearly all banking rules—whether they relate to risk management, capital adequacy, or the design of corrective action programs against banks—are subject to and heavily reliant upon informed judgment by supervisors. In this regard, there are two formidable challenges:

- Regulations are almost always *minimum* requirements and rarely depict what is appropriate for each bank. Thus, a fundamental prerequisite to the proper application of rules is a supervisory *mindset* that views banking rules as floors rather than ceilings. If supervisors adopt the philosophy that requirements are ceilings, they will never seek to go beyond prescribed regulations during the examination and surveillance process.

- Supervisors must be able and willing to implement rules based on a regulatory concept known as “proportionality,” which requires them to tailor the application of rules to each bank—based on its size, complexity, or risk characteristics—rather than to apply a “one-size-fits-all” approach.

For these reasons, *how* supervisors implement rules is critical because it sets the context for the *discovery* process—through which supervisors unearth the specific facts used to form conclusions about an institution's overall risk profile, which drives the nature and severity of any subsequent supervisory actions. Thus, the effectiveness of the entire supervisory review process hinges on the supervisors' ability and willingness to interpret rules as “floors” and to appropriately apply those rules specifically for each bank, consistent with a safety and soundness mindset.

To illustrate the subjective nature of rules, consider risk management, capital adequacy, and supervisory actions.

**Risk management:** The first line of defense against financial instability at individual banks, or in the banking system as a whole, relies on the **quality and effectiveness of the risk management practices** at each bank. For this reason, many of the key regulatory standards or supervisory expectations focus on the ability of the bank's board and senior management to properly identify, monitor, measure, and control its material risk exposures. Supervisors are expected to take actions against banks in which significant risk management shortcomings are identified, even if reported capital remains strong.

Exactly what constitutes sound risk management is not clear cut and is influenced by many factors, including the bank's size and complexity; the nature of its material risk exposures; the perceived sophistication of the bank's risk models, particularly at large and complex banks; the supervisor's competence and

personal experience with other banks' risk management systems; and risk management norms that prevail in the country at that point in time. Adherence to prevailing norms can lull supervisors into a false sense of security or delay their taking actions, if the entire industry is engaging in weak risk management practices—for example, by degrading loan origination standards.

**Capital adequacy:** The application of judgment is also relevant in evaluating capital adequacy, which appears to be a quantitative question but in fact is largely a qualitative assessment. Although most jurisdictions have adopted global capital rules—which require a minimum 8 percent ratio of capital to risk-weighted assets—the accuracy of the ratio is premised on, among other things, the reliability of asset valuations of bank balance sheets. Those valuations are difficult, especially when they involve problem loans and other hard-to-value assets for which there are no observable market prices and whose assigned values depend on many assumptions. Because banks are highly leveraged, a small miscalculation in asset valuations can lead to a large impact in reported capital ratios. For example, a 4 percent decline in asset values equates to a 50 percent drop in the minimum 8 percent capital ratio, using a simple capital to assets measurement methodology.

A more complex challenge is determining how much capital is adequate—regardless of regulatory minimums—to ensure that capital levels are aligned with an institution's overall risk profile. This assessment is particularly critical during an expansionary cycle, when a combination of relaxed loan origination standards and easy credit allows marginal borrowers to *refinance*—rather than to repay—their debt obligations, which leaves the impression of low default risk. Because of the procyclical bias of capital measurement techniques, this low level of “observed” default risk is fed into bank risk models, which results in an underestimation of required capital for both regulatory requirements and the bank's own internal benchmarks.

It is during this time that a robust *supervisory* assessment of capital adequacy—one which challenges the prevailing consensus—becomes critical to constrain excessive risk-taking. Key decision-making inputs, all of which are judgmental, include the nature, size, direction, and stressed results of an institution's material risk exposures; the quality of its risk origination and management practices; economic forecasts; asset growth projections; and the reliability and size of internal sources of capital from retained earnings.

**Supervisory actions:** In most countries, the menu of supervisory actions is discretionary, which allows authorities to fit the punishment to the crime. Therefore, the design and effectiveness of supervisory actions depend first on the supervisor's *ability* to identify the key problems and second on its *willingness* to follow through with the appropriate actions. Both ability and willingness depend on many preconditions, including adequate legal protection of the supervisor and institutional will of the supervisory authority.

To minimize the propensity of supervisors to delay taking timely actions, some countries have adopted prompt corrective action (PCA) provisions. PCAs, which were introduced

in the United States in the early 1990s, include both mandatory and discretionary actions that are triggered once a bank's capital ratio falls below the minimum 8 percent threshold, with the mandatory actions becoming more severe the farther capital declines below the benchmark.

However, PCAs are not a panacea in restricting supervisory judgment. First, the term “prompt corrective action” is misleading. It is a *lagging* indicator that is triggered only after capital falls below regulatory thresholds. In other words, PCA provisions do not require any actions if bank capital remains above regulatory minimums, even if there might be other significant problems unrelated to capital. A more fundamental and forward-looking challenge is to determine *whether*, *when*, and *what* actions should be taken against banks that report higher than the minimum regulatory capital, but have identified weaknesses in risk management or other safety and soundness concerns. This remains necessarily a discretionary process, because the perceived type and severity of the identified shortcomings and the supervisor's view on whether management has both the ability and willingness to address the weaknesses on their own could vary.

Second, even when PCA becomes relevant, the timeliness of mandatory PCAs is based on the accuracy of reported capital ratios, which are premised on the reliability of a bank's asset and loan valuation practices. That, as outlined above, is itself an inherently assumption-dependent process. And when banks are close to breaching the minimum capital rules, they have incentives to apply overly optimistic valuations to their problem loans and other hard-to-value assets to keep reported capital from falling below the threshold. Thus, supervisory judgment—backed by critical analysis—remains essential to ensure that bank's reported capital ratios are accurate, so that the established PCA triggers *can* be activated in a timely manner.

### **The supervisory reform agenda**

Given the importance of informed judgment to the implementation of all banking rules, it is imperative that policymakers focus as much time on strengthening supervision as on changing the rules themselves. Strengthening supervision may be the more important and far more difficult task. Although there are calls to curtail supervisory discretion, this is not a feasible option unless policymakers are willing to raise minimum capital and liquidity requirements to an extent that would have dire consequences for credit intermediation and job growth. Therefore, policymakers must begin to focus efforts on the *countercyclical promise* of supervision by strengthening supervisory practices. A difficult question is how to enhance the quality of supervision? Here are some possibilities:

**Establish a robust supervisory culture within each regulatory authority.** Although the concept of a supervisory culture is abstract, it is simply the collective set of values, beliefs, and behaviors that are rewarded within each regulatory body. This begins with the appropriate tone set by, and the actions of, the leaders of the regulatory authority, which set the broader context within which day-to-day supervision operates. A strong supervisory culture requires operational



independence (from the government and industry) and encourages the independence of individual supervisors. It places an overriding focus on safety and soundness, and promotes the use of intrusive supervision, if needed, to enforce its views. This troika of independence, safety and soundness, and intrusive supervision at both the institutional and individual supervisor levels are the cornerstone of a robust system of micro-prudential supervision.

