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YOUTH DEMANDING CHANGE

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Youth Speaks Out

Young people, hardest hit by the global economic downturn, are speaking out and demanding change. Coming of age in the Great Recession, the world's youth face an uncertain future, with lengthening job lines, diminished opportunities, and bleaker prospects that are taking a heavy emotional toll. Some people call them the iPod generation—insecure, pressured, overtaxed, and debt-ridden—but insecure or not, around the world young people are challenging a system that appears to have let many down. "Young people want a world economy that is more just, more equal, and more human," says Angel Gurría, secretary-general of the Organization for Economic Cooperation and Development.

The Great Recession has taken its toll on the different generations in different ways. For the post–World War II baby boom generation, it's essentially a wealth crisis. A generation that had hoped to retire has seen the value of its property and savings dramatically eroded. For the group known as Gen X (born 1965–80), it's an income crisis. They should be in the period of their life when they are earning the most, but the downturn has depressed their salaries and threatens their pensions. For Gen Y (1981–2000), it's about their future and the potentially damaging legacy of the boomer generation.

In recent issues of the magazine, we have looked at the impact of aging populations on economies around the world and how inequality affects growth. In this issue of *F&D*, we look at the need to urgently address the challenges facing youth and create opportunities for them. Harvard professor David Bloom lays out the scope of the problem and emphasizes the importance of listening to young people. Other articles look at the need to improve education and skill levels, the effect of the crisis on youth in advanced economies, and the role of the IMF. We also speak to six young people around the world about their hopes and aspirations and how the crisis has affected them.

Also in the magazine, we profile Fred Bergsten, examine the rise of the Chinese currency, look at the role of the credit rating agencies, discuss how to boost the empowerment of women, and present our primer on macroprudential regulation, seen as increasingly important to financial stability.

In addition, for all who want a better understanding of basic macroeconomic concepts, we'd like to flag the release of the new compilation of our "Back to Basics" columns, which we have assembled on one page of our website, www.imf.org/fandd.

Finally, we are sad to report the death of Michael Mussa, the IMF's witty and trenchant former chief economist. He was 67. Mussa contributed widely and influentially to economic theory and empirics, and served as the Fund's Economic Counsellor and Director of the Research Department from 1991 to 2001.

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an American GLOBALIST

Prakash Loungani profiles **C. Fred Bergsten**

WHAT do Woody Allen, Miles Davis, Julia Child, and C. Fred Bergsten have in common? Not an easy one. Time's up. The answer is that they are all U.S. citizens who've been awarded France's Legion of Honor for their contributions to society and global discourse. Well, the French love Woody, and they love jazz, and of course they love their food. But what is Fred Bergsten's contribution? And (yes, you can ask now) who is Bergsten?

While other recipients of the Legion of Honor are often globe-trotters, Bergsten has conducted his life's work from within the Beltway, the nickname for the highway that surrounds Washington, D.C. Here, in 1981, Bergsten founded—and still heads—probably the world's most influential think tank on international economics, the Peterson Institute. This follows a distinguished career in the U.S. government, first in the Nixon administration at the National Security Council under Henry Kissinger—who says Bergsten taught him "everything I know about economics." Later, Bergsten was the U.S. Treasury's top gun for international economics under President Carter during the tumultuous time of the energy crisis. He recently announced that he will step down as director of the Peterson Institute at the end of 2012.

Bergsten's life has been devoted to putting global considerations into the minds of often-parochial U.S. policymakers and to furthering global economic integration. These efforts have gained him plaudits abroad, such as the Legion of Honor from France and an honorary fellowship in the Chinese Academy of Social Sciences. He has been a fervent supporter of the euro and—because he thinks it will unleash protectionism and hurt global integration—a vehement critic of what he considers to be the undervalued renminbi. The late Michael Mussa—IMF chief economist from 1991 to 2001 and later a senior fellow at Peterson—described Bergsten as "an evangelist for the open economy."

Evangelical roots

It is an evangelism that would have been difficult to predict from Bergsten's roots. He grew up on New York's Long Island in the suburb of Amityville (known to many Americans from the popular *Amityville Horror* book and movies) and then moved to Farmington, Missouri, which he says "is kind of like the name sounds . . . in the middle of a basically rural area." In both places, basketball competed with academics for the top spot in the young Bergsten's mind; it is a sport in which he remains active to this day.

How did this all-American experience lead to a love of international affairs? Bergsten credits a trip he took with his parents to England in the summer of 1951, when he was 10. His father, a Methodist minister, had been involved in the church's global ministries and took an exchange pastorate in England. "London was still largely bombed out," says Bergsten. There was rationing from which foreigners like his family were exempt. "So I got an introduction to a foreign environment, plus a kind of taste of repercussions still from the war . . . And I think that was really what got me started down that path."

Bergsten did his undergraduate studies at Central Methodist University in Fayette, Missouri, which both his parents had attended. In his junior year, he got "heavily into political science, history, and debate . . . anything tied to political stuff." That summer, he traveled with a group from his college to Austria and Germany. On the way over on the ship, he noticed that a seminar on international affairs was being held every day on the deck. Bergsten says he "sort of sidled up to it."

The person leading the seminar turned out to be Seth Tillman, the chief of staff of influential U.S. senator J. William Fulbright. Tillman encouraged Bergsten to cultivate his interest in international affairs by doing graduate work at Tufts University's Fletcher School of Law and Diplomacy. Tillman himself "was a Fletcher School graduate . . . and helped me get in. And from that everything then developed."

Cold War with Kissinger

In 1968, after he had graduated with a Ph.D. from the Fletcher School, the 27-year-old Bergsten was asked by Kissinger to be his economic deputy at the National Security Council. It was, he says, like being "military advisor to the Pope." The Cold War was raging, and Kissinger was absorbed by foreign policy issues and had little interest in foreign *economic* policy issues. Bergsten says Kissinger told him: "Fred, I want you to do everything in my name and never bother me."

Bergsten says the arrangement worked initially, but "then there were a number of things where I needed him and he just didn't pay attention . . . I really couldn't do my job right with him not clearing his inbox of my stuff." So Bergsten quit in mid-1971, telling Kissinger that "you do not seem to need—or deserve—the quality of advice that I am giving you." In 1973, he wrote an op-ed in *The New York Times* stating that "Henry Kissinger's record on economic issues is dismal" and that "economic issues cannot be handled by superstar solos."

Bergsten now says that he was "obviously a little miffed [with Kissinger] at the time." Kissinger and he have since made up. Bergsten says he has a signed photograph from Kissinger that reads, "To Fred, who taught me everything I know about economics." Once when Kissinger was introducing Bergsten at an event, he joked: "[After leaving me] Fred went on to have a very distinguished career in the Carter administration, something quite difficult to have achieved."

Burning issues

The day after he was elected president in November 1976, Carter asked Bergsten to come to Georgia to brief him on the gamut of international economic issues. Bergsten was responsible for all international economic issues during the transition and was then appointed to the top international job at the U.S. Treasury.

The crisis precipitated by the sharp increase in world oil prices was uppermost in the new president's mind. In April 1977, four months into his term, Carter delivered a speech from the Oval Office—wearing a sweater and sitting by a fire to demonstrate how Americans could reduce their reliance on foreign oil—in which he declared that overcoming the energy crisis was the "moral equivalent of war."

The late Michael Mussa described Bergsten as "an evangelist for the open economy."

It turned out to be a war for which Bergsten was well prepared. In the summer of 1962, he worked at Esso International, later to become Exxon. Like the other oil companies, Esso used to take its delivery of crude petroleum in one place and send it to refineries elsewhere, generally a long way away. Bergsten said it became clear that if one company could arrange to swap deliveries of crude petroleum with another company, each could save a lot of money by minimizing the costs of sending the crude to more distant refineries.

The job of figuring out how to do so was given to the 21-year-old Bergsten. "So I would figure out that if we, Esso, took some of Shell's oil from Venezuela and sent it to our refinery next door in Curaçao and gave them some of our crude from the Middle East to send to their refinery in Africa, we'd both save a hell of a lot of money, and we would divide it up. It was a great thing and I learned a lot." This experience came in handy when the Six-Day War broke out in the Middle East in 1967. The State Department, says Bergsten, was "really worried about access to oil, and rightly so. We had no idea where the oil was coming from or where it was going to." Bergsten said he could find out. Through his old contacts at Esso and other companies, Bergsten helped the State Department gather the data, and "that was part of the defense mechanism that was then built up."

Bergsten maintained an avid interest in energy issues and "more or less predicted [the rise of] OPEC [Organization of the Petroleum Exporting Countries]." During 1970–71, the

Shah of Iran and Muammar Qaddafi, who had just taken over in Libya, "kept jacking up the price of oil to beat each other, and the effect was a big increase in world oil prices." Bergsten says he "could see where it was going to lead." In the mid-1970s, he published a now-famous article in *Foreign Policy* magazine titled "One, Two, Many OPECs" in which he predicted OPEC's success and warned that cartels were coming in other primary products.

While OPEC succeeded as he had predicted, his warning that other cartels were coming has largely fallen by the wayside. In fairness to Bergsten, this is in some part because his warning—and OPEC's success—roused policymakers in resource-importing countries into taking action to try to head off other cartels. Mussa wrote in *Fred Bergsten and the World Economy* that Bergsten is a "happy Cassandra" who, on the one hand, has a "proclivity to forecast economic calamities" but, on the other, "maintains a fundamentally optimistic outlook" that the worst can be avoided through constructive policy action.

Bergsten's wealth of experience on energy issues—and his attitude that policy actions could make a difference—proved invaluable to President Carter, and he was later awarded the U.S. Treasury's Exceptional Service Award. But even without the energy crisis, says Bergsten, it would have been "a hot period for international economic issues." (See Box 1 for more on Bergsten's stint at Treasury.)

Think tank

Bergsten's contributions to the U.S. government would have been sufficient to ensure some enduring fame, but it is what he has done since that has cemented his legacy. In 1981, he set up a think tank, the Institute for International Economics, with the help of a substantial grant from the German Marshall Fund of the United States, an American public policy institution. Bergsten was no stranger to the world of think tanks: he had spent his years between government service at the Council on Foreign Relations and the Brookings Institution.

The institute—since renamed the Peterson Institute for International Economics (PIIE), partly in recognition of the financial support of its founding chairman of the board, Peter G. Peterson—has been described by British journalist Martin Walker as "the most influential think tank on the planet." Success came early and often. The concept of target zones for exchange rates, as adopted in the Louvre Accord in 1987, came out of proposals developed by Bergsten and Peterson scholar John Williamson. Richard Darman, U.S. Treasury deputy secretary at the time, says that the term "reference rates" was used in the accord to make the debt to the target zone proposals a bit less obvious.

Over the years PIIE has been at the forefront both in quantifying the costs of trade protectionism and in advocating assistance for those who are hurt by trade. In 1999, the institute's Gary Hufbauer showed that an import quota bill for steel set to pass the U.S. Senate would save fewer than 3,000 jobs at a cost to taxpayers of $800,000 per job. Bergsten says that "every senator had that analysis in his hand on the floor . . . and every newspaper had a story on it that day. The bill was voted down. It was a prototypical application of think-tank work to a particular policy issue. We had done the underlying analysis earlier, kept the work updated, applied it to the specific issue, and put it in the hands of the people making decisions." Three years later, the institute's cost estimates of a trade adjustment assistance package were critical to ensuring the passage of a law that restored so-called fast track authority for the U.S. president.

Former U.S. Treasury Secretary Larry Summers says that few institutions outside the government have had as much impact on global economic thinking as the Peterson Institute. "As an American and a citizen of the world, I feel we're lucky" to have the institute, Summers has written.

Euro booster

The adoption of the euro was a singular event in world monetary history. But most U.S. economists have been skeptical of the euro's success. The perspective adopted by most of these economists is that of the theory of optimum currency areas—which asserts that common currencies can succeed only when certain conditions prevail, such as mobility of workers across the economic units that adopt the common currency and a system of fiscal transfers from units that are doing well to those that are faring poorly. The absence of these conditions in the countries adopting the euro led U.S. economists to predict that the economic union would founder. Harvard University's Martin Feldstein, for instance, wrote in an influential 1997 article in *Foreign Affairs* that "the attempt to manage a mon-

Box 1

Rebalancing Acts, 1977 and 2007

While the adoption of an energy program was the "first priority" of Carter's economic team when they took over in 1977, rebalancing global demand by reducing the size of current account balances was not far behind. Indeed, even the energy program sought to reduce the U.S. current account deficit through lower oil imports.

The United Kingdom was also running a current account deficit at the time. During the transition from President Ford to President Carter, Bergsten was lobbied by the British to reduce the cuts in public expenditures that had been agreed under the country's IMF-backed program as one of the levers to bring down the U.K. current account deficit. Kathleen Burk and Alec Cairncross write in their book *Goodbye, Great Britain: The 1976 IMF Crisis* that "for over two hours, [U.K. representative Harold] Lever tried to convince Bergsten that Carter should somehow lighten the pressure from the Ford Treasury. Bergsten's answer was no."

Bergsten also nudged two countries with large current account surpluses, Japan and Germany, to stimulate their domestic economies lest it become necessary to allow their currencies to appreciate. Thirty years later, the resolution of global imbalances emerged again at the top of the policy agenda, when the IMF led an effort in 2007 through "multilateral consultations" to get agreement among a set of economies—China, the euro area, Japan, Saudi Arabia, and the United States—on policy actions to reduce their current account balances.

etary union and the subsequent development of a political union are . . . likely to lead to increased conflicts within Europe and between Europe and the United States."

Two U.S. economists have bucked the trend. One is Nobel Prize winner Robert Mundell, paradoxically the originator of the theory of optimum currency areas. Mundell argued that monetary union would lead to economic union; that is, the conditions necessary for a successful optimum currency area would come about as a result of adoption of the euro. The other euro booster is Bergsten. He says, however, that his position results from a "political economy perspective" rather than an optimum currency area perspective. During his time in government, Bergsten had active interactions with European policymakers and became convinced that they would in the end always do what was needed to keep "the integration process moving forward."