Beyond this, the political dimension of banking supervision cannot be ignored, given that the banking system is at the core of the power play in all countries. As such, a strong culture of supervision requires an enabling political system that recognizes (through legislation) and respects (through minimal political interference) the sanctity of independent prudential regulators who can call the plays as they see them regardless of the players— or politics—involved.

**Strengthen the ability and willingness of supervisors to exercise sound judgment.** The demands placed on supervisors are enormous. They are required to master many roles, including risk manager, financial analyst, accountant, lawyer, investigator, forecaster, and financial economist. In addition, they are expected to make conclusions that form the basis of early supervisory actions, based on evidence that often involves micro-level technical minutiae. Above all, they must be able and willing to lean against prevailing headwinds and to say “no” even when society is saying “yes.” And they must recognize that bad times also come to an end. This requires an ability to look beyond the present and necessitates a formidable set of conceptual, analytical, decision-making, and communication skills, not to mention a “sixth sense” and intestinal fortitude that can take years to develop. That is a tall order, particularly in societies and organizations—like some central banks and supervisory authorities—that traditionally reward obedience and preservation of the status quo.

As a starting point, each regulatory authority must ensure that its culture, compensation, and promotion practices are sufficiently attractive to recruit and retain high-caliber individuals with the skills needed to thrive in supervision. In addition, a robust, ongoing, and well-funded in-house training program that keeps pace with market developments is an absolute must to build and to sustain supervisory capacity.

**Develop a constrained, discretionary approach to supervision.** Consideration should be given to developing a system of tripwires that would require certain actions against banks that report good financials, but have identified weaknesses in risk management, to promote early supervisory intervention. In this regard, the tools, methodologies, and handbooks used for day-to-day supervision must strike the right balance between encouraging sound judgment while ensuring structure and consistency to the risk assessment process. That dual approach should result in a system of constrained discretion.

**Require systemically important banks to downsize if supervisory resources are insufficient in relation to the size and complexity of the regulated entity.** The links between a bank’s size and the ability of authorities to supervise it cannot be ignored. If a bank is too big to supervise, it suggests that supervisors do not have sufficient means to indepen-

dently test and properly validate the integrity of a bank’s risk management systems, and are limited to conducting high-level “process” reviews of the bank’s policies, procedures, and limits. In such circumstances, the supervisor *must* rely on the bank’s own assessment of risk—a situation now viewed as a key shortcoming in the run-up to the financial crisis that began in 2007. Unless regulatory authorities are willing to bet that bank management will exert greater self-discipline during the next expansionary cycle, a robust approach to reducing risk-taking is warranted in the oversight of banks that are too big to supervise.

**Design a sustained set of longer-term programs to enhance both the pool and quality of professionals in financial supervision.** Supervision is too important for society to outsource training to each regulatory authority. There have been calls to make financial supervision a recognized university academic discipline. As such, international standards setters and leading supervisory authorities could collaborate with academic institutions to establish graduate degree programs in financial supervision. Additionally, there should be a globally recognized certification program for financial supervisors. The certification process would be based on a combination of practical experience and multilevel rigorous testing of technical competency and critical thinking skills that replicate the daily challenges of supervisors. Over time, the certification could become a “gold standard” and facilitate career mobility across jurisdictions.

## A chance to reshape

The financial crisis has provided policymakers with a once-in-a-lifetime chance to reshape the regulatory and supervisory architecture that governs the global banking system. So far, reform efforts have focused overwhelmingly on the regulatory landscape, with limited consideration given to the *art* of supervision and its critical role in fostering financial stability. It is time to lift supervision out of its black box and place it in the center of the global reform agenda. Perhaps one of the most important lessons of the recent financial crisis is that there is no substitute for strong supervision. It is in the collective interests of policymakers, politicians, and the broader public to support the efforts of supervisors, especially when they swim against the tide of conventional wisdom and take on powerful vested interests, including government policy itself, to safeguard financial stability.

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# What Constitutes Unemployment?

Ceyda Oner

**E**ARLIER this year, the International Labor Office announced that global unemployment last year reached the highest level on record. More than 200 million people, 7 percent of the global workforce, were looking for jobs in 2009.

It is not a coincidence that the global economy is experiencing the most severe case of unemployment during the worst economic crisis since the Great Depression. Unemployment is highly dependent on economic activity; in fact, growth and unemployment can be thought of as two sides of the same coin: when economic activity is high, more production happens overall, and more people are needed to produce the higher amount of goods and services. And when economic activity is low, firms cut jobs and unemployment rises. In that sense, unemployment is *countercyclical*, meaning that it rises when economic growth is low and vice versa.

But unemployment does not fall in lockstep with an increase in growth. It is more common for businesses to first try to recover from a downturn by having the same number of employees do more work or turn out more products—that is, to increase their productivity. Only as the recovery takes hold would businesses add workers. As a consequence, unemployment may start to come down only well after an economic recovery begins. The phenomenon works in reverse at the start of a downturn, when firms would rather reduce work hours, or impose some pay cuts before they let workers go. Unemployment starts rising only if the downturn is prolonged. Because unemployment follows growth with a delay, it is called a *lagging indicator* of economic activity.

How sensitive is the unemployment rate to economic growth? That depends on several factors, most notably labor market conditions and regulations. One estimate for the strength of this relationship for the U.S. economy is *Okun's Law* (named after the late economist Arthur Okun), which postulates that a decline in unemployment by 1 percentage point corresponds to a 3 percent rise in output. More recent estimates find that the consequent rise in output may be lower, possibly between 2 and 3 percent.

How far does this inverse relationship between growth and unemployment go? If economies kept expanding, would one expect to see unemployment disappear? Actually this is not the case (see Chart 1); even in the 2000s when the global economy was prospering (at least until the 2008–09 crisis), global unemployment declined but never reached zero. This

observation raises one basic question: Can unemployment ever fall to zero?

## Clearing the market

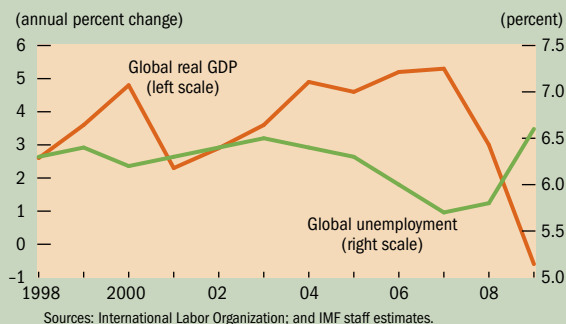
According to classical economic theory, every market, including the labor market, should have a point at which it clears—where supply and demand are equal. (See “Back to Basics: Supply and Demand,” *F&D*, June 2010.) Yet the very existence of unemployment seems to imply that in labor markets around the world, the demand for and supply of labor fail to reach an equilibrium. Do labor markets continually fail?

Sometimes it is a matter of wages, or the unit price of labor, not adjusting to clear the market. Some workers, particularly skilled ones, may have *reservation wages* below which they are not willing to work, but which are higher than what employers are willing to pay. Alternatively, the wage an employer is willing to pay may be lower than the legal *minimum wage* set by governments to try to ensure that wages can sustain a living. When such rigidities in the labor market lead to a shortage of jobs, it is called *structural unemployment* and those who are structurally unemployed tend to have longer spells of joblessness, on average.

But the inflexibility of wages does not fully explain the perennial nature of unemployment. Some level of unemployment will always exist, for no other reason than there always will be some people who are between jobs, or just starting

Chart 1  
**Jobs and growth**

In general, when real global gross domestic product is growing, the unemployment rate declines. The jobless rate generally increases when the world economy is shrinking.



Sources: International Labor Organization; and IMF staff estimates.

out their careers. These people are unemployed not because there is a shortage of jobs in the market, but because finding a job takes time. Such temporary spells of unemployment are referred to as *frictional unemployment*.

The combination of these factors brings about a long-term average around which the unemployment rate tends to fluctuate, called the *natural rate of unemployment* (NRU). The term “natural” does not mean it is a constant that cannot be changed; to the contrary, it implies that labor market characteristics, which are mostly driven by policies, determine it. For example, the relatively high rate of unemployment in Europe compared with the United States is in part attributed to Europe’s stronger unions and stricter labor regulations (see Chart 2). These labor market institutions may give European workers a better bargaining position, but they can also render workers too expensive for the employers. In the United States, unionization is lower and labor markets are more flexible, but workers have traditionally enjoyed higher employment rates than their European counterparts.

The natural rate of unemployment is sometimes called the *non-accelerating inflation rate of unemployment* (NAIRU), because it is consistent with an economy that is growing at its long-term potential so there is no upward or downward pressure on inflation. The flip side of this argument suggests that whenever unemployment temporarily deviates from NAIRU, inflation would be affected. Consider a recession, a period of low economic activity. With lower demand for goods and services, firms would start laying off workers and at the same time not raise their prices as much as they would have. So, one would observe a rise in unemployment and a drop in inflation during recessions (see “Back to Basics: What Is a Recession?” March 2009). This tradeoff between unemployment and inflation—described by the *Phillips curve* (named after the late economist William Phillips)—is only temporary, though; once prices adjust to a new equilibrium that clears the goods and services market, firms go back to producing at full capacity and unemployment once again falls—to the NAIRU.

Understanding what is behind the long-term equilibrium rate of unemployment helps policymakers understand how they can, and cannot, change it. For example, policies that try to lower unemployment by boosting consumer demand (thereby raising production) can do so only temporarily, and at the cost of higher inflation later. However, policies that are geared toward easing frictional or structural unemployment can boost employment without necessarily affecting inflation.

But NAIRU can also change over time without any explicit policy action: structural changes such as technological advancements or demographic shifts can have long-lasting effects on unemployment trends. For example, many economists agree that the technology boom of the 1990s increased labor productivity, making each worker more “desirable” to employers, and has therefore reduced the NAIRU—although there was an initial blip of unemployment as workers untrained in using the technologies were displaced. A rapidly aging population—as is occurring in many advanced countries today—is another important factor in reducing the number of people in the job market and bringing down unemployment.

## Measuring unemployment

Not all people who don’t work are unemployed. To be considered unemployed for government statistics, a person would not only have to be out of work, but also be actively looking for a job—for example, by sending out résumés. In the United States, unemployment is measured by a monthly survey of households conducted for the Bureau of Labor Statistics and covers a representative sample of more than 100,000 individuals. The *labor force* includes both those with jobs and those looking for them. The *unemployment rate* is the percentage of the labor force that is looking for a job. The labor force is only a portion of the total population. The ratio of the labor force to the working age population is called the *labor force participation rate*.

The labor force excludes people who are of working age but are neither employed nor looking for a job—such as students and homemakers. But the labor force also leaves out jobless people who were in the job market unsuccessfully for so long that they stopped looking for a job. Such *discouraged workers* are one reason unemployment statistics can underestimate the true demand for jobs in an economy. Another form of *hidden unemployment* in statistics comes from counting as employed anyone who did *any* work for pay (or profit, if self-employed) in the week prior to the government survey. This hides the demand for work by people who would have preferred full-time employment, but are working fewer hours only because they could not find full-time jobs. ■

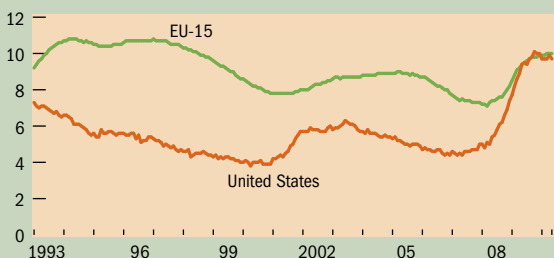
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Chart 2

### Europe’s higher unemployment

Europe’s labor market rigidities contribute to an unemployment rate in the continent that is generally higher than in the United States.

(unemployment rate, percent)



Source: CEIC Data Co., Ltd.

Note: The European Union-15 includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

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# Return to Form

## Germany's economy is again Europe's locomotive, but its export dependence is both a blessing and a curse

Helge Berger and Martin Schindler

**G**ERMANY'S ability to produce goods that the rest of the world wants to buy has been a constant theme in Europe's post-World War II economic history. Its impressive export performance is a sign of economic muscle and enduring competitiveness. But even though German exporters have historically maintained an edge in many high-value markets, the precrisis export surge, and consequent very high current account surpluses, is fairly new and most likely a temporary phenomenon.