"Unless the U.S. and China agree, it's hard to see anything major being done by way of economic issues."

The recent crisis in Europe has not led Bergsten to change his mind. European policymakers "at every stage of this crisis have done enough to avoid a collapse." Bergsten says, "Germany will pay whatever it has to pay" to save the euro because it has a geostrategic stake in European integration and because the euro has contributed to an expansion of German trade. He predicts that Europe is slowly inching toward "full economic union. And five years from now . . . they'll have it."

G-20 and G-2

Bergsten also sees some progress beyond the euro area in economic relations among nations. He says that a forum like the Group of 20 (G-20) advanced and more developed emerging economies was "absolutely essential for legitimacy reasons," since emerging markets are now half the world economy and "they're the most dynamic part. You can't have a G-7 or G-8 [which represents only the largest advanced economies] try to run the world." The Great Recession of 2008–09 accelerated the process of legitimizing the role of the G-20. "You couldn't dither anymore," says Bergsten. "You had to get the right people around the table to manage the crisis."

Controversially, Bergsten also advocates a "G-2," a tacit group of the United States and China. He says his proposal is based on the "simple argument that unless the U.S. and China agree, it's hard to see anything major being done by way of economic issues." He cites lack of progress with the Doha Round of trade negotiations and at Copenhagen on climate change, where a stalemate between the United States and China hampers progress among the broader set of nations. He also points to the stalemate on exchange rate issues: "The U.S. is hammering on currency manipulation; China has stonewalled" (see Box 2).

Randall Henning, a Peterson scholar, says that the premise behind Bergsten's advocacy of many forums is that "cooperation between national governments in international economic relations, a public good, is chronically undersupplied. The main problem is not that an institutional spaghetti bowl will result from the creation of too many forums, but the failure to use enough of them."

Box 2

China and the bicycle theory

Peterson scholars are known for not always singing from the same songbook. But their views on China's exchange rate are fairly harmonious: it is undervalued, they chorus. "The artificially low value of the renminbi—it is 20 to 30 percent less than what it should be—amounts to a subsidy on Chinese exports and a tariff on imports from the United States and other countries," wrote Bergsten in an op-ed in the *The New York Times* last year. He said that the United States should launch a case against China at the World Trade Organization "for engaging in illegal competitive currency devaluation and retaliate if China does not cease this protectionist policy."

Bergsten's strong views reflect, in part, his famous "bicycle theory"—his belief that, like a bicycle, trade liberalization must maintain some forward momentum or it will start rolling back toward protectionism. China's exchange rate policy "is a blatant form or protectionism," Bergsten has written, and a threat to the multilateral trading system: ". . . a policy response to the Chinese actions by the U.S. or other countries [should] be viewed as antiprotectionist."

"A string of 50s"

At 70, Bergsten is now in the phase of life where anniversaries loom large. He is enthusiastic about commemorating these events because they help him stay connected to the people and the institutions that have shaped his life. Last year he organized the 50th reunion of his undergraduate class at Central Methodist University, and this year he is organizing the 50th reunion of his Fletcher School graduating class—and his 50th wedding anniversary. "So this is a string of 50s for me," he says.

Bergsten remains active in policy circles and on the basketball court. He regularly presides over many of the "invitation only" events held in the large conference room, now named after him, at the Peterson Institute. Mussa once joked that though "in view of Fred's parentage, some might think [the conference room] resembles a modern church, I believe it resembles a basketball court. Fred is a bit of a basketball fiend." Indeed, Bergsten still plays basketball in a league where he averages 38 points a game, a performance that provokes skepticism from U.S. Treasury Secretary Timothy Geithner, also an avid basketball player. Bergsten concedes that the score is high because "the league is kind of a fun thing. But you still have to put the ball in the basket." ■

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Youth in the

David E. Bloom

FROM the unemployment lines of Europe and Japan to the swarming streets of Cairo and Lagos, the world's youth are feeling the pinch of the global economic crisis and are demanding change.

Whether it's the "Occupy Wall Street" movement in the United States or the mass rallies of the Arab world, young people have been jolted into action and are leading the response to diminished opportunities and unfulfilled aspirations.

Women protest in Cairo's Tahrir Square.

Balance

Frustrated and angry, the world's young people are demanding change

Politicians around the world are recognizing that the prolonged global crisis is shattering hopes, building tensions, and fostering protests. In many instances, young people have played key roles in agitating for change, but the reforms they are calling for speak to society as a whole, not just to their generation.

Resilient and connected

The global economic crisis, prolonged by strains within the euro area, has put millions of youth out of work—50 percent in Spain and Greece and 30 percent in Portugal and Italy. It threatens to spawn a "lost generation" that may find it hard to recover, and it is likely to exact a harsh human toll for years to come.

The young are naturally resilient and tend to have fewer dependents than older generations. But those who are out of a job for a long time often see their self-confidence and skills erode and lose their attachment to the labor force (see "The Tragedy of Unemployment," in the December 2010 issue of *F&D*). They can become disheartened, disempowered, and disconnected from established institutions (see "Voices of Youth," in this issue of *F&D*).

Yet clearly, in the long run, it is today's young people who will face the task of creating economic success and human security.

Allowing youth to take the lead will mean of course ensuring that they have a good education and good health. In some countries, a declining share of young people in the population will make it easier to spend more resources on them. In others, where youth represent a rising fraction of the population, the reverse will be true. And in many countries, competition for resources is on the horizon, as an aging population, after decades of contribution, sees itself at risk and demands more attention (see "The Price of Maturity," in the June 2011 issue of *F&D*).

Amid the turmoil and the uncertainty about their economic future, young people, more than any other group, have turned to new media for information and to communicate with their peers and beyond. Widespread access to the Internet has raised their aspirations, in part by making the young aware of the vast differences in standards of living within their countries and around the world. It has also made them more conscious of the extent of corruption and injustice and how that affects their lives.

This greater awareness on the part of youth, arising in the context of recession and scant opportunities, portends a potentially shaky long-term economic future. As such, young people (and others) may well have reason to up the ante in their protests in coming years. Moreover, it seems likely that the social and political movements that gain traction in one place may inspire others around the world, as they did in Tunisia, for example.

How big is this issue?

More than one in six people in the world are between the ages of 15 and 24. Yet the world's 1.2 billion adolescents and young adults are probably the most neglected—by policy analysts, business thinkers, and academic researchers—of all the age groups. Not only have the 810 million people over the age of 60, whose growing numbers threaten social safety nets around the world, attracted more attention, so have children and prime-age adults.

Young people (and others) may well have reason to up the ante in their protests in coming years.

That neglect is surprising. Adolescents and young adults are powerful agents of change in society. Their skills, habits, behavior, and ambitions in such diverse realms as work, saving, spending, rural-to-urban and international migration, and reproduction will profoundly shape society for years to come. Their global numbers have been steadily increasing since 1950 and will continue to do so for at least another two decades (see Chart 1).

The current and future generations of youth present countries with both great peril and great promise. Whether they can lead productive lives as adults depends much on what they experience in their school years and in their earliest years of work.

The number of adolescents and young adults and their share of the total population reflect trajectories of birth and death rates and, to a lesser extent, international migration—

Teenage girls in Stockholm, Sweden.

and are closely connected to the *demographic transition,* a term demographers use to signify a long-term change from high to low mortality and fertility (i.e., the number of children per women; see box). Because fertility rates initially decline more slowly than do mortality rates, this transition brings first an increase in the number of children followed by a surge in the number and share of those ages 15 to 24.

Behind the numbers

Let's take a look behind the numbers at some key factors driving the frustration of the young.

Youth have a huge stake in bringing about a political and economic system that heeds their aspirations.

The economic issues related to young people include employment, income, savings, spending, affordable higher education, and taxation that may disproportionately benefit older groups. The social issues encompass cohabitation, marriage, divorce, fertility, gender equity, crime, and intergroup relations. The political issues concern trust and engagement in formal and informal political institutions and with leaders.

Future population health is also at risk. Today's youths—tomorrow's workers—will not necessarily be more healthy and productive than their parents. The decline in physical activity (a consequence of urbanization and a transition to more sedentary occupations) and rising obesity and alcohol and tobacco consumption portend more noncommunicable diseases such as cardiovascular problems, diabetes, and cancer. And less stability—at home and on the job—has negative implications for the emotional and mental health of the world's young people.

A rising adolescent and youth share of the population signals increases in the productive capacity of an economy on a per capita basis in the years to come and the prospect of a *demographic dividend*, a time-limited window of opportunity for rapid income growth and poverty reduction (Bloom, 2011). The window, which exists as long as the working-age share of the population is relatively high, also poses a risk of social and political instability in economies that fail to generate sufficient jobs.

It is no surprise that many of the participants in recent protest movements have been young people—both in societies where youth unemployment has always been high and in advanced economies where the global economic crisis has hit younger workers the hardest. Youth have a huge stake in bringing about a political and economic system that heeds their aspirations, addresses their need for a decent standard of living, and offers them hope for the future.

Parsing the projections

All population data and projections are the medium-fertility estimates published in *World Population Prospects: The 2010 Revision* by the United Nations Population Division. The projections depend critically on assumptions and projections of future fertility, mortality, and migration. For the world as a whole, the medium-fertility trajectory declines smoothly from the current level of 2.5 children per woman to 2.2 in 2050. This change represents the net effect of fertility declines in 139 economies and increases in 58.

Estimates of future life expectancy are based on historical country- and gender-specific trends and a model that anticipates more rapid gains in countries with lower current life expectancy.

Assumptions about migration are based on past estimates and the policies that countries have adopted. Projected levels of net migration incorporate a slow decline through 2100.

The United Nations Population Division provides the income-group population data on a DVD, *World Population Prospects: The 2010 Revision, Special Aggregations*. Income groupings are based on criteria from the World Bank *World Development Indicators, 2011*. These criteria, expressed in 2009 per capita gross national income (GDP plus net income from abroad), are

- low-income: $1,005 or less;
- lower-middle-income: $1,006 to $3,975;
- upper-middle-income: $3,976 to $12,275; and
- high-income: $12,276 or more.

The absence of such a system is a potent recipe for conflict—especially now, with the availability of cheap means of communication such as smartphones and social media.

Vulnerable in crises

Adolescents and young adults are especially vulnerable to macroeconomic downturns, and have borne the brunt of the global economic crisis that began in 2008 and the subsequent sluggish employment recovery. The global youth unemployment rate rose from 11.6 percent to 12.7 percent between 2007 and 2011, while the youth labor force participation rate (the percentage of the age group either working or looking for work) showed a modest decline as some discouraged workers gave up their job search (ILO, 2012).

Developed economies experienced the largest effects (see "Scarred Generation," in this issue of *F&D*): youth unemployment in these countries rose more sharply than unemployment among those 25 and older (especially among males). Youth unemployment has stayed high, and the slower the recovery, the less likely it is that young people will develop a fruitful connection to the labor market.

On the other hand, young people will inevitably play a key role in the recovery thanks to their dynamism and willingness to relocate from labor-surplus to labor-shortage areas, and from low-productivity agriculture to higher-productivity industry and services. Their up-to-date training and education is also often a plus—although too often the education system imparts skills that are out of date or unneeded (see "Making the Grade," in this issue of *F&D*). Insofar as the expectations that education typically creates are not satisfied, youth can also power a decisive impulse to change institutions and leadership.

Country examples

Some examples help illustrate what is happening.

India is an example of a country focused on and struggling to realize the benefits of its large and still-growing youthful population.

It is the second most populous country in the world, and its 15- to 24-year-old population is the largest—and growing. (India's 238 million 15- to 24-year-olds equals the total population of the world's fourth most populous country, Indonesia). The Indian National Knowledge Commission, headed by Sam Pitroda, concluded, "Our youth can be an asset only if we invest in their capabilities. A knowledge-driven generation will be an asset. Denied this investment, it will become a social and economic liability." India's young people have shown strong support for social activist Anna Hazare and his anticorruption campaign—a testament to their acute awareness of the debilitating effects of corruption.

Neighboring Pakistan sits on a similar precipice, albeit a bit closer to the edge. With 38 million adolescents and young adults, Pakistan has the world's fifth largest 15- to 24-year-old population. But fragile governance structures, a poor record of development progress, regular episodes of extreme social conflict, and a shaky macroeconomic situation all contribute to young people's lack of confidence in Pakistan's future (British Council, 2009). These conditions can be high-octane fuel for repeated cycles of social and political instability. If, however, Pakistan invests in the talents and productive capacity of its young and channels their energy, it could step onto a development trajectory that will allow the country to regain some of the ground lost in recent decades and that better satisfies the aspirations of its people.

Similar circumstances helped crystallize the Arab Spring protests, demonstrations, and uprisings that began in December 2010 and led to the fall of governments in Tunisia, Egypt, and Libya and to ongoing conflict elsewhere in the Middle East, North Africa, and beyond. These events are rooted in a multitude of social, cultural, political, and economic factors, but large populations of unemployed, underemployed, and unmarried young people are often considered to be a common denominator. The thinking is that those who are unemployed and unmarried have relatively little to lose and relatively more to gain from change. In addition, new social media—such as Facebook and Twitter, which have taken strongest hold among the young—facilitate communication and organizing. Although the theory is intriguing, empirical evidence of the predictive power of youth demographics with respect to the nature and intensity of social and political unrest—and its practical consequences—is still in its infancy (Hvistendhal, 2011).

India is an example of a country focused on and struggling to realize the benefits of its large and still-growing youthful population.

In Africa, the youth spotlight is often focused on the continent's largest population: that of Nigeria. In 1980, Nigeria's GDP per capita was slightly higher than that of Indonesia, but today it is only half that. Demographic factors appear to be a powerful contributor to this divergence in macroeconomic performance (Okonjo-Iweala and others, 2010). The demographic transition was much more rapid in Indonesia than in Nigeria, resulting in a larger share of adolescents and young adults in the African nation. Indonesia used much of its oil revenue to educate its youth. It successfully absorbed its young people into productive employment and elevated their standard of living. Nigeria could benefit from careful study of Indonesia's example.