Germany's export performance has led to a rapid industry-led recovery following the global economic crisis. But its dependence on exports has come at a cost: the ups and downs in global demand for German products sent the economy on a roller-coaster ride during the financial crisis, when strong precrisis expansion was followed by an unheard-of output drop of over 4½ percent in 2009, before resurgent world trade brought growth back into positive territory. Because of its current account surpluses, Germany has also featured prominently in discussions of such surpluses' role in balanced global growth. Observers in both Europe and the United States have urged the German government to boost domestic demand as a means to spur global recovery.

A closer look at Germany's net-export performance can help inform this—at times heated—debate. Temporary cyclical factors influence foreign and domestic demand but in themselves are little reason for concern. Likewise, surpluses resulting from structural developments such as an aging population are not only natural but a welcome development as the economy moves toward a new demographic equilibrium. Other structural factors could be less benign, however. For instance, persistent rigidity in service and labor markets might limit growth from domestic sources and, by deepening dependence on trade, lead to unwanted volatility. It is in these areas that economic policy could play an important role in adjusting Germany's current account dynamics.

### Roller-coaster ride

The most remarkable characteristic of Germany's trade and current account balances since the 1970s is not their size, but their ups and downs (see chart). Driven by cyclical factors

and structural shocks, current account balances have fluctuated substantially over the past four decades, and small—even negative—balances are, historically speaking, more typical for Germany than the recent record highs.

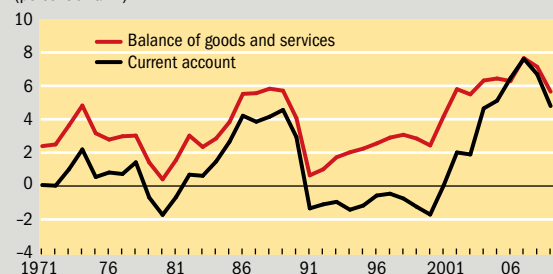
Two current account balance surges from past decades stand out: one during the run-up to German reunification in 1990 and another over a period in the late 2000s. After averaging only 0.6 percent of gross domestic product (GDP) during the 1970s and 1980s, the current account balance increased to more than 4 percent in the years prior to German reunification, driven by a cyclical upswing in the world economy and only moderate increases in unit labor costs as a result of robust labor productivity growth.

The deterioration of the current account that followed the reunification of East and West Germany lasted throughout the 1990s. High government deficits associated with reunification and catch-up consumption reduced aggregate savings. At the same time, low labor productivity in the former East Germany, along with an increase in labor costs because of an unfavorable conversion to the deutsche mark, weighed on external competitiveness. A slowing world economy further reduced external demand for German exports, while imports remained stable. The result was a sharp decline in Germany's net foreign trade position.

### Ups and downs

The recent surge in Germany's current account surplus is extraordinary and unlikely to last.

(percent of GDP)



Source: IMF, *World Economic Outlook*.

It was not until after 2000 that the current account turned positive again and began a period of steep ascent to reach the heights observed today. This most recent episode has been exceptional in terms of both the speed at which current account balances rose and their levels, peaking at nearly 8 percent of GDP in 2007. External and domestic factors have both played a role in shaping the recent current account dynamics: the rise in the current account balance has accompanied a mounting share of exports in GDP, as German exports kept pace with expanding world trade. Imports, by contrast, grew less strongly, suggesting that domestic factors also have contributed to recent current account surpluses.

### Value for money

The post-2000 reversal in Germany's current account dynamics reflects improved competitiveness, which had declined during the 1990s and contributed to German exports' shrinking share of world trade at that time. German firms and unions responded to the challenge of declining competitiveness with a series of agreements that limited wage increases. These, along with improving labor productivity, helped limit the increase in unit labor costs and offset the impact of the substantial exchange rate appreciation that followed the introduction of the euro in 1999.

Germany's traditionally high nonprice competitiveness and its export composition also played an important role, positioning German companies to participate in global trade growth. In particular, Germany's strength in the area of manufactured capital goods helped the economy benefit from surging growth in emerging markets, generating strong demand for investment goods. Demand from the United States also played a role, both directly and indirectly—U.S. demand for Chinese consumption goods fueled much of China's demand for investment goods, for example.

Finally, German exporters benefited from their specialization in machinery equipment and manufactured goods and from their traditional focus on innovation and flexibility, including strong after-sales services. This winning combination meant that German exports were less sensitive to price increases than many other goods, a fact that also helped the economy hold its own as the euro appreciated.

### Saving for a rainy day

The rising current account surplus also reflects Germany's increased savings and lower domestic investment, both of which are the result of structural changes in Germany's domestic and external environment. A strong euro, Germany's reunification, and the eastward expansion of the European Union contributed to the internationalization of Germany's supply chain: German firms shifted their manufacturing capacity abroad to benefit from lower production costs and as a hedge against further exchange rate appreciation. This meant that foreign direct investment to some extent displaced domestic investment, a development that contributed to the sharp rise in the current account surplus, especially during the early 2000s.

Germany's high savings, in turn, are influenced by cyclical and structural factors. The volatile nature of international

trade flows exposes the economy to increased economic uncertainty regarding wages, profits, and employment, prompting many firms and households to save more for a rainy day. Indeed, private households started spending less of their income on private consumption, especially as net trade was increasing during the 2000s.

High savings are, in part, also the result of slow-moving structural factors, in particular Germany's waning and aging population. When fewer young people carry the burden of financing the health care and pension needs of retiring generations, higher savings are a natural response. For this reason, positive current account surpluses should come as no surprise. They are, in fact, necessary until a new demographic equilibrium is reached.

### Facing up to structural factors

Many factors have contributed to Germany's current account surpluses. Some are clearly temporary, such as those linked to cyclical upswings in Germany's trading partners. Others are more structural in nature. Much of Germany's high level of savings is a rational, and welcome, response to the aging of its population. Similarly, Germany's strong export performance is a reflection of just how globally competitive its companies are.

These factors all reflect legitimate market choices that have served Germany and its export partners well, and more generally, high trade and current account balances are only undesirable insofar as they reflect market distortions. Thus, attempts to shrink Germany's current account surplus through measures that reduce its external competitiveness, as some recommend, would hurt both the German economy and that of its trade partners.

But other structural factors that contribute to the high level of current account surpluses might be less desirable. In particular, rigidity in the German service and labor markets continues to limit domestic growth. It also contributes to structural unemployment, which remains high, and exacerbates Germany's dependence on trade. For example, regulations that make it difficult to start a new business in the service sector limit economic growth and job creation. Moreover, a generous social benefit system can have unintended consequences for the labor market, where reduced incentives to take lower-paying jobs will tend to fall hardest on the service sector.

A broad reform agenda, encompassing both the service and labor markets, could unleash Germany's domestic growth potential. A larger, more productive service sector would increase the relative importance of the domestic economy, which should help reduce income volatility and the associated need for precautionary savings. New businesses in the service sector are also likely to trigger higher investment, at least initially, and new jobs would support consumption. Both higher consumption and investment would tend to increase imports, potentially reducing the current account surplus while strengthening growth. ■

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# Finding New Data

**The global crisis revealed vast gaps in international financial statistics that authorities are working to fill**

*Adelheid Burgi-Schmelz*

**T**he recent global financial crisis demonstrated the lack of data in key areas that might have helped authorities measure and understand the risks to the international system that arose from increasingly integrated economies and financial markets. Statistics that are timely, internally consistent, and comparable across countries are critical to monitoring financial stability. Better information on the connections among financial institutions through channels such as interbank lending, securities lending, repurchase agreements, and derivatives contracts is critical to helping authorities ensure financial stability.

But in the run-up to the recent crisis, data systems failed to capture comprehensively the deepened integration of economies and markets and the strengthened linkages among financial institutions. There is overwhelming evidence that credit risks were made worse by heavy borrowing (leverage), much of which took place outside traditional depository institutions (such as banks) through the use of commercial paper, repurchase agreements, and other similar market instruments. The heavy use of short-term finance to purchase long-term assets (maturity transformation), which led to a mismatch in the maturity structure of corporations' assets and liabilities, was a key problem in the crisis. But because of a paucity of data, regulators, supervisors, and market participants could not fully measure the degree of maturity transformation or the extent to which financial institutions and markets were interconnected.

## **A key lesson for financial stability**

One key lesson is that supervisors, policymakers, and investors should have sufficient data and information to more quickly evaluate the potential effects, for instance, of possible failure of a specific institution on other large institutions through counterparty credit channels, and on financial markets, payment, clearing, and settlement arrangements. Federal Reserve Board Governor Daniel Tarullo noted recently (see Tarullo, 2010). The need for comprehensive, high-frequency, and timely data to monitor systemic risks associated with operations of the systemically important financial institutions was underscored by IMF Managing Director Dominique Strauss-Kahn, who observed in a recent interview (Schneider, 2010), "We need more data, including from

a rather small number of the large financially systemic institutions.... The mandate of the Fund is to have surveillance of countries, but today you have institutions as big, maybe bigger, than many countries. How can we have global surveillance without having data on what happens with those large financial institutions?"

The Group of 20 (G-20) advanced and large emerging market economies echoed this sentiment and the group asked the IMF and the Financial Stability Board (FSB), to **explore gaps and provide appropriate proposals for strengthening data collection** (see Burgi-Schmelz, 2009). The International Monetary and Financial Committee, the multinational group that steers IMF policy, endorsed this request in April 2009 and again in 2010.

## **What is missing?**

In response, the IMF and the FSB—which the G-20 set up last year to identify problems in the financial system and oversee any action to remedy them—made 20 recommendations (see table), including:

- Strengthening data essential for effective capturing and monitoring of the build-up of risk in the financial sector. This calls for the enhancement of data availability, both in identifying the build-up of risk in the banking sector and in improving coverage in those segments of the financial sector where the reporting of data is not well established, such as the nonbank financial corporations.
- Improving data on international financial network connections. This calls for enhanced information on the financial linkages of systemically important financial institutions as well as strengthening data-gathering initiatives on cross-border banking flows, investment positions, and exposures, in particular, to identify activities of nonbank financial institutions.
- Strengthening data important to monitoring the vulnerability of domestic economies to shocks. This calls for measures to strengthen the sectoral coverage of national balance sheet and flow of funds data, including timely and cross-country standardized and comparable government finance statistics and data on real estate prices. Real estate issues are particularly tricky. Country practice in compiling these data is uneven, yet the impact of house prices on household net worth is highly relevant to the current crisis.

- Promoting effective communication of official statistics to enhance awareness of available data for policy purposes.

Work to address all the recommendations has begun. In some cases, closing the gaps poses significant challenges, such as finding needed resources for statistics agencies or changing legislation. In others, the identified gaps relate to existing initiatives where the conceptual framework for capturing data is well developed, such as in the IMF's Coordinated Portfolio Investment Survey.

### Collecting data efficiently

Moving from identification of data gaps to efficient systems of data collection, management, and reporting is complicated. It requires prioritization of activities, effective coordination and cooperation among international agencies and national authorities, adequate resources, and appropriate legislative frameworks in many countries to improve the ability of regulatory and statistical agencies to collect the necessary data. At a conference in Basel last April, senior government officials acknowledged the difficulties (see IMF, 2010). They also observed that some of the most challenging recommendations—such as those calling for a better understanding of global financial networks—are among the most important for enhancing financial stability analysis.

So it is imperative that the data collection effort recognize its international dimensions and seek appropriate participation from regulators worldwide, especially in jurisdictions with significant financial centers. For instance, the international nature of financial markets hampers the extent to which one economy acting single-handedly can organize data on financial markets globally.

It is in recognition of these factors that the IMF and FSB adopted a consultative international approach to developing a common reporting template for the systemically important institutions, involving financial stability experts, supervisors, and statisticians from the countries that are members of the FSB—all of the G-20 plus Spain. The reporting template could play an important role in standardizing information and facilitating the process of sharing data on common exposures and linkages between systemically important institutions. But coordination is not a panacea—important barriers remain, such as the lack of an adequate legislative framework for data sharing. Confidentiality issues in data disclosure and private sector proprietary rights must also be dealt with.

### Making progress

Considerable progress has been made (see IMF and FSB, 2009, 2010). For example, the Principal Global Indicators (PGI) website was launched in April 2009 to provide timely data available from participating international agencies covering financial, governmental, external, and real sector data, with links to data on websites of international and national agencies.

In developing the PGI website, the seven international organizations that comprise the Inter-Agency Group on Economic and Financial Statistics recognized the importance of going beyond traditional statistical production processes

to obtain a set of timely and higher-frequency economic and financial indicators, at least for systemically important countries. Because of the global nature of the recent crisis, data users demand more internationally comparable, timely, and frequent data. This interagency approach mobilizes existing resources, builds on the comparative advantages of each agency, and supports data sharing in a coordinated manner. The international agencies have access to selected country data sets that are presented in a broadly comparable manner across countries.

The website has already been enhanced several times. Efforts are under way to expand the website's country coverage beyond the G-20 economies in tandem with ongoing data initiatives at the IMF—including the promulgation of international statistical methodologies, harmonization in the presentation of government finance statistics, improving regular reporting of Financial Soundness Indicators, and increased dissemination and transparency of data through the IMF's General Data Dissemination System and the Special Data Dissemination Standards.