There are currently 32 million Nigerians ages 15 to 24, and more than double that number under the age of 15. These age groups represent a huge national resource. Investments in their skills and health, and in the physical capital, infrastructure, and institutions that will make them productive, will help determine Nigeria's development success. Investing in girls and women, including investments in reproductive health, would likely have the added benefit of lowering fertility rates and freeing up resources for

social investment. Failure to satisfy the desire of youth for productive engagement could further undermine political legitimacy, promote frustration and conflict, and deter investment. Like many other countries, Nigeria must also stay attuned to inequalities across geographic units and religious and ethnic groups and adopt policies to keep these from becoming a greater source of friction and instability.

Change on the way

The demographic weight of young people is slated to change, however. And this will have important implications—for their future and that of the global economy.

Young people are more highly represented in countries and regions where the demographic transition has been sluggish. For example, young people account for 12 percent of the population in high-income countries and in Europe, whereas they make up about 20 percent of the population in low-income countries and in Africa. But the brisk annual average rate at which the age group has been growing since 1970, 1.4 percent, will essentially end in coming decades—dropping to less than 0.1 percent from 2012 to 2050.

During that period, the share of total population that adolescents and young adults have maintained during past decades will diminish as their tepid growth rate is dwarfed by an overall population growth rate of 0.73 percent.

The global figures, however, mask considerable underlying diversity. Swaziland has the highest share of 15- to 24-year-olds, 24.5 percent of the total population and nearly two and a half times the fraction in Japan (9.7 percent), Spain and Italy (9.8 percent), and Greece (10.1 percent).

In high-income countries the number of 15- to 24-year-olds is already stagnant or declining. By contrast, the number of adolescents and young adults has been growing at breakneck speed in low-income countries (2.6 percent), lower-middle-income countries (2.1 percent), and Africa (2.7 percent). But that will end in the low-income countries soon.

In coming years, the rate of increase in the number of 15- to 24-year-olds will decline in every income group and geographic region. The rate will turn (or become more) negative in the upper-middle-income countries and in three regions—Asia, Latin America, and Europe (see Charts 1 and 2). The steady increase in the number of 15- to 24-year-olds from 1950 through 2010 will abate and plateau at 1.26 billion around 2035. Only in low- and lower-middle-income countries will the number of adolescents and young adults continue to increase.

With these changes, the concentration of adolescents and young adults in the world will move sharply in the direction of Africa. Currently, Africa is home to 17.5 percent of the world's adolescents and young adults, while Asia accounts for 61.9 percent. But by 2050, Africa's share of the world's adolescents and young adults is projected to grow to 31.3 percent, while Asia's is projected to drop to 50.4 percent.

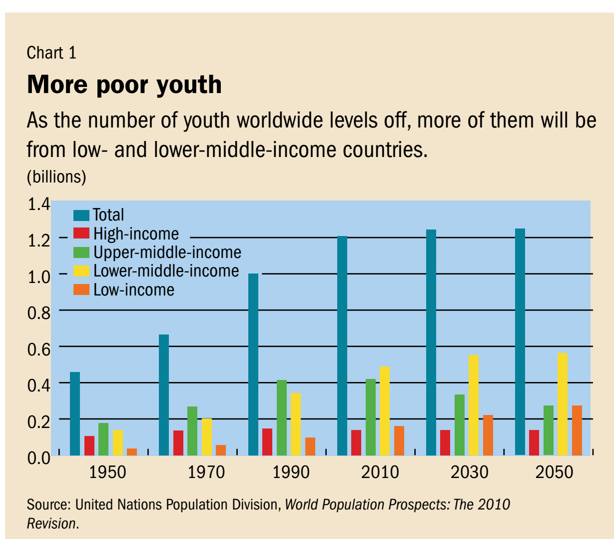
Elderly on the rise

Moreover, adolescents and young adults will not outnumber the elderly for much longer (see Chart 3).

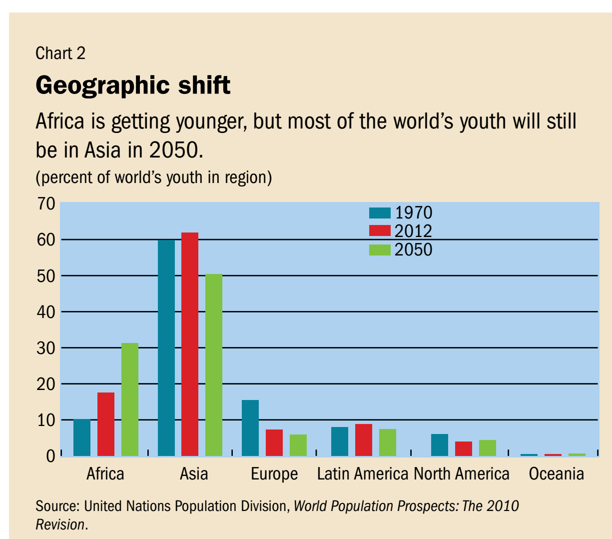
According to projections by the United Nations Population Division, slower growth in the number of 15- to 24-year-olds, coupled with more rapid growth of those ages 60 and over, will result in a crossover of the numbers in 2026, when the elderly will outnumber the young. The crossover has already occurred in the high-income countries (1990), Europe (1982), North America (1987), and Oceania (2011). It is projected to occur in the upper-middle-income countries by the beginning of the next decade, and in Asia not long after.

As noted above, India has the largest number of people between 15 and 24—238 million—and its youth dominance will increase in the coming decades. That's because in China, today the world's most populous country, the number of 15- to 24-year-olds will shrink from the current 217 million to 158 million in 2030.

Large adolescent and youth populations today do not signal further growth in the future. Among the 10 countries with the highest 15- to 24-year-old populations in 2012, in 5 the youth population is projected to increase by 2030 and



Source: United Nations Population Division, *World Population Prospects: The 2010 Revision*.



Source: United Nations Population Division, *World Population Prospects: The 2010 Revision*.

in 5 this age group is projected to decrease. Among all countries, the fastest growth of 15- to 24-year-olds will take place in sub-Saharan Africa—Niger, Zambia, Tanzania, Uganda, and Malawi—while the biggest growth rate declines will be in Bosnia and Herzegovina (–2.4 percent), Albania and Moldova (–2.3 percent), and Cuba (–2.2 percent).

What is to be done?

Where does all this take us? As we have seen, youth can instigate change, and they and others can benefit, but that means getting many things right in a number of realms.

Perhaps first and foremost are improvements in training and education (at all levels, in both access and quality). This will not be easy, but it is clear that new thinking (and probably new resources) is needed in many countries, so that young people are educated more thoroughly and in ways that benefit themselves and their economies.

Mandatory or volunteer service programs—ranging from national military service to volunteer organizations such as the U.S. Peace Corps—can socialize young people, instill a sense of community, and boost self esteem, while imparting marketable skills. It would be useful to expand apprenticeships in some situations, specifically targeting youth and not those over age 25 as often happens now in the United Kingdom. And more emphasis on cultivating financial literacy, health literacy, and entrepreneurial skills would likely pay good dividends.

Other priorities include provision of reliable and modern infrastructure, more carefully tuned labor market policies, greater access to financial markets, governance that takes youth issues into account, and universal health care. This last point is key. Good health is as important as education and training in allowing young people to enhance the skills they need to become economically productive members of society. Youth, like all other groups, need access to quality health care services if they are to realize their potential.

Benefiting from the dynamism of youth also means addressing the challenges of gender, income, and rural-urban disparities, and managing the expectations of young people. In addition, it means dealing with the weakening of family units—in part by figuring out how to move jobs to where people live and thus lessening economically driven migration of younger family members.

Carrying out these steps is not, however, sufficient to ensure a productive future for the world's youth. That requires the creation of good jobs—and efficient mechanisms to connect people with those jobs—and ensuring that the young are deeply integrated into the fabric of society and share equitably in all its resources and in the benefits they confer.

The fastest growth of 15- to 24-year-olds will take place in sub-Saharan Africa—Niger, Zambia, Tanzania, Uganda, and Malawi.

The political weight of adolescents and young adults is already declining in the high-income countries and in parts of Latin America and Asia. It will also wane in many developing countries in the decades ahead as their populations begin to age. But it is undoubtedly the case that the elderly in all countries will be better supported in the future if more resources are invested in adolescents and young adults along the way.

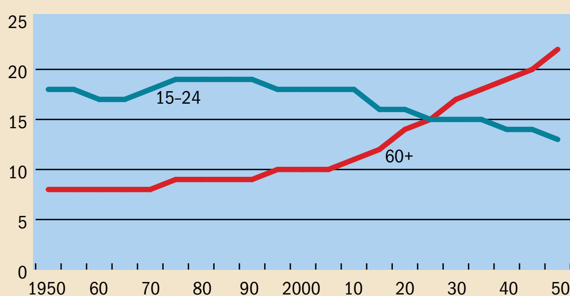
Finally, it is important that institutions, policymakers, and society as a whole really listen to what young people are saying. Communities, cities, provinces, and countries can set up forums for the purpose of listening to the concerns and ideas of adolescents and young adults and stimulating change. Young people could be offered a voice in decision-making bodies. To make such processes genuinely worthwhile means including a true cross section of this demographic group, by inviting, for example, individuals who represent poor or less-educated sectors of society. Inclusion can benefit all. ■

Chart 3

The young and the old

Youth will outnumber the elderly only for another dozen years.

(percent of world population)



Source: United Nations Population Division, *World Population Prospects: The 2010 Revision*.

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Making the Grade

Emmanuel Jimenez, Elizabeth M. King, and Jee-Peng Tan

Revamping what and how young people learn is the best way to help them and their home countries succeed

YOUTH in developing nations are spending more time in school than ever before, but they are not learning the skills they need to find gainful employment. Their working lives are thus less productive than they could be, which takes a toll on their countries' growth potential.

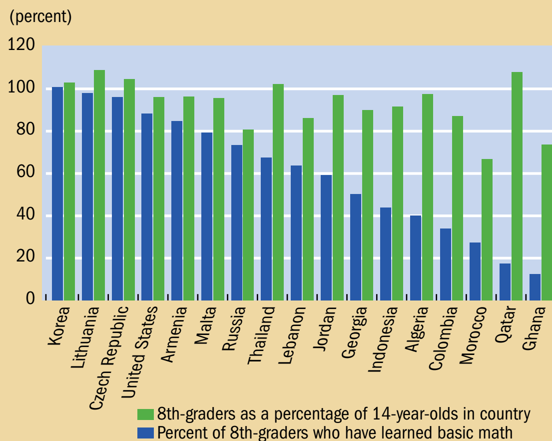
In other words, developing nations have made progress in achieving *quantitative* education goals. Over the past two decades alone, for example, the net enrollment rate for primary education increased from about 50 percent to 80 percent in low-income countries.

But developing countries have been less successful in achieving *qualitative* improvements in education, as measured by how well students perform on learning assessments. In addition, the young are not acquiring the *right types of skills* to function in a modern economy, which often leaves them unprepared to make the *right choices* among an expanded set of economic opportunities. And finally, either because the education system or their own choices fail them, or because of unexpected events such as civil conflict, young people may prematurely drop out of school or become unemployed. This calls for *"second-chance" programs* that enable them to return to school or obtain new job-relevant skills.

Can developing countries improve the quality of their education systems, do a better job of imparting relevant skills, keep more students in school longer, and find them jobs when they graduate—or offer them a second chance if they drop out or don't find a job? Yes, but countries must take a systemic approach to changing what and how kids learn rather than relying on any single education reform.

Learning deficit

In many countries, being enrolled in a class does not mean children are learning the subject.



Source: National Center for Education Statistics, Trends in International Mathematics and Science Study database.

Substandard basics

Because many young people are poorly educated when they leave school, they enter the world of work without the knowledge, skills, or behaviors necessary to adapt to changes in the economy and their lives. Country studies find alarmingly low learning levels in developing countries. Malian students tested did not possess the basic elements of reading, even in Grade 3. Between 50 and 60 percent of students could not read a single word on a list of frequently used words in their language (Ralaingita and Wetterberg, 2011). In Pakistan, tests of Grade 3 students show that only half could answer very basic multiplication questions (see World Bank, 2011, for citation and other examples). International student assessments, such as the Trends in International Mathematics and Science Study, confirm these low learning levels. Even middle-income economies that have achieved high enrollment rates in basic education, such as Colombia, Indonesia, and Thailand, show a large gap between the Grade 8 enrollment rate of 14-year-olds and the proportion of those 8th-graders who have learned basic math (see chart).

Moreover, within countries, learning levels are highly unequal, which points to a need not only for relevant and high-quality education at all levels, but also for basic education for hard-to-reach or disadvantaged groups. Research indicates that learning inequality more depends on the design and effectiveness of education policies than on income (Hanushek and Woessmann, 2008).

Students listen in a classroom in Jakarta, Indonesia.

Irrelevant curricula

Even those who do manage to get an adequate basic education may be unable to find work because they do not possess the skills needed by today's—and, more important, tomorrow's—employers. Despite persistent joblessness among young people, surveyed employers complain that they can't find enough workers with the skills they need to grow their businesses.

One problem is that young people lack the technical skills they need to be productive immediately. In India, for example, the below-average competence of university and college graduates has led industry leaders in such businesses as software, banking, pharmaceuticals, and retail services to design their own training programs and in some cases even build their own campuses to open up a pipeline of future recruits (Wadhwa, De Vitton, and Gereffi, 2008). Young people's lack of technical skills would not be such a problem if employers considered them trainable for the jobs at hand. But poor basic skills mean that these workers may not benefit from on-the-job training—which employers tend to reserve for their more educated employees. Low enrollments in such fields as science, technology, engineering, and mathematics don't help.

Attention to noncognitive, or "soft," skills also appears inadequate. Employer surveys in a number of regions reveal gaps in areas such as problem solving, creativity, team work, ability to communicate, willingness to accept responsibility, critical thinking, creativity, initiative, entrepreneurship, and punctuality (IFC and IsDB, 2011). These skills are more important than ever in the modern workplace, with its proliferation of information technology, shift to flat organizational structures, integration of geographically dispersed businesses into global production networks, and need to keep up with technological advances and respond to new market developments. The same factors suggest that knowledge of foreign languages, particularly English, and of basic computing are increasingly viewed by employers as essential skills.

Unwise and uninformed choices

Young people face more challenges than adults when making long-term decisions—such as how much to invest in learning today—about their future. First, they are inexperienced decision makers and may lack the information to make informed choices. For example, in the Dominican Republic, boys surveyed in 2001 during their final year of primary school accurately estimated the return on completing primary school, but severely underestimated—by one-third—the payoff for a secondary school diploma. This was because they based their estimates only on the wages of those who remained in the village after completing secondary school; the high earners had moved away (Jensen, 2010).

Another reason for poor education choices by young people is lack of resources. After early secondary school, young people start to finance their education and training with more of their own resources. Even when these investments are heavily subsidized, the opportunity cost of spending time on training is largely borne by the young. And grants and loans to finance education are not widely available in most developing countries.

Finally, recent research shows that significant brain development occurs after puberty, especially in the frontal lobe, where executive functions occur. These functions enable young people to make rational education choices by comparing the present and projected benefits and costs of schooling. There is no room for youthful myopia or risk taking when students have only one chance at success.

No second chances

Even with adequate opportunities for quality education, young people, their parents, or their governments are still likely to make some bad choices.

In 2009, 67 million primary-school-age children and 72 million of lower secondary school age worldwide did not attend school. Most of these youths live in sub-Saharan Africa and in south and west Asia, which together claim 46 percent and 57 percent, respectively, of primary- and secondary-school-age youths not in school worldwide. Most of these children will probably never acquire even basic literacy and numeracy through formal schooling.

For these young people, second-chance programs are a lifeline. Such programs include literacy courses, equivalency degree programs, and vocational courses geared toward employability. Information on their availability is patchy, but one survey of sub-Saharan Africa identified 154 programs in 39 countries serving 3.5 million children in 2006; 52 million African youths were out of school in 2009 (DeStefano and others, 2006).

Because the intended beneficiaries are, by definition, disadvantaged, second-chance programs often lack the political backing required to mobilize sustained financial commitment. The programs are often costly and lack a reliable path back to the mainstream education system (for example, through equivalency certification of course completion) and links to jobs, which is particularly important for older adolescents.

Moving ahead

There is no dearth of ideas on how to improve access to education, nor is effort lacking. Many countries devote a large portion of public spending to education and training. But countries need to do more to broaden learning opportunities for the young, especially by improving quality. They also need to help young people (and their parents) choose wisely among those opportunities and—in the almost inevitable event of poor choices—countries must develop cost-effective second-chance programs.

The most promising initiatives take a systemic view of learning centered on measurable results (World Bank, 2011).

First, *accept that reforming a youth-oriented learning system is not just about improving public postprimary schools and institutions, but also about expanding informal and private institutions and making continuous learning something that happens at home and in the community.* This systemic approach would prevent piecemeal reforms—which can result in misalignment between the increased number of graduates from the basic education system and the limited number of places available at higher levels of education—and gaps between the skills taught and those demanded by private sector employers. This approach also means that children must enter adolescence well nourished and healthy, so they are able to learn during their formative years. It calls for good preschool and primary education and greater parental support for learning.

There is no room for youthful myopia or risk taking when students have only one chance at success.

Second, *acknowledge that better learning outcomes take more than investment in school buildings and classrooms, trained teachers and professors, and textbooks: those inputs must improve teaching and learning within the classroom through good governance of the education system and a focus on results.* This focus starts with measuring and monitoring learning, which then must be used to guide how schools are managed and financed, and how teachers are recruited and promoted. Teachers and principals need appropriate tools and adequate resources and must be held accountable for well-defined outcomes. Because failures of governance and accountability typically hit schools that serve disadvantaged groups hardest, a systemic approach promotes equity as well as efficiency.

Third, *develop programs that teach young people to make good decisions when investing in their human capital, by giving them information, resources, and second-chance opportunities, so they can get back on track when they or others make the wrong choices.* More information about the returns on education pays off, as the above-mentioned case of the Dominican Republic shows. Eighth-graders who were shown data on the actual earnings of high school graduates were more likely to enroll in secondary education than their counterparts who did not receive this information and underestimated the return on continuing their education (Jensen, 2010).

Fourth, *evaluate the impact of innovative programs.* Second-chance programs include a wide range of interventions for young people who have been out of school and out of work for several years. These programs have not been particularly popular because they are thought to cost more than formal schooling. But recent studies of efforts such as the *Jóvenes* program in Latin America show that, with the right design and vigorous implementation, these interventions lead young people back into the mainstream labor market in a cost-effective way (World Bank, 2006; Attanasio, Kugler, and Meghir, 2011).

These initiatives are not the perfect answer, but they will help young people make use of their talent and energy and increase their chances of success. That, in turn, is good news for economic growth. ■

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Scarred Generation

Hanan Morsy

Job seekers wait in line at a job fair in New York City.

THE recent global economic crisis took an outsized toll on young workers across the globe, especially in advanced economies, which were hit harder and are recovering more slowly than emerging market and developing economies.

Young people have always had a tough time finding work. Historically, the unemployment rate for those ages 15 to 24 in advanced economies has been two to three times higher than for older age groups. But since the global crisis began in 2008, young people have suffered a much sharper rise in joblessness than older workers, and structural issues—especially in Europe—have exacerbated youth employment problems.

Unemployment can exact a big personal toll on young people. Failure to find a first job or keep it for long can have damaging long-term consequences on their lives and career prospects. But youth unemployment also has broader social consequences and contributes significantly to growing income inequality in advanced economies.

Bad, then worse

In 2007, the year before the global recession began in earnest, young workers were already in trouble. Unemployment among workers ages 15 to 24 in advanced economies averaged 13 percent, compared with about 5 percent among older workers. The unemployment rate among those young workers has now climbed to nearly 20 percent, three times the roughly 7 percent average that prevails in older age groups. And because advanced economies are recovering so slowly, the rate is likely to remain high for some time.

Youth unemployment has varied widely across countries. Although just before the crisis it averaged 13 percent in advanced economies (Australia, Canada, Japan, Korea, New Zealand, the United States, western Europe), in Greece and Italy the youth unemployment rate exceeded 20 percent, in the Netherlands and Japan it was less than 10 percent, and in the United States it was about 10 percent. In several countries, including Sweden and the United Kingdom, youth unemployment was four times greater than that of adults.

Since 2008, youth unemployment has increased (see chart)—in the United States it climbed to more than 18 percent, and in Italy and Sweden, it is about 25 percent. The biggest increase was in Spain, where youth unemployment doubled, from less than 20 percent in 2008 to almost 40 percent three years later. In Germany, however, youth unemployment fell, thanks to well-functioning apprenticeship programs and the intro-

In advanced economies, the crisis sparked a huge increase in unemployment among younger workers that will take a long time to abate

duction of short-time working policies that subsidize firms when they reduce hours rather than lay off workers during a business slowdown. Young German workers, however, are still one and a half times more likely than adults to be unemployed.

But it is not only the overall unemployment rate that is worrisome. Equally alarming is the length of time young workers are unemployed, often while seeking their first job. Two of every ten unemployed youths in advanced economies have been seeking a job for a year or more. In the euro area countries, the ratio is even higher, at 3 out of 10. The highest incidence is in Spain, where 40 percent of young workers have been seeking a job for more than 12 months. Workers unemployed for an extended period lose their skills and their ties to the workplace. Growing frustration over unemployment has also led a large number of discouraged youths to give up looking for a job—so it is likely that unemployment statistics understate the joblessness picture.

Hard to find

Young people usually have more trouble finding a job than do older workers for many reasons. They have less work experience, less knowledge about how and where to look for work, and fewer job-search contacts. In addition, many young people lack the skills employers need, often because of backward-looking education systems. As a result, for many young people the transition from school to work is bumpy and sometimes long, and now is even more arduous because of the crisis. Even those who find jobs are more vulnerable than older workers, especially in economic downturns, because the last hired tend to be the first fired.

But there are also labor market practices, especially in Europe, that add to long-term problems. Young people are more likely than older workers to work under temporary contracts. Almost a third of employed youths in advanced economies held such contracts before the crisis. In boom years, companies relied heavily on temporary workers—largely to get around regulations that make it difficult to fire permanent workers. As the economy contracted, the temporary workers were among the first let go; moreover, many did not qualify for company-paid severance—not only was it easier to fire them, it was cheaper. Half of young workers in Spain were on temporary contracts before the crisis and were the first to lose their jobs. Young workers often face a double whammy when they are let go. Not only do they lose the job, they often have less access to social welfare benefits.

Scarring effects

In addition to the short-term problems unemployment causes for young people, it has long-term debilitating effects. Studies have shown that those who experience unemployment early in their life are more likely to be unemployed again in later years. Moreover, they are likely to earn less over their working life than are their peers who find jobs more easily (von Wachter, Song, and Manchester, 2009; Kahn, 2010). Experts call the negative long-term consequences of early unemployment "scarring effects." Those scarring effects are the result of such factors as deterioration of skills and forgone work experience. But they can also come from potential employers' belief that these workers will not be productive. The longer a person is unemployed, the longer the scarring effects are likely to last. The earnings penalty can be as high as 20 percent compared with their peers who find employment early, and the earnings deficit can persist as long as 20 years.

The adverse effects on lifetime earnings are most pronounced for unemployment experienced in youth, especially at the time of college graduation. Those who entered the job market during Japan's so-called lost decade of the 1990s, for example, experienced such scarring effects. Long-term youth unemployment more than doubled and persisted well after the recovery began, because Japanese employers preferred to hire recent graduates rather than those trapped in long-term unemployment or persistent inactivity.

In addition to harmful effects on future wages and employability, studies find evidence that spells of unemployment for a young person often hurt the individual's happiness, job satisfaction, and health for many years thereafter.

High costs

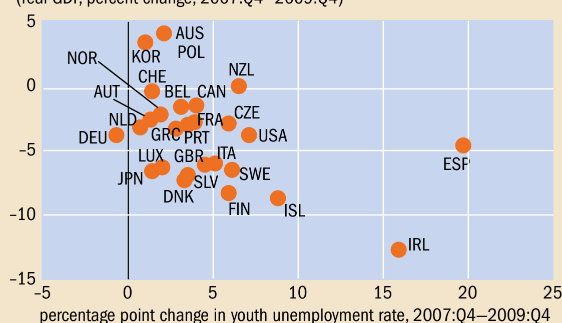
Youth unemployment can also lead to high economic and social costs for society. Underutilization of young people in the labor market can result in a vicious circle of intergenerational poverty and social exclusion. Lack of employment opportunities may trigger violence and juvenile delinquency. Recent high youth unemployment has contributed to social unrest in many countries—advanced, emerging, and developing.

Income inequality, a growing problem in many advanced economies, is made worse by rising youth unemployment. Extrapolating from the underlying factors between 1980 and 2005 that caused income inequality in advanced economies that are member of the Organization for Economic Cooperation and Development (OECD) shows that the global crisis will exacerbate inequality, mainly by increasing

A sinking feeling

Except in Germany, the youth unemployment rate rose during the global crisis—increasing by more than 20 percentage points in Spain and by nearly that much in Ireland.

(real GDP, percent change, 2007:Q4–2009:Q4)



Source: Organization for Economic Cooperation and Development.
Note: AUS = Australia, AUT = Austria, BEL = Belgium, CAN = Canada, CZE = Czech Republic, DNK = Denmark, FIN = Finland, FRA = France, DEU = Germany, GRC = Greece, ISL = Iceland, IRL = Ireland, ITA = Italy, JPN = Japan, KOR = Korea, LUX = Luxembourg, NLD = Netherlands, NZL = New Zealand, NOR = Norway, PRT = Portugal, SLV = Slovenia, ESP = Spain, SWE = Sweden, CHE = Switzerland, GBR = United Kingdom, USA = United States.

unemployment and inhibiting job creation (Morsy, forthcoming). Youth unemployment contributes significantly to rising income inequality.

The increase in youth unemployment during the crisis is estimated to have raised income inequality, measured by the Gini coefficient, by 4 percentage points among all advanced economies and by as much as 8 percentage points in the countries on the periphery of Europe—Greece, Ireland, Italy, Portugal, and Spain—where the youth labor market deteriorated much more than in other countries. The Gini coefficient measures inequality on a scale of zero to 100, with zero denoting perfect equality of household income and 100 representing a situation in which one household has all a society's income.

The more a country's employers hire workers on temporary contracts, the higher the level of inequality.

The global crisis also produced more "discouraged" workers, young and old, who dropped out of the labor force, which likely further exacerbated income disparity. The rise in youth unemployment rates further widened the gap between rich and poor. Spain and Ireland are estimated to have suffered the largest deterioration in income distribution: a rise in income inequality of 18 percentage points and 12 percentage points, respectively. This reflects large job losses in construction, a major source of employment for many low-skilled young workers. Close to half of the unemployment contribution to inequality in these countries can be attributed to long-term unemployment. By contrast, inequality barely changed in Germany and the Netherlands, where the cost of firing workers and programs to support part-time work propped up employment. The effects of unemployment on inequality might have been even greater without advanced economies' extensive social safety nets.

The analysis of OECD data also indicated that the more a country's employers hire workers on temporary contracts, the higher the level of inequality. This gap is particularly noticeable in countries such as Spain and Portugal that relaxed regulations on temporary contracts while maintaining strong employment protection for permanent workers.

Resolving the problem

A healthy recovery accompanied by job creation will bring down youth unemployment, improve income distribution, and strengthen social cohesion. But recovery alone won't be enough to prevent many of today's young people in advanced economies from marginalization and exclusion from the workforce.