### The way forward

There has been significant progress in the availability and comparability of economic and financial data in recent years. But the crisis that began in 2007 has raised issues that require even more innovative approaches to statistical production, both to obtain timely and higher-frequency economic and financial indicators and to enhance cooperation among international agencies in addressing data needs. The work in progress on data gaps, and in particular on the IMF-FSB common template, offers great opportunities to permit enhanced understanding of the issues surrounding financial stability—especially those that relate to the interconnections of systemically important global financial institutions.

*Adelheid Burgi-Schmelz is Director of the IMF's Statistics Department. Robert Heath, Andrew Kitili, and Alfredo Leone of the IMF's Statistics Department assisted in the preparation of this article.*

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## Revisiting Russia's Crash



**Martin Gilman**

### No Precedent, No Plan

Inside Russia's 1998 Default  
MIT Press, Cambridge, 2010, 416 pp., \$29.95 (cloth).

The global financial crisis has revived interest in previous crises. Martin Gilman's book, the most substantial contribution to date on the Russian financial crash of August 1998, is therefore timely. Gilman was the IMF's senior resident representative in Moscow in 1996 and has lived there for all but three years since; he offers excellent insights into Russian policymaking, the work of the IMF, and the evolution of the crisis. He knows the actors, Russia, and the relevant literature.

The Russian financial crash was spectacular. It hit with a triple whammy: default on domestic treasury bills, sharp devaluation of the ruble, and a three-month freeze of foreign bank payments. Fears abounded of hyperinflation and an end to Russia's experiment with a market economy. This crash was a turning point—for the better. Remarkably, Russia's GDP fell by only 5.3 percent in 1998, and it grew by an annual average of 7 percent for the next decade. Most of the domestic debt could be written off.

This book is a chronological-thematic narrative of the build-up, the peak, and the outcome of the financial crash. Gilman tells this exciting story well. His is an easy

read without unnecessary professional jargon or technicalities, and the author is refreshingly candid about his own views. His favorites are the Russian reformers and the IMF management of Michel Camdessus and Stanley Fischer, while he harbors no sympathy for red directors, communists, nationalists, oligarchs, or Joseph Stiglitz. His many personal observations are both telling and revealing. "The problem on the government side was that no one was clearly in charge." Key insights include the miserable state of Russian institutions, the severity of the economic problems, and the weakness of the state after the collapse of the Soviet Union. Concerted policymaking was missing and vital information did not flow. Gilman displays many examples of the absence of policy coordination. Incredibly, the finance minister and the chairman of the central bank refused to talk to one another during the financial crisis, while decisions were often made by people without government posts.

Gilman gives a good picture of how the IMF works. Its access to Russian policymakers was impressive, but often its staff did not know what was really going on. Outsiders will obtain an uncommonly clear picture of what the IMF could and could not influence. Most will realize how great the limitations on its power are. The author rightly emphasizes that its greatest role was to promote good policy discussion. On specific policies, he is critical of his longtime employer for having opposed export taxes, flat income taxes, and the stabilization fund. I think his balance is accurate: the IMF is good at acting fast and sensibly, but its policy thinking is intelligent and decent rather than outstanding.

Gilman takes satisfaction in discrediting three myths. Contrary to widespread but false media reports, nobody stole the IMF disbursement of \$4.8 billion in July 1998. Nor "was there evidence that the Bank of New

York laundered billions of dollars from the Russian mafia." Months later, after successive front-page stories, *The New York Times* backtracked on its allegations of money laundering and disingenuously buried its condemnation of its main source for those claims in a large article in its business section. Third, and despite unfounded allegations particularly emanating from economist Joseph Stiglitz, capital flight was not caused by capital liberalization enforced by the IMF. Russia did not liberalize capital account operations until 2006—eight years after the IMF program—when the weak state found it impossible to control capital flows.

Curiously, the author is reticent to draw all the conclusions from the crash of 1998, which in hindsight turned out to be such a success. He emphasizes that the absence of financing imposed fiscal discipline on the government, promoted a profound tax reform, and led to the completion of various structural reforms. But he is not prepared to say that it was good that the crash came early so that Russia could preserve \$10 billion of reserves or that the default allowed Russia to write off some \$60 billion of treasury bills. This crash was Russia's real shock therapy and it worked. Yet, the crash also promoted Vladimir Putin's authoritarian rule.

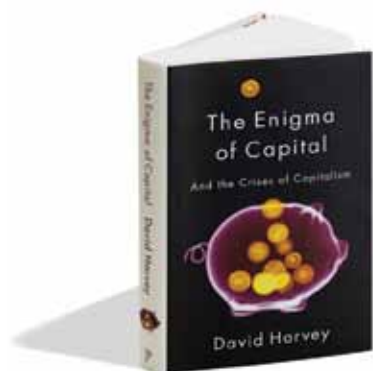
Gilman calls the 1998 crisis "a humbling lesson for the IMF," but was it in substance? The IMF offered reasonable policy advice and a large amount of financing to resolve Russia's hardship in July 1998. Alas, the Russian parliament refused to legislate the necessary measures. Then the IMF honestly carried out its threat to stop financing. The Russian crash ensued, and taught Russian policymakers why. On their own, they did what the IMF had suggested. A successful crisis resolution followed. After all the recent Western financial folly, we are surely more tolerant of the early failures of Russia, which since has learned its lessons so well.

**Anders Åslund**

Senior Fellow, Peterson Institute for International Economics



## Mysterious Money



David Harvey

### The Enigma of Capital

Profile Books, London, 2010, 256 pp., \$24.95 (cloth).

The global financial crisis has naturally given rise to a great many theories about its cause. Whereas most theories focus narrowly on one factor or another—global imbalances, excessively low policy interest rates, failings of financial regulation—David Harvey's *Enigma of Capital* provides a more sweeping explanation. For Harvey, who analyzes the crisis largely through a Marxist prism, the root cause of the crisis is the class struggle between capital and labor over distribution of the economic pie.

Harvey's basic story runs as follows. In industrialized countries, sustained capital accumulation and the consolidation of capitalists' economic power were held in check through the 1960s by a shortage of labor. Immigration—including guest worker programs in Europe and the 1965 immigration reforms in the United States—labor-saving technological change, and outsourcing to countries like China meant there was a gradual shift in the bargaining power between capital and labor.