Some essential far-reaching labor and product market reforms include the following:

- *Addressing the mismatch between the skills students acquire and the needs of employers:* This will go a long way toward helping reduce long-term youth unemployment. Policies should ensure that the education system prepares young people for the skill demands of employers through outreach programs, training, apprenticeships, and access to job-search assistance measures. Governments could entice private employers to hire more young people by such actions as reducing employer social security contributions for new hires and/or subsidizing firms that hire long-term unemployed, low-skilled youths.
- *Relaxing protections for regular workers, while enhancing them for temporary workers to support job creation:* A pervasive dual labor market system, with a flexible temporary workforce and a highly protected permanent workforce, can increase unemployment (Blanchard and Landier, 2002; Dao and Loungani, 2010). Easing regulations only for fixed-term contracts strengthens the power of permanent workers in wage bargaining, which pushes up wages and makes it harder for others to get hired. This is why both steps must be taken together.
- *Fostering competition and creating a more business-friendly environment:* Such steps would open up various sectors to new firms, promoting both innovation and efficiency and in turn stimulating private investment and employment. Policies should remove entry barriers and reduce operating restrictions in sectors such as services, retail, energy, and telecommunications. Studies have shown sizable employment gains when labor market liberalization is accompanied by more competitive product markets.

Not all these reforms yield immediate gains, but they are necessary to deal with the chronic unemployment problem.

The energy, skills, and aspirations of young people are invaluable assets that no society can afford to waste. With a significant and growing proportion of young people at risk of prolonged unemployment, the potential negative long-term scars to their careers, earnings, health, and well-being could be profound. Moreover, the economic and social costs associated with youth unemployment, including greater income inequality, are high. It is important to introduce policies to enhance the skills and capabilities of younger workers and assist them in joining the labor market as quickly as possible. ■

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Stolen Dreams

Our ability to set the world economy straight will decide the fate of today's young people

WHEN the young Tunisian street vendor Mohamed Bouazizi set himself on fire a little more than a year ago to protest the confiscation of his wares, he didn't just start a revolution in his own country. His desperate act also set off the chain of events that led to the wider Arab Spring. "I believe the reason why the young man in Tunisia changed the world was not because he was unemployed. It was because he had his dreams stolen."

These words, spoken by a young entrepreneur from Kenya at an IMF seminar last September, have stuck in my mind because they sum up the terrible price that young people who are unable to find jobs may ultimately end up paying: their futures diminished, their dreams impaired.

Lost generation

Young people were innocent bystanders in the global financial crisis, but they may well end up paying the heaviest price for the policy mistakes that have led us to where we are today. Young people will have to pay the taxes to service the debts accumulated in recent years. Moreover, the global economy is threatened by intensifying strains in the euro area, and unemployment is still climbing in several countries, in particular in Europe. Young people (those ages 15 to 24) are the most affected, and youth unemployment has reached record levels in a number of countries.

If the right policies are not put into place, there is a risk not only of a lost decade in terms of growth but also of a lost generation.

Consider this. In Spain and Greece, nearly *half* of all young people cannot find jobs. In the Middle East, young people account for 40 percent or more of all unemployed people in Jordan, Lebanon, Morocco, and Tunisia and nearly 60 percent in Syria and Egypt. And in the United States, which traditionally has had a strong job creation record, more than 18 percent of all young job seekers cannot find employment.

Young people tend to be hurt more by recessions than the rest of the labor force—when economic growth slows, youth unemployment rises. As new entrants to the labor market they already face the most obstacles. One such obstacle is the fact that young people have less job-specific experience, which means they often need additional on-the-job training. When there is an economic downturn, they tend to be affected more, and employers remain reluctant to hire inexperienced people as growth resumes. From a purely economic perspective, it is also easier for employers to lay off young workers than more seasoned ones, because their dismissal costs are lower. These factors seem to have been particularly pronounced during the 2008 global economic crisis and its aftermath.

Youth unemployment has long-term consequences for economic growth because of the loss or degradation of human capital. But it also has many other consequences, both for the individuals affected and for society as a whole.

Among those consequences are

Increased costs to the economy: Youth unemployment results in higher unemployment insurance and other benefit payments, lost income tax revenues, and wasted productive capacity.

Brain drain: Youth unemployment often leads to increased emigration, which is clearly happening in Ireland and Iceland and has been a long-standing feature of many Middle Eastern countries. Many crisis-hit economies have a tradition of emigration when the economy undergoes a serious downturn.

Higher crime rates: Increased unemployment has been linked to higher crime rates.

Lower lifetime earnings: Youth unemployment leaves a "wage scar" in the form of lower earnings that can last into middle age. The longer the period of unemployment, the bigger the effect.

Lower life expectancy: Unemployment more generally has been linked to lower life expectancy, a higher incidence of heart attacks later in life, and even higher rates of suicide.

Lessons for the IMF

So what can be done? And what can the IMF do to help? At the seminar I mentioned earlier, one of the participants asked me whether the IMF really cares about unemployment and the young.

The IMF's mandate is to promote global macroeconomic stability, and there are in fact many aspects of economic stability that have important consequences for youth unemployment—and vice versa.

What happened during last year's Arab Spring, for instance, holds an important lesson for us here at the IMF. Before 2010, most Middle Eastern countries had respectable economic growth rates—countries like Tunisia and Egypt were growing 3 to 5 percent a year on average during the three years that preceded the revolutions. On the surface, these countries appeared to be quite successful. But once you looked beyond those numbers and took into account what was happening to inequality and to unemployment, it was quite clear that there were huge problems festering underneath.

So it is not enough to simply look at the aggregate numbers. We have to look at what is underpinning them. If a country is going to have a revolution as a result of those underpinnings, that is clearly bad for macroeconomic stability.

IMF work has not focused on employment issues in the past. That is why we work with others who have a specific mandate in this important area. We have a strong partnership with the International Labor Organization (ILO) and have been pooling our expertise to understand better which macroeconomic policies are good for creating jobs. At a more practical level, we have also worked with the ILO in a handful of countries to devise strategies that can help governments, unions, and the private sector foster job creation.

The IMF also has its own active dialogue with trade unions at the global, regional, and national levels. We liaise regularly with the International Trade Union Confederation and interact with the Trade Union Advisory Committee of the Organization for Economic Cooperation and Development. And some 80 percent of all IMF missions to member countries meet with trade union representatives to gain a better understanding of what is happening in the labor market.

But the biggest contribution the IMF can make to reducing youth unemployment is helping its member countries restore economic growth. It is only when the economy recovers that people will start to find jobs again.

Road map to jobs

To get the world economy back to where it creates rather than destroys jobs, a number of steps should be taken.

In advanced economies like the United States and Europe, there is a problem of inadequate demand. After the crisis in 2008, governments in those countries increased public spending to avert a depression. This worked, but worries about the future linger. Further support for demand will be essential, together with policies that foster confidence in the future. And in the meantime, scarce fiscal resources must be used to preserve and further strengthen young people's skills.

Many countries in Europe also face obstacles to hiring young people that are of a more long-standing structural nature. The structure of product and labor markets often protects insiders, whether workers or companies. In the end, such lack of domestic competition hampers an economy's ability to compete in international markets and hinders growth and job generation. As part of its policy dialogue with member countries, the IMF is recommending measures to reduce labor market segmentation, lower barriers to competition (especially in the service sector), implement growth-friendly tax reforms, and increase efforts in education and research and development. Such measures obviously need to be adapted to countries' specific circumstances, but it is essential that they be implemented as soon as possible.

Emerging economies are another story. They have been growing strongly, and some—at least until recently—were even at risk of overheating. Some of these countries—mainly those running large external surpluses—could contribute to solving the global and youth unemployment problem by boosting domestic demand and purchasing more goods produced elsewhere, including in advanced economies.

Low-income countries weathered the crisis pretty well after 2008, but in the process used a lot of their government resources. They now need to rebuild their fiscal buffers, so they can sustain employment and redirect spending toward high-priority areas such as health, education, and infrastructure, even if the global environment deteriorates.

Getting credit flowing again

Another important factor in job creation is access to credit. Right now, in the United States and Europe, the problem is that banks are not lending. In the United States, the continuing crisis in the housing market is putting a damper on credit growth. In Europe, banks have big exposures to sovereign debt. The answer has been to tighten lending conditions, and, not surprisingly, young entrepreneurs are among the first affected, with fewer loans going to start-ups, for example.

That is why it is important to recapitalize banks and more broadly restore confidence, so that financial institutions can get back to the business of lending and contributing to growth.

In developing economies, many banks are lending, but the loans do not reach large segments of the population, particularly young people and would-be entrepreneurs. For this reason, expanding the number of people who have access to credit is very important for employment.

Call to action

For millions of young people around the world, a lot is at stake in 2012. If we do not succeed in putting the world economy back on the path to recovery, futures will be blighted, and more dreams will be stolen. To solve the problems of youth unemployment, restoring global growth is crucial, as are policies to support job creation and credit. None of this can be achieved without global cooperation. ■

VOICES of Youth

As the global youth population reaches a historic high, we are witnessing a generation adrift. For many people coming of age, the dream of learning a profession or trade and finding secure employment is out of reach. It's not as if today's youth somehow went astray. They have played by the rules, following the formula that was supposed to bring economic independence and a happy life. They've gone to school to become productive members of society, but there aren't enough jobs, or the skills they've acquired don't correspond to the jobs available. Some are willing to leave for the big city, or go abroad, in search of a better life. But the dream proves elusive.

From Cairo's Tahrir Square to Madrid's Puerta del Sol, youth everywhere have protested the lack of economic opportunity. Clearly the system is cracked—but no one knows quite how to fix it. Here are the stories of six youth, told in their own voices.

Ahmad Hasan in Cairo, Egypt.

A Revolutionary in Egypt

AHMAD Hasan is a revolutionary at heart. But the 25-year-old Egyptian never imagined that his country would one day rise up in revolution as it did on January 25, 2011. He never dreamed that he would become one of the key people responsible for providing security in Tahrir Square throughout the initial days of the revolution, a turn of events that has restored his self-confidence.

"Definitely, I was a different person before the revolution. After the revolution, I became capable of criticizing any official and demanding a change of anything I do not like in the country. I will always draw strength from the liberation, and I will continue going to the square until the aspirations of the people are realized," Hasan says.

Hasan is a middle child. His older sister has married, easing the family's economic burden, and his younger brother will graduate soon from a business school in Cairo. His father died when he was only six, leaving Hasan's mother as the family's sole support.

She leases a small store where she sells vegetables in Shubra al-Kheimah, one of Cairo's oldest, poorest quarters.

He began working as a child, a year after his father's death. His mother sent him to the market daily to sell a basket of lemons. He would give her most of the proceeds and keep a small portion for himself, which he used to buy school supplies and clothes.

"I was not born to choose anything in life. I have always been a prisoner of my circumstances and fate," Hasan muses.

He earned good enough grades to be admitted to the College of Education. Unable to afford the tuition, however, he settled for admission to a two-year journalism program in a post-intermediate college.

With youth unemployment at more than 25 percent, satisfaction in life is something millions of young Egyptians are sorely lacking. According to the Population Council's 2009 survey of Egyptian youth, 30 percent of males ages 15 to 29 said they were looking to migrate, mostly to an oil-rich Gulf state, because they did not expect to find work at home. Hasan would likely have chosen this course had it not been for the events of January 25.

The youth unemployment problem stems partly from a serious mismatch between the skills young people possess and those that firms seek. Employers frequently cite the lack of suitable skills among job seekers as a constraint to hiring. And unemployment rates are actually highest among the most educated, which suggests that education systems are failing to produce graduates with marketable skills.

"I was desperate. Some days before the revolution, I was fired from my job because I got into a debate with my manager, who was a supporter of Gamal Mubarak's assuming the post of president after his father," says Hasan, who at the time was working as a sales representative for a wireless phone company.

"I remained without work for 24 days. I considered traveling abroad until I heard that young people were intending to hold demonstrations on January 25," he recalls. "On January 24, I went out to check out the squares and streets, eager for a chance to vent my anger. The next day, I was in the square at 7:00 a.m. and remained there until the president stepped down."

Now a part-time videographer with a documentary television production company, Hasan dreams of finding a steady job in his field and being treated with respect and dignity by the police. "The most important reasons behind the revolution were lost dignity, poverty, corruption, rigged elections, and the spread of nepotism and cronyism," says Hasan.

For now, though, Hasan will keep working toward change, one day at a time. ■

Reporting: Hisham Allam; photography: Maggie Osama

Chasing a Goal in Bosnia

IRMA Boracic has set bold career goals for herself, chased by a desire to become a judge at Bosnia and Herzegovina's top criminal court. But two years after graduating from the Sarajevo University Law School, the 24-year-old is still searching for a job, pursuing further training while rejections to her job applications keep piling up.

Many European countries suffer from high unemployment rates, but Bosnia's problem is chronic, with 75 percent of all the unemployed out of work for more than two years and 50 percent for more than five years, according to the Bosnian Statistics Agency.

"I have submitted over 300 job applications in the past two years," says Boracic. "I was short-listed many times but somehow I have never been offered a job." Bosnia's unemployment rate is also one of the highest in Europe. Those under 25 are affected the most, with close to 50 percent in this age group out of work.

Boracic was born in the Bosnian capital of Sarajevo, where she finished elementary and high school and got her university degree. She is single and lives in a family apartment with her mother and sister, who are supporting her financially while she studies for a final judicial exam.

Irma Boracic in Sarajevo, Bosnia.

“Since I joined law school, I have been dreaming about becoming a criminal judge. I think that I am qualified enough to work on the gravest crime cases,” Boracic says passionately.

Even though she has set her goals high, Boracic says that any job in the legal field would suffice to get her started in her career, whether in the private or public sector. Boracic completed a two-year unpaid internship at a Sarajevo court, first as a volunteer and later receiving only meals and a transportation allowance. Since completing the internship, she has been unable to land a job despite her active search.

In Boracic’s opinion, the education system does a poor job of aligning skills acquired by students with those required by the labor market. She thinks there are too many lawyers and economists. An IMF study supports her view: the sizable skills gap is one of the main constraints on the development of the country’s labor market. About two-thirds of secondary school students are enrolled in technical or vocational schools with narrowly specialized and sometimes outdated programs. Students leave the system without important skills in communication, problem solving, and teamwork, which are in high demand in the labor market.

A part of the former Yugoslavia, Bosnia and Herzegovina went through a traumatic transformation in the 1990s. The 1992–95 war caused immense human suffering, destruction of infrastructure, and an almost 80 percent decline in GDP. The 1995 Dayton Peace Agreement, which ended the war, created a complex political system that is frequently bogged down by ethnically motivated policies. “It is a very difficult situation,” Boracic says. “For young people like me, who are ambitious and have invested a lot in themselves, the chances of succeeding in the labor market are slim. It is very hard to find jobs in a country where the economy is not strong enough and where the state institutions are weak.”

Boracic also speaks of the corruption that affects aspects of life in her country, including employment. “At the moment, most people are getting jobs based on family ties and connections rather than on merit. In many cases, young people are asked to pay bribes in order to get hired,” she says.

Boracic expects to pass the judicial exam in March and will continue her job search, hoping that her efforts will eventually bear fruit. ■

Reporting: Daria Sito-Sucic; photography: Dado Ruvic

Postponed Ambitions in Peru

IN a shantytown on the outskirts of Lima, on a barren hillside, men and women wait while a bright-blue tanker truck fills plastic barrels with water, which they must haul up long staircases under the broiling sun.

The decade-long boom that saw Peru’s economy grow on average at 5.5 percent between 2000 and 2010 has significantly reduced poverty but it does not seem to have crept uphill to *Flor de Amancaes*, a cluster of brightly painted but flimsy wooden houses perched precariously on the rocky slope.

“For some people, I suppose things are better, but I don’t see it here,” says Adilmer García, 19, glancing up the hill at the one- and two-room dwellings.

Despite recent improvements, income inequality in Peru remains stubbornly high.

Adilmer García in Lima, Peru.

García was just 15 when he traded life on his family's tiny farm in the mountains of Piura, in northern Peru, for what he saw as a brighter future in Lima's sprawling capital. Four years later, home is a tiny prefabricated house at the very edge of the city, beyond the reach of the electrical grid and the municipal water supply.

"I came to work and to study," he says. "I saw a better chance to find a job, but especially for education." City life hasn't worked out the way García had hoped. When he arrived, he moved in with his brother, and he landed his first job two months later. But working full time six days a week left García with no time for classes, and he still hasn't been able to go back to school.

Most recently, he worked in a glass cutter's shop in a middle-class neighborhood an hour from his home, earning about $75 for a 60-hour week, with no insurance or other benefits. But that job ended in late 2011, and he is hunting again.

This time he wants to find a job that will leave the morning or afternoon free for classes, but he is doubtful about his prospects. "There's work, but it's harder to find a job that will also let you study," he says.

He isn't sure what kind of trade or career he might pursue. "I want to finish high school," he says, "then see what I like best." Despite his postponed ambitions, García does not regret moving to the city.

"The good thing here is that if you work, you earn money," he says. "On the farm, you work, but you don't have money." García is not alone. Over the past two decades, some 130,000 people a year have moved to Lima, which is now home to 7.6 million people.

Originally built on Peru's coastal plain, the city has crept up the rocky Andean foothills to the east, with each new wave of settlers claiming land once considered useless, farther up the steep, arid slopes. Their lives gradually improve, but in increments far smaller than the upward curve of the country's GDP.

"Four years ago, there weren't staircases" up the treacherous hillside, García says of *Flor de Amancaes*. "There wasn't a road. There was just a narrow path, and cars couldn't get up here. The houses were smaller—they've been remodeled. In the years I've been here, I've seen progress. I hope it continues." But his dream still hovers beyond his grasp.

"Sometime in the future, if we get electricity and water, this would be a good place to live," he says. "I'd like to have a house of my own, but that's in the future. Right now, I want to work and study." ■

Reporting: Barbara Fraser; photography: Oscar Medrano Pérez

Call to Action in the United States

WHEN the collapse of U.S. investment bank Lehman Brothers in September 2008 set off global economic turmoil, Alexa Clay did not feel the despair many felt. For Clay, who had just turned in her master's thesis in economic history at Oxford University, it was a call to action.

"I don't think of myself as a protester," said Clay, although she is a member of the Occupy Wall Street protest movement that is giving a voice to youth and others against economic

Alexa Clay in Washington, DC, United States.

and social inequality in the global economy. "It's not about being reactionary, but actually reimagining what capitalism looks like today. . . . My mission is to empower people to feel like they can make a change in the economy, not be paralyzed by it."

Clay says a defining characteristic for young people today is entrepreneurship as well as a sense of identity drawn from their vocation.

"You know yourself by the change you're trying to create; I think that's true for many of my generation."

Clay does not consider herself a victim of the global economic crisis. Now 27, she worked through graduate school, lives in Washington D.C., and has enjoyed steady employment since Lehman failed—a period in which the U.S. unemployment rate rose from 6.5 percent to peak at 10 percent in October 2009 then slowly subsided to about 8.5 percent in early 2012.

The self-described nomad now works for a Washington-based non-profit group whose mission is to bring about social change through entrepreneurship. She recently travelled to Kenya and Rwanda to research youth unemployment and job creation and soon will go to India to begin research on the informal economy.

Clay may have worked steadily during the crisis but she knows all too well that young people are struggling to find jobs. "We're going to have to be much more creative and scrappy to create opportunities and jobs for ourselves; they won't be hand delivered to us."

She thinks the Occupy movement and its worldwide protests have created a space for citizens to express their massive frustration with the current economic system. But she criticizes the movement for not having "enough of a theory of change I can buy into."

Economics has become disconnected from the real issues that matter, says Clay: how do we distribute resources fairly in society and what are the conditions for a prosperous economy?

"Economic theory tends to be self-referential and closed to most people," says Clay. She wants members of the profession to communicate their thinking in a more democratic language because "our economic system has become so much more complex, and for most people it's really difficult to engage in economic discussion."

Clay says the doctrines of self-regulating markets and individuals acting in their self interest didn't hold up during the crisis and economists are now beginning to reimagine their profession and their role in society.

While the Occupy Wall Street protests created a way to express a massive frustration with the current way of doing things, Clay wants more dialogue, including with those in power, about how to take a different approach.

"The biggest challenge for Occupy Wall Street is how to make citizens become real change agents in shaping our future economy; not just passive resisters of the crisis." ■

Reporting: Jacqueline Deslauriers; photography: Stephen Jaffe

Lost and Alone in Japan

TAKUMI Sato survives on a single pot of instant noodles a day and says if he were not receiving a disability check from the Japanese government he would be homeless.

Takumi Sato in Tokyo, Japan.

"I studied computer game design and production at technical college and got a job as an assistant director for a company that made animated television and video programs," said 23-year-old Sato, who lives by himself in a one-room apartment in Kawagoe, just north of Tokyo.

"But it was not really a full-time job, and even though I was working eight hours a day, I didn't have a contract," he said.

It is the situation of more and more Japanese workers as companies—feeling the pinch of the past few years' economic slowdown—abandon the nation's vaunted system of lifetime employment and the carefully nurtured sense of the company as a family. Instead, workers are hired under short-term rolling contracts that allow employers to cast them adrift with little warning and no support.

Against the backdrop of Japan's weakening economy, the social safety net is also deteriorating, with just 23 percent of unemployed people eligible for benefits. The fragility of the labor market combined with the lack of support services is taking its toll on the health of the population. Some have even taken their own lives.

Sato lasted two months in his next job, preparing bento box meals for supermarkets and convenience stores, earning Y130,000 ($1,671) a month for an eight-hour day, five days a week.

Sato left after his doctor told him that he needed to stop work to prevent his mental health from deteriorating.

That was three years ago; he has since survived on Y110,000 ($1,413) from the government each month, of which Y35,000 ($450) goes for rent.

Sato is angry that while the government is doing all it can to help companies ride out the global economic storm, people like him are effectively ignored.

"They do not do enough for us, and they don't even care when companies treat their staff badly," he said. "They just look the other way."

They also recognize that it is cheaper to hire foreign staff—the bento company Sato worked for brought in more Brazilian and Indian staff—who work for less and do not complain about the conditions, "as they know that they could very easily fall afoul of the immigration rules," Sato says.

There are an estimated 11 million people earning less than Y2 million ($25,706) a year in Japan, most of whom cannot afford to rent a home, according to the Japanese nonprofit Moyai, which works with the homeless. The majority of these homeless people are in their 20s, research shows.

At its extreme, the employment situation has led to adolescents and young adults withdrawing from society, often seeking refuge in extreme isolation and

confinement. Many refuse to leave their homes for months, sometimes years at a time. The condition even has its own name: *hikikomori*, literally "pulling inward" or "being confined."

"The government tells people like me that I can do anything I want if I just try a little harder, if I keep on working, but it's not true," Sato says. "I feel as if I'm slipping out of this society, and I don't think that I will ever be able to get back into it again." ■

Reporting: Julian Ryall; photography: Alfie Goodrich

Mismatched Skills in Nigeria

LIKE tens of thousands of university graduates her age, Chioma Nwasonye couldn't find a job when she left college. She completed one year of compulsory national service after graduation two years ago and has been job hunting ever since.

One of five children, 23-year-old Nwasonye graduated in 2010 with a degree in Geography and Regional Planning from Delta State University. The course "was not my original choice," she says. "I would have loved to study accounting or business studies."

Chioma Nwasonye in Badagry, Lagos State, Nigeria.

Because her grades weren't high enough to get her into the university's accounting program, she entered a one-year pre-degree program that guaranteed her a university slot at its conclusion. But the pre-degree program "did not offer accounting that year so I took Geography," she says. It still pains her that accounting was offered the following year.

About a million candidates take Nigeria's centralized University Matriculation Examination to vie for slightly over 100,000 spots available each year at the country's 95 public and private universities. So most young people jump at the offer of any course, as Nwasonye did, just to have access to a university degree.

Nigeria churns out thousands of graduates a year, but many cannot find work because of a mismatch between skills and market requirements, declining standards due to poor funding, and a lack of well-qualified lecturers. Some employers complain that many graduates do not have core technical knowledge in their discipline.

Nigeria's unemployment rate is on the rise and is now close to 24 percent in Africa's most populous country. Being highly educated does not increase the chance of finding a job. Three out of ten graduates cannot find work.

Nwasonye started with an advantage. Her mother is a primary school teacher—no mean feat given that she was raised in Nigeria's northern region of Sapele, where 43 percent of primary-school-age girls still do not have access to basic education,according to the Northern Education Initiative, a project in the area funded by the United States Agency for International Development.

Things are better in southern Nigeria, where Nwasonye grew up, but even there the literacy rate for females ages 15 to 24 is only 65 percent, compared with 78 percent for males in the same age group, according to United Nations Children's Fund statistics.

While she loves working with numbers, "my parents, especially my mother, really wanted me to study medicine. "Some courses in Nigeria are more respected," explains Nwasonye. Everybody wants to be a doctor or an accountant." Why is that? "I think it's the economy; many people think when you study such courses you have more job offers after graduation."

So for now she has decided to make her father—who works for the state-owned electricity company—happy by pursuing a master's degree.

"My father has always made it clear to us that we must all go to universities and not polytechnics or colleges of education," she says. "In fact, he mandated us to obtain our master's degree before he will reckon with us as graduates."

In a country with 40 million unemployed youths—many of them unemployable because of deficiencies that go back to primary school—most will not have the luxury of choosing further education to avoid unemployment. ■

Reporting: Wale Fatade and Tolu Ogunlesi; photography: Yinka Olugbade

Will the Renminbi Rule?

Eswar Prasad and Lei Ye

The Chinese currency is on track to become more important globally, but is unlikely to challenge the dollar anytime soon

THE Chinese economy is now the world's second largest and a key driver of global growth. It amounts to between 10 percent and 15 percent of world GDP (depending on how it is measured) and, in 2011, accounted for about one-quarter of world GDP growth. But among the currencies of the six largest economies in the world, China's renminbi is the only one that is not traded easily and accepted worldwide—that is, it is not a hard currency.

China's government has taken steps recently to promote the international use of the renminbi, even though it has not been willing to open up its economy to the free flow of capital and allow its exchange rate to be flexible. Nevertheless, given the sheer size of China's economy and its rising shares of global output and trade, these steps portend a rising role for the renminbi in international finance and trade. But a compelling question is whether the renminbi's global stature will rise to match that of the Chinese economy—perhaps approaching the U.S. dollar.

The answer to that question depends on three related but distinct concepts about the currency:

- *Internationalization:* its use in denominating and settling cross-border trade and financial transactions—that is, as an international medium of exchange;
- *Capital account convertibility:* how much a country restricts inflows and outflows of financial capital—a fully open capital account has no restrictions; and
- *Reserve currency:* whether it is held by foreign central banks as protection against balance of payments crises.

A country's currency can be used internationally even if its capital account is not fully open. And even in the absence of restrictions on capital flows, a country's currency may be used little or not at all internationally. But both international use and an open capital account are necessary for a currency to become an international reserve currency.

This article evaluates the current state of and prospects for the renminbi in each of these three dimensions in terms of the balance and sustainability of China's economic development and the associated implications for the global monetary system.

Becoming a reserve currency

Given China's size and growth prospects, it is widely seen as inevitable that the renminbi will eventually become a reserve currency. To gauge the likelihood and timing, it is necessary to consider the typical attributes of a reserve currency and evaluate China's progress in each of these dimensions. The factors that generally affect a currency's reserve status include

- *Economic size:* A country's GDP and its shares of global trade and finance are important, although not crucial, determinants of a country's reserve currency status.
- *Macroeconomic policies:* Investors in a country's sovereign assets must have faith in the ability of its economic policies, especially its commitment to low inflation and sustainable public debt, to protect the value of the currency from erosion.
- *Flexible exchange rate:* Reserve currencies are typically traded freely and their external value is market determined, although this does not entirely preclude central bank intervention in foreign exchange markets. An open capital account is not synonymous with a freely floating exchange rate.
- *Open capital account:* Reserves must be acceptable as payments to a country's trade and

financial partners, which requires that the currency be easily tradable in global financial markets. This is difficult if a country imposes restrictions on capital flows and if its foreign exchange markets are thin and subject to the government's direct control.

- *Financial market development:* A country must have deep and liquid financial markets—that is, markets, especially in government bonds, with many buyers and sellers to provide "safe" assets that can be held by international investors and central banks from other countries. Turnover (trading volume) in these bond markets, which is a measure of liquidity, is also important.

There is no hard-and-fast rule that dictates which of these factors are important or even essential. For instance, the Swiss franc is a global reserve currency even though Switzerland's shares of global GDP and trade are small. Moreover, many major reserve currency economies—the euro area, Japan, and the United States, for example—have large and rising public debt, which casts doubt on their macroeconomic stability but has not affected their currencies' reserve status, at least so far. Some analysts have in fact extrapolated from the U.S. experience to argue that China will have to run large current account deficits if it wants to provide reserve assets to the rest of the world. But that is not the case. The currencies of Japan and Switzerland have achieved reserve status despite those countries' consistent current account surpluses.

How the renminbi fits in

China's size and importance in world trade are well known. It now accounts for 10 percent of global trade in goods, up from 4 percent a decade ago, and is extensively connected with other economies through trade linkages. Whether China's fiscal and monetary policies anchor long-run inflation expectations and foster macroeconomic stability is an open question. China has a moderate level of explicit public debt and a small government budget deficit relative to the major reserve currency economies. Moreover, despite its tightly managed exchange rate, which has compromised the independence of monetary policy, China has had a relatively stable inflation rate in the recent past.

The next question is whether China is opening up its capital account. Although China still has extensive capital controls in place, they are being selectively and cautiously dismantled. As a result, gross inflows have risen sharply over the past decade, reflecting China's attractiveness as a destination for foreign investment. Outflows other than foreign exchange reserves, including investments abroad by Chinese corporations and institutional investors such as pension funds, have also grown substantially, albeit from a low base. In short, China's capital account is becoming increasingly open in actual terms, although even by this measure it remains less open than those of the reserve currency economies—the euro area, Japan, Switzerland, the United Kingdom, and the United States.

Financial market development in the home country is a crucial determinant of a currency's international status. Historically, each reserve currency has risen to prominence under unique circumstances and spurred by differing motivations, but one constant is that this process has always required strong financial markets. The relevant aspects of financial market development include

- *Breadth:* the availability of a broad range of financial instruments, including markets for hedging risk;
- *Depth:* a large volume of financial instruments in specific markets; and
- *Liquidity:* a high level of turnover (trading volume).

Without a sufficiently large debt market, the renminbi cannot be credibly used in international transactions. If there is insufficient liquidity in markets for renminbi-denominated debt, the currency will not be attractive to foreign businesses. Both importers and exporters may be concerned about greater exchange rate volatility from an open capital account if they don't have access to derivatives markets to hedge foreign exchange risk.

Where do things stand? China's financial system remains bank dominated, with the government directly controlling most of the banking system. Total domestic credit provided by the banking sector outweighs the size of the equity and bond markets combined. The banking system's size and structure, which protect banks' profits by limiting competition, and regulatory barriers have stifled broader financial market development.

Debt markets in China lag far behind those of major reserve currency economies in size and liquidity (see Chart 1). The government debt market is reasonably large in absolute terms but turnover is low. Turnover is relatively high in China's corporate bond market, which is still small. Analyzing the shares of international debt securities according to the currencies of issuance reveals a similar picture. The existing reserve currencies dominate; only a paltry 0.1 percent of international debt is denominated in renminbi.

While the absolute size of the debt securities market in China is small from a cross-country perspective, it should not mask the rapid *growth* of these markets, which is consistent with the country's intention to make the renminbi accepted as an international currency (see Chart 2). Nevertheless, reserve currency status for the renminbi is probably a much longer-term goal.

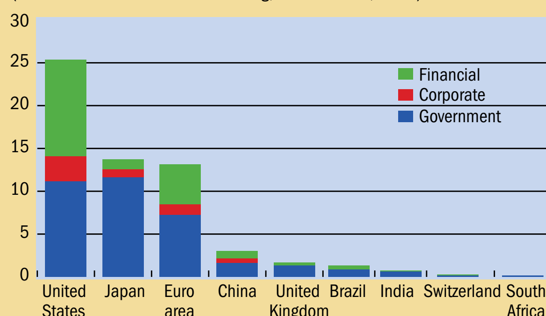
One area in which China has made significant progress is in the development of equity markets. Following reforms in

Chart 1

Behind the biggest

The size and liquidity of China's debt markets are far lower than in markets of major reserve currency countries.

(domestic debt securities outstanding, trillion dollars, 2010)



Sources: Bank for International Settlements; and authors' calculations.
Note: The chart shows the amount of domestic debt outstanding by residence and sector of issuer. Euro area data do not include Estonia.

2005, market capitalization and turnover surged and have grown sixfold, while trading volume has climbed more than tenfold. However, Chinese stock markets are highly volatile and prone to concerns about corporate governance, so they may be of limited help in promoting the renminbi's role as an international currency.

The pace of internationalization of China's currency depends on its use in international financial transactions, not just trade. Foreign exchange market turnover is a good indicator of a currency's potential as a vehicle currency for transactions involving cross-border trade in goods and financial assets. Currently, the renminbi accounts for less than 1 percent of all turnover in foreign exchange markets in 2010, but that understates reality. China uses Hong Kong SAR as an important financial center for settling foreign exchange transactions, and in 2010, Hong Kong SAR accounted for 5 percent of global foreign exchange market turnover. Hong Kong SAR provides a useful platform that puts the renminbi on a competitive footing relative to other emerging market currencies in terms of reaching international currency status.

Most derivatives markets in China are still nascent, but three of its commodity futures exchanges are among the top 20 derivatives exchanges in the world as measured by the number of futures and options contracts traded. From the perspective of promoting international use of a currency, however, a large commodity derivatives market is not as useful as more diverse and liquid financial derivatives markets.

To some extent, policies that direct activity toward Hong Kong SAR are playing a role generally carried out by vibrant domestic financial markets. Both the amount of renminbi deposits and the number of institutions authorized to conduct renminbi business in Hong Kong SAR have risen sharply over the past year.

Policies to increase offshore renminbi use have effectively promoted its global role without risking the potentially deleterious effects of capital account liberalization. But the full potential of the Chinese currency's international use cannot be realized without more active onshore development. Ultimately, it will be difficult to fully develop foreign exchange and derivatives markets without substantial capital account liberalization.

To sum up, there has been modest development of the breadth, depth, and liquidity of China's financial markets over the past decade. But China still comes up short when it comes to the key dimensions of financial market development, and financial system weaknesses are likely to impede its steps to heighten the currency's international role.

A rising international presence

Despite the weak financial infrastructure supporting it, the renminbi is gaining an international presence (see Charts 3 and 4). China has been using Hong Kong SAR extensively as a testing ground for initiatives to promote the international use of the renminbi. Personal renminbi business was launched in Hong Kong SAR in 2004, when residents there were allowed to open deposit accounts denominated in renminbi. Other initiatives followed, such as cross-border settlement of trade transactions and renminbi bond issuance.

Given China's rapidly expanding trade volume, promoting renminbi trade settlement is a logical first step toward the currency's internationalization. Since it began in 2009, cross-border trade settlement in the Chinese currency has surged. In 2011, renminbi trade settlement amounted to about 8 percent of China's total trade in goods and services. Monthly remittances of renminbi used for cross-border settlement in Hong Kong SAR rose to nearly $25 billion a month in 2011, more than double the 2010 average.

Issuance of renminbi-denominated bonds (known as dim sum bonds) in Hong Kong SAR is on the rise as well, tripling from 2007 to 2010 and hitting a high of about $10 billion in the second quarter of 2011. Fewer of these bonds were issued during the remainder of 2011, reflecting weaker global market conditions as the debt crisis in Europe continued to fester.

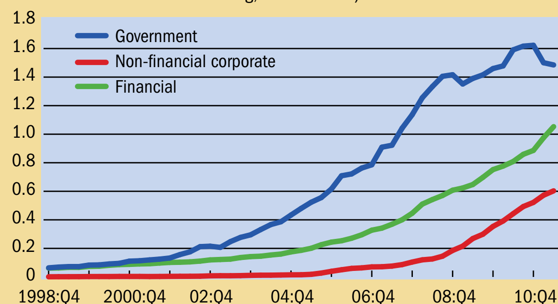
Another way to gauge offshore use of the renminbi is to look at transactions among banks. Such renminbi clear-

Chart 2

Catching up

Although small on an absolute basis, China's debt markets are growing fast.

(domestic debt securities outstanding, trillion dollars)



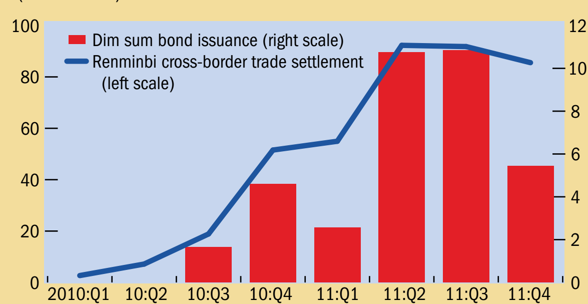
Source: Bank for International Settlements.
Note: Data are through September 2011.

Chart 3

A growing international presence

In Hong Kong SAR, China is issuing renminbi-denominated (dim sum) bonds and settling trade transactions in renminbi.

(billion dollars)



Sources: CEIC Data; Bloomberg; and authors' calculations.

ing transactions were virtually nonexistent until mid-2010, when financial institutions in Hong Kong SAR were allowed to open renminbi-denominated accounts. Since then, both the volume and value of transactions have increased dramatically. The total value of transactions hit a peak of more than $500 billion in August 2011.

Although still on a modest scale, the initiation and rapid expansion of various elements of the offshore renminbi market foretell the currency's significant presence in trade and financial transactions in Asia. Some might argue, however, that dim sum bond issuance and cross-border settlement in renminbi are still narrow in scope, with most of the activity accounted for by Chinese mainland companies and their Hong Kong SAR subsidiaries. Some of this activity may also reflect attempts to circumvent capital controls. In short, even the influence of offshore renminbi use has some distance to go to reach its full potential.

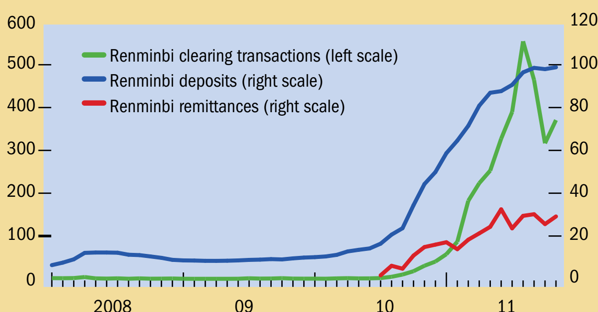
On another front, China's central bank is establishing and expanding local currency bilateral swap lines with other central banks around the world to facilitate and expand the use of the renminbi in international trade and financial transactions. The amounts of these bilateral agreements are small, but they indicate efforts to make other countries' central banks comfortable and familiar with renminbi-denominated instruments and financial facilities.

The renminbi has also started to appear in a few central banks' foreign exchange reserve portfolios. Malaysia and Nigeria first reported renminbi reserves in 2011. Chile's central bank investment portfolio now has 0.3 percent of its assets in renminbi-denominated instruments. Other central banks are considering adding renminbi assets to their reserve portfolios. These holdings cannot in principle be counted as official reserves, given the renminbi's lack of convertibility, but that does not seem to deter these central banks, which see renminbi-denominated assets—just like those of other major reserve currencies—as insurance against balance of payments pressures.

Chart 4

Banks boost renminbi role abroad

Offshore renminbi deposits, remittances, and clearing transactions among banks are well above 2008 levels.



Sources: CEIC Data; and Hong Kong Monetary Authority.

These moves are all modest in size but symbolically important in signaling the shift in perception about the renminbi's stability and its future role in the international monetary system.

Taking on the dollar

Is the renminbi on a trajectory to usurp the U.S. dollar's role as the dominant global reserve currency? Perhaps, but the day is a long way off. It is more likely that, over the next decade, the renminbi will evolve into a reserve currency that erodes but doesn't end the dollar's dominance.

About two-thirds of global foreign exchange reserves are now held in U.S. dollar–denominated financial instruments. Other indicators, such as the dollar's shares of foreign exchange market turnover and cross-border foreign currency liabilities of non-U.S. banks, confirm the currency's dominance in global finance. There are growing concerns about U.S. macroeconomic stability that might affect the dollar's desirability. Although the U.S. central bank, the Federal Reserve, has strong worldwide credibility for its inflation-fighting credentials, rising public debt poses a serious concern. U.S. gross general government debt is about 90 percent of GDP, and IMF forecasts indicate that it could reach 110 percent of GDP, or nearly $21 trillion, by 2016. This is dangerous terrain for the world's largest economy, but paradoxically—given the weaknesses in Japan and the euro area and emerging markets' demand for so-called safe assets as they continue to accumulate foreign exchange reserves—rising U.S. debt may cement the dollar's dominance in the global financial system.

Moreover, a gulf remains between China and the United States when it comes to the availability of safe and liquid assets such as government bonds. The depth, breadth, and liquidity of U.S. financial markets are unmatched. Rather than catching up to the United States by building up debt, the challenge for China is to develop its other financial markets and increase the availability of high-quality renminbi-denominated assets.

The renminbi is attaining more prominence in international trade and finance. While this importance is sure to grow, the renminbi is unlikely to become a prominent reserve currency—let alone challenge the dollar's dominance—unless it can be freely converted and China adopts an open capital account. The challenge for the Chinese government is to back up its modest international policy actions with substantial domestic reforms. The renminbi's prospects as a global currency will be shaped by a broader range of policies, especially those related to financial market development, exchange rate flexibility, and capital account liberalization. The path of China's growth and the renminbi's role in the global economy will depend on those policy choices. ■

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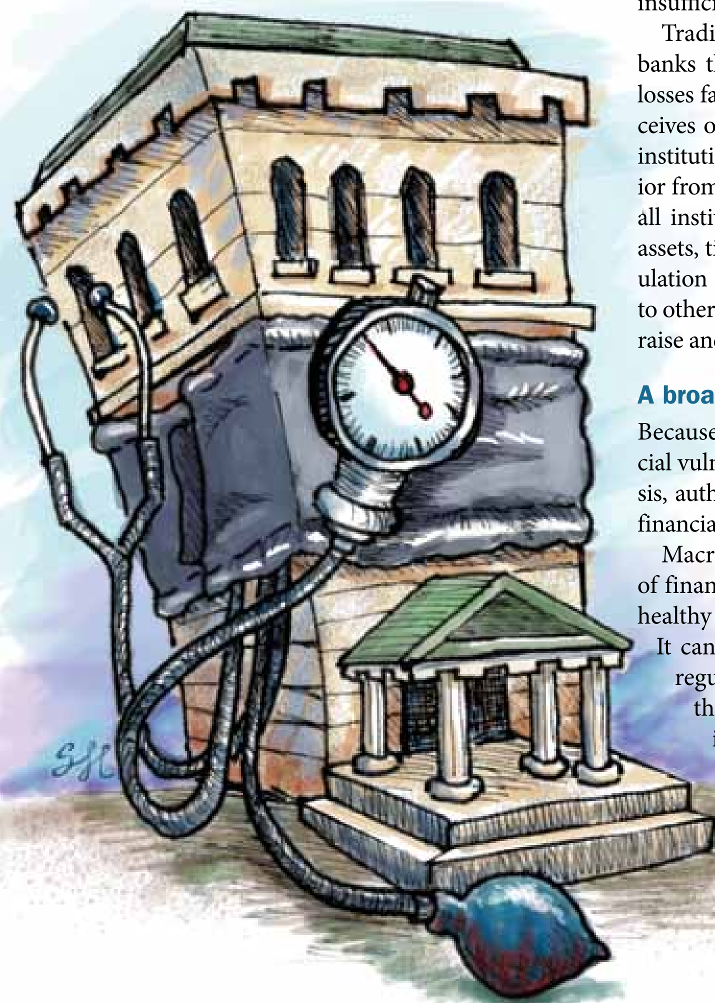
This article is based on a Brookings Institution study by the authors titled "The Renminbi's Role in the Global Monetary System."

Protecting the WHOLE

Keeping individual financial institutions sound is not enough. A broader macroprudential approach is needed to safeguard the financial system.

Luis I. Jácome and Erlend W. Nier



GOVERNMENTS have long sought to regulate financial institutions to ensure that they are safe, sound, and able to honor their obligations—especially institutions like commercial banks that collect funds from the general public. But the global financial crisis demonstrated that traditional regulation, often called microprudential, is insufficient to guarantee the health of the financial system as a whole.

Traditional regulation tends to be light on institutions like investment banks that operate primarily in wholesale markets, where the potential for losses faced by retail depositors is less. Moreover, microprudential policy conceives of the stability of the financial system as the sum of individual sound institutions. It does not take into account that what constitutes prudent behavior from the point of view of one institution may create broad problems when all institutions engage in similar behavior—whether by selling questionable assets, tightening credit standards, or holding onto cash. Microprudential regulation also does not typically recognize that institutions can be a threat both to other financial institutions and to markets, where many large financial firms raise and place funds.

A broader approach

Because of increasing recognition that traditional regulation allowed financial vulnerabilities to grow unchecked, contributing to the global financial crisis, authorities in many countries are exploring a more systemic approach to financial regulation. This holistic approach is called *macroprudential policy*.

Macroprudential policy does not seek to replace traditional regulation of financial institutions, such as commercial banks, which are essential to a healthy system. Instead, it adds to and complements microprudential policy. It can often deploy traditional regulatory tools, and relies on traditional regulators for implementation and enforcement. But it adapts the use of these tools to counter growing risks in the financial system. This evolving approach may require a new type of regulatory setup to monitor the financial system for evidence of growing threats to stability and to enable the authorities to take action to counter those threats.

The notion of a macroprudential approach is not entirely new (Crockett, 2000). But it was only after the global financial crisis that policymakers fully came to appreciate the likelihood and costs of a systemic disruption in modern financial markets and the need to keep systemic risk in check. As a result, it is an approach that is still evolving (FSB/IMF/BIS, 2011).

The scope of macroprudential policies

Macroprudential policies are designed to identify and mitigate risks to systemic stability, in turn reducing the cost to the economy from a *disruption in financial services* that underpin the workings of financial markets—such as the provision of credit, but also of insurance and payment and settlement services (FSB/IMF/BIS, 2009; IMF 2011a).

An example of such a disruption is a *credit crunch*, in which losses suffered by banks and other lenders cause a curtailment of credit to households and firms that in turn depresses overall economic activity.

Such disruptions can arise either from the overall, or aggregate, weakness of the financial sector or from the failure of so-called systemic individual institutions—which are large and have financial relationships with many other institutions.

Aggregate weakness arises when the financial sector as a whole becomes overexposed to the same risks—whether these are credit (borrowers will not repay), market (collateral values will decline), or liquidity (assets cannot easily be sold or debts refinanced) risks. For example, in the run-up to the recent crisis, both in the United States and elsewhere, credit was increasingly tied to the value of real estate collateral. When the housing market collapsed, lenders were exposed both to market risk, because the value of the real estate declined, and to credit risk, because borrowers were less able to repay their loans. Moreover, in a number of countries, credit providers increasingly borrowed the funds they lent in wholesale markets (from money market mutual funds, for example), relying less on traditional deposits from customers. When those markets dried up (especially following the Lehman Brothers bankruptcy in 2008) those lenders faced liquidity risks because they could not refinance expiring debt (Merrouche and Nier, 2010).

If exposures to these sources of risk are *common* or *correlated* across financial institutions, many or all financial intermediaries (such as banks and other lenders) are likely to come under pressure because the value of assets goes down and the cost of replacing lendable funds (liabilities) goes up. That will hurt the ability of the system to provide key financial services, including credit and payments, to the economy.

The failure of an individual institution can create systemic risk *when it impairs the ability of other institutions to continue to provide financial services to the economy.* Usually only a large institution that is heavily connected to many other institutions can cause such spillovers that its failure threatens systemic stability. These spillovers can occur through one or more of four channels of contagion:

- direct exposure of other financial institutions to the stricken institution;
- fire sales of assets by the stricken institution that cause the value of all similar assets to decline, forcing other institutions to take losses on the assets they hold;
- reliance of other financial institutions on the continued provision of financial services, such as credit, insurance, and payment services, by the stricken institution; and
- increases in funding costs and runs on other institutions in the wake of the failure of the systemic institution (Nier, 2011).

For example, the 2008 Lehman Brothers failure led not only to direct losses at other financial institutions but also to sharp increases in funding costs for all financial institutions because providers of funds were uncertain about where the losses triggered by Lehman Brothers might have occurred, and were therefore wary of lending to any institution.

For macroprudential policy to be able to reduce the expected cost both of aggregate weakness and of disruption through failure of individual systemic institutions it must bring within its purview two sets of firms—systemic institutions and all leveraged credit providers (those that lend borrowed funds).

Systemic institutions include not only large banks, but also those that provide critical payment and insurance services to other financial institutions. For example, American International Group (AIG) essentially provided insurance to other financial institutions by protecting the value of mortgage-related securities held by those institutions. Had AIG been allowed to collapse, this insurance protection would have disappeared, exposing other institutions to large losses.

All leveraged providers of credit, regardless of size, are included in the purview of macroprudential policy because it is their collective weakness that can affect the provision of credit to the economy as a whole (Nier, 2011). Although banks are almost always the most important leveraged providers of credit, in some jurisdictions important classes of nonbank lenders must also be within the scope of macroprudential policy. Otherwise there is a risk that the provision of credit will migrate from banks to less-constrained nonbanks.

Policy in practice

Macroprudential policy must deploy a range of tools to address aggregate weakness and individual failures. Because a single tool is unlikely to be sufficient to address the various sources of systemic risk, the macroprudential authority must be able to tailor specific macroprudential instruments to the particular vulnerabilities identified by its analysis (Lim and others, 2011).

A number of tools are being developed or have recently been used to address the buildup of aggregate risks over time. An important one is the *dynamic capital buffer*. Financial institutions have long been required by regulators to maintain a certain amount of capital (normally equity and retained profits) to enable them to absorb (or buffer) losses on loans or securities. The dynamic buffer—proposed by an international panel of regulators that meets in Basel, Switzerland—would lead macroprudential authorities to require financial institutions to add to their capital when there are signs of unusually strong credit growth or when there are signs of a credit-driven asset price boom. The buildup of the capital buffer has a twofold impact. Because lenders must raise more costly equity funds, the cost of credit should rise and its growth should slow. At the same time, the buffer should increase the resilience of the system, allowing it to better absorb any losses when the boom gives way to bust. That in turn reduces the chance of a costly credit crunch.

The dynamic, or countercyclical, capital buffer is but one of the tools macroprudential authorities can use to target specific vulnerabilities. Many of them have already been used in the past (especially in emerging market economies) to prevent boom-bust credit cycles and include tools to address the interplay between market risks and credit risks—such as maximum loan-to-value ratios for home mortgages—and the buildup of liquidity risks as credit grows strongly—such as measures to discourage an overreliance on volatile wholesale funding:

• *Variation in sectoral risk weights:* Designed to be less blunt than dynamic capital buffers, these force institutions to add capital to cover new loans in sectors that are building up excessive risks. For example, Turkey recently increased requirements for new lending to households to stem high loan growth in this segment.

Macroprudential policy must deploy a range of tools to address aggregate weakness and individual failures.

• *Dynamic provisions:* These force banks to set aside money to cover loan losses in good times when credit losses are relatively low so that bank balance sheets are better prepared to absorb losses that build during downturns. A dynamic provisioning regime was introduced in Spain in 2000 and more recently in Chile, Colombia, Peru, and Uruguay.

• *Loan-to-value ratios:* Maximum loan-to-value ratios are increasingly being applied to reduce systemic risk from boom-bust episodes in real estate markets. By limiting the loan amount to well below the value of the property, loan-to-value ratios help limit household leverage. They can also put a brake on increases in house prices and reduce the chance of underwater households being driven to default on their loans when the housing cycle turns (IMF, 2011b). They are often complemented by debt-to-income ratios that seek to limit the fraction of household income spent on servicing debt.

• *Measures targeted at foreign currency lending:* If borrowers take out loans in a foreign currency, their ability to repay can be significantly affected if the value of the foreign currency rises and they have not protected themselves against such a swing. The threat of a rise in foreign currency value heightens credit risk for lenders because repayment becomes more expensive for borrowers. Macroprudential measures to reduce these risks include portfolio limits on foreign currency lending and other targeted restrictions, such as requiring more capital and tighter loan-to-value and debt-to-income ratios for foreign currency loans—an approach recently adopted in a number of countries in central and eastern emerging Europe.

• *Liquidity requirements:* When funding is easy to obtain, an increase in required buffers of liquid assets (those that can be easily and quickly converted to cash) provides cash reserves that can be drawn on when funding dries up. Such a time-varying increase in liquidity requirements can also curb credit expansion fueled by short-term and volatile wholesale funding and reduce dangerous reliance on such funding. New Zealand and Korea recently introduced such measures.

• Authorities also need to be in a position to address the risk of failure of individually systemic financial institutions. Most tools currently under discussion in this regard are designed to reduce the likelihood of failure of institutions that are too important to fail. The Financial Stability Board, an international body of regulators set up in 2009, recently announced that a number of financial institutions important to the world economy—mainly banks and large investment banks with worldwide operations—will be subject to additional capital requirements in amounts related to the level of risk the institutions pose to the global financial system. While these additional capital requirements will help restrain the growth of such institutions and better prepare them to absorb losses, additional tools to ease the impact of failure of individual systemic institutions would also help. For example, there would seem to be a strong case for requiring institutions to maintain more capital when they are exposed to large systemic institutions, because it is those exposures that transmit the effects of a large institution's failure. Requiring greater transparency of exposures, including those between financial institutions in markets for derivatives, is another potentially powerful tool to reduce uncertainty and, in turn, the marketwide impact of the failure of individually systemic financial institutions. It was such uncertainties that contributed to the freeze-up of financial markets following the Lehman collapse.

Effective macroprudential policies

Because macroprudential policy is at an early stage of implementation, it faces three crucial issues before it can become fully effective:

• building—or refining—its institutional underpinnings;

• designing an analytical framework to effectively monitor and assess systemic risks, so as to guide the appropriate policy action; and

• establishing international cooperation.

Institutional underpinnings: While the design of institutional foundations for macroprudential policies should take into account country-specific circumstances and differences in institutional starting points, some general goals are likely to be relevant for all countries. The arrangements should foster effective identification of developing risks; provide strong incentives to take timely and effective action to counter those risks; and facilitate coordination across policies that affect systemic risk (Nier and others, 2011).

To achieve these goals, the setup should avoid complex and excessively fragmented structures. If there are many players, institutional silos and rivalries can hinder risk identification and mitigation of systemic risk, undermining the effectiveness of macroprudential policies. Moreover, to create strong incentives to act, the framework should identify a leading authority, vested with a clear mandate and

commensurate powers, so that it can be held accountable for achieving its objectives.

The independent central bank should play an important role in all arrangements. Not only do central banks have expertise in risk assessment, but as lenders of last resort to institutions facing liquidity problems, central banks are motivated to take timely action to reduce the buildup of risks. Moreover, a strong role for the central bank allows coordination with monetary policy, which sets the overall conditions that affect the demand for and supply of credit. Participation by the government is useful to ensure the support of tax policy and to facilitate legislative changes that may be needed to enable the authorities to mitigate systemic risk, such as the creation of regulatory authority over non-bank lenders and other systemic institutions. But because of the political nature of government, a strong role can pose risks because governments have incentives to oppose taking macroprudential measures in good times, when they are often most needed.

Measuring systemic risk: How to establish an analytical framework that is effective in identifying systemic risks at an early stage and that encourages the macroprudential authority to take timely and appropriate action is a major issue as well. Attempts have been made to develop a single measure of overall