By the time Reagan and Thatcher came along, labor was politically subdued, and real wages for workers were no longer keeping pace with rising productivity. But for capital to be able to sell its wares, workers

need sufficient income (there are only so many yachts a billionaire can buy). So how could demand be sustained in the face of a falling income share for labor? By extending easy credit! This provides both effective demand for goods and, through interest payments, an additional source of income to capital. And that, according to Harvey, is exactly what happened.

In the United States, for example, the share of wages and salaries fell from about 53 percent of GDP in the 1960s to less than 50 percent in the 1980s and by 2005 was hovering around 45 percent; meanwhile, the consumer debt service ratio (debt service payments in proportion to disposable income) rose from about 10 percent in 1980 to more than 13.5 percent by 2005. Eventually, of course, the house of cards came tumbling down: without a real rise in income, workers were unable to repay their mounting debts, and a financial crisis ensued.

How plausible is this story? First, there are some (largely uncontroversial) facts: at least in the United States and the United Kingdom, income inequality has worsened over the past 25 years or so; there was a boom in consumer (especially home mortgage-related) lending; and we have just seen the worst financial crash since the Great Depression. (Indeed, as Harvey points out, similar trends of rising inequality and of increasing household indebtedness were evident before the 1929 financial crash.)

Harvey is not the only one to notice these trends: in *Fault Lines*, Raghuram Rajan tells a similar story, albeit based on the college education premium rather than on class struggle. Rajan emphasizes the 90–10 divide: between 1975 and 2005, the purchasing power of those in the 90th percentile of the income distribution saw their wages rise by 65 percent more than those in the bottom 10th percentile. For the latter (mostly those who lack a college degree in an increasingly skill-based economy),

the politically expedient solution was to provide easy credit, particularly through Fannie Mae and Freddie Mac. This made home ownership affordable to those who could not really afford it. Beyond that, Harvey's and Rajan's explanations are pretty much the same: the bubble collapses when the debt-financed consumption boom becomes unsustainable.

## Harvey analyzes the crisis largely through a Marxist prism.

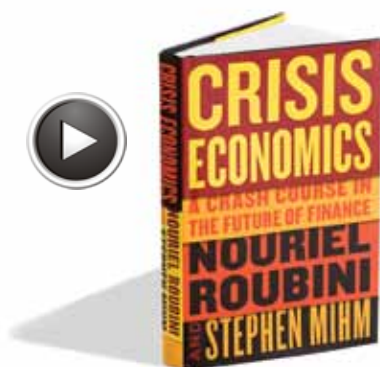
So has Harvey solved the mystery of the financial crash? Not quite. He has a plausible tale, but what economists will find frustrating with *The Enigma of Capital* is that the details are not worked out. The book covers a great many important and interesting ideas but none in sufficient detail to yield testable hypotheses. For instance, when does the declining income share of labor become a critical constraint for capital to sell goods? Does the theory require that real wages actually decline or just not keep pace with rising productivity and real GDP? And does rising demand from Chinese workers—whose real wages are increasing—not help offset the lower demand from American workers whose jobs are being outsourced? Harvey does not articulate his ideas with sufficient precision to pin down such questions. Fortunately, however, others are already at work modeling this theory with the analytical rigor that economists are likely to demand. Meanwhile, Harvey has written a thought-provoking book that is an important contribution to the “how-on-earth-did-this-all-happen?” literature.

So do I buy Harvey's theory of what caused the global financial crisis? Not yet. Would I buy his book? Definitely.

**Atish Rex Ghosh**

Division Chief, IMF Research Department

## The Man Who Saw It Coming



*Nouriel Roubini and Stephen Mihm*

### **Crisis Economics**

A Crash Course in the Future of Finance

Penguin Group (USA) Incorporated, New York, 2010, 368 pp., \$27.95 (cloth).

**N**ouriel Roubini, one of the authors of *Crisis Economics*, is known as the man who saw the global financial crisis coming. This book is a chronological thought process of how he managed to do it. Each crisis is different, but the principal thesis of this book focuses on the strong common factors of crises that make them both probable and predictable. The message is that capitalism and crises are natural bedfellows. “Creative destruction”—the mechanism by which technical innovation drives economic growth—necessarily causes crises. What the book counsels is controlled creative destruction, which comes from understanding and managing crises. The book takes the reader through the great thinkers in economics who have written on business cycles and financial meltdowns: J.S. Mill, Jevons, Marx, Schumpeter, Keynes, Fisher, and Minsky. While no surprise to the scholar, the general reader will find a contemporary resonance in 19th-century economist J.S. Mill’s description of a credit boom and crash.

This book has the pace and verve of a thriller. The narrative is littered with context and clues, and there are many villains (including

Alan Greenspan) but few heroes. Roubini may be viewed as one of the heroes, though there are others less well known. But nobody listens to anyone warning of the dangers of alcohol abuse at a fraternity party. The book takes the reader into the bewildering world of financial engineering. As part of the explanation of securitization, it describes the “originate and distribute” model and explains the workings of collateralized debt obligations (CDOs), CDOs-squared, and CDOs-cubed. It also refers to bankers’ bonuses, risk taking, moral hazard, deregulation, over-leveraging, global savings, easy credit, and the growth of the shadow banking system. Chapter 4 describes how a cocktail of these elements led to the subprime crisis and not just the collapse of two investment banks but the near-collapse of Fannie Mae, Freddie Mac, and AIG—and with them, the undermining of the creditworthiness of the United States.

The book describes how the infection in the U.S. financial system developed into a global epidemic, laying low the myth of decoupling. However, no matter how close the world came to repeating the experience of the Great Depression, lessons had been learned and the major central banks deployed innovative and radical policies to prevent a recurrence. Those radical policies are discussed, but the authors speculate about whether the cure is simply delaying the onset of the next crisis. Intervention by the authorities did not distinguish among the good, the bad, and the ugly. It has left open the inevitability of the next downturn.

Later chapters bring the reader to policy actions. The authors argue that prior to the crisis, the prevailing philosophy was that the “market knows best.” But this is not what is taught in economics courses. Market failures from uncertainty, asymmetric information, and moral hazard are standard in economics programs. Ignoring what is taught in economics

is not a crisis for economics but may be one for economists, who were slow in sounding the warning sirens. A number of practical proposals—most of which have been discussed in the media—are examined, from the structure of bankers’ bonuses to the inclusion of the toxic assets designed by Wall Street’s financial engineers as part of the bonus pool. Other proposals include “dynamic provisioning” (raising capital requirements during a boom to cover inevitable losses in a downturn), tighter liquidity management rules, the return of a form of Glass-Steagall (the separation of investment banking from commercial banking), stronger capital requirements for hedge funds that trade in credit default swaps (an insurance contract that meets payments in case of default but can be traded so that an agent with no insurable interest can hold it), improved corporate governance, the need to reduce the dependence on rating agencies, and the need to limit bank size. Much of this is sensible; some of it is contentious.

The title of the book is perhaps a misnomer. Crisis economics does not require a special type of economics. What needs changing in response to the crisis is how economics is taught in the mainstream. There is nothing wrong with rigor and model building as long as students are taught the critical evaluation that should accompany them. Even the proponents of the Efficient Markets Hypothesis have long abandoned the naive versions, and there is ample empirical refutation. The best way of developing critical evaluation is through the study of economic history, and that is the lesson I take away from this book. Unfortunately, many economics departments have relegated economic history to the periphery of the curriculum. As the authors state, “History promotes humility, a quality that comes in handy when assessing crises.” Who can disagree with that?

**Kent Matthews**

*Sir Julian Hodge Professor of Banking & Finance, Cardiff Business School*

# Coping with Capital Inflow Surges



## In response to recent inflow surges, some emerging markets are again using capital controls

ONE of the effects of the recent global crisis has been a surge in capital flows to emerging markets, particularly to those with strong growth prospects. Capital inflows have well known benefits—by supplementing domestic savings in financing economic growth, fostering the diversification of investment risk, and contributing to the development of financial markets. Still, a sudden surge of incoming capital can complicate economic management, lead to asset price bubbles, and increase systemic risk in the financial sector. In addition to the traditional policy responses—exchange rate changes, adjustments in fiscal and monetary policies, foreign exchange intervention, reserve accumulation, and prudential measures—emerging economies often use capital controls—tightening controls on inflows, easing controls on outflows, or both—to try to mitigate risks associated with fluctuations in international capital flows.

Before the recent global crisis, many emerging markets followed the advanced economies by opening up their economies to foreign investment and allowing domestic investors to put their money abroad. As a result, cross-border capital flows—from advanced economies to emerging economies and between emerging economies—increased over the past two decades. But some emerging economies responded by placing restrictions on these flows. For example, Argentina, Thailand, and Colombia implemented unremunerated reserve requirements on most types of capital inflows in the second half of the 2000s. Thailand also actively liberalized outflow controls to balance part of the capital inflows by allowing residents to invest abroad. To address the large increase in credit expansion, Croatia applied a mix of prudential measures and capital controls on banks' foreign borrowing. While both India and China pursued a gradual liberal-

ization of the capital account, controls were tightened on specific capital inflows in 2007. More recently, Brazil introduced a tax on some foreign exchange transactions at the end of 2009 and supplemented it with another tax on certain equity inflows in 2010.

But the evidence on the effectiveness of capital controls is mixed. They generally cannot reduce the total volume of inflows or reduce exchange rate volatility. However, they appear to lengthen the maturity structure of inflows, resulting in more stable flows, and provide some monetary independence by maintaining a wedge between domestic and foreign interest rates. The measures introduced in Malaysia in 1994 and in Chile in 1991 to stem short-term debt inflows were successful in reducing the volume of net inflows and in lengthening their maturity structure.

### What are capital controls?

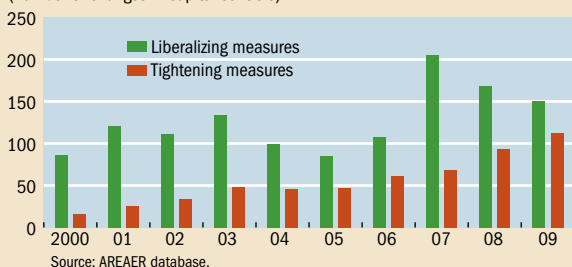
While there is no unique generally accepted legal definition of capital controls, in the broadest sense, they are measures that regulate inflows and outflows of capital. Controls can take many forms, but they generally fall under two main categories: administrative and market based. Market-based controls, such as unremunerated reserve requirements and taxation of financial flows, discourage the targeted transactions by increasing their cost. Administrative controls prohibit or impose explicit quantitative limits on capital transactions. Because they often subject these transactions to the approval of the authorities, administrative controls are typically less transparent than market-based controls.

### About the database

The Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) database tracks exchange and trade arrangements for all 187 IMF member countries since 1950. This unique database is updated yearly based mostly on information from country authorities. The database also provides information on different types of capital controls used by countries, restrictions on current international payments and transfers, arrangements for payments and receipts, procedures for resident and nonresident accounts, exchange rate arrangements, and the operation of foreign exchange markets. It also includes measures implemented in the financial sector, including prudential measures. The database is available on a trial basis at [www.imfarear.org](http://www.imfarear.org) (user name: trial; password: imfarear).

### Since the start of the financial crisis, emerging and developing economies have been placing more controls on capital flows—by implementing fewer liberalizing measures and more tightening measures.

(number of changes in capital controls)

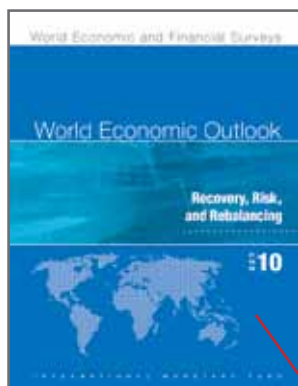


Prepared by Annamaria Kokenyne of the IMF's Monetary and Capital Markets Department.

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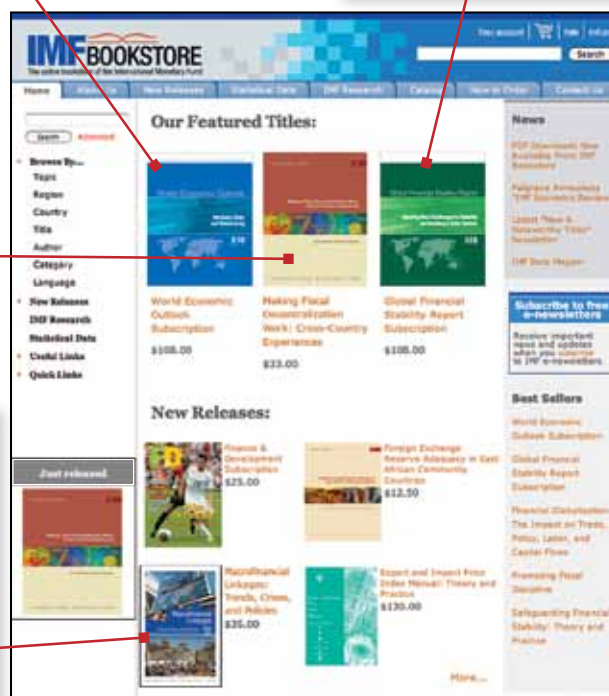
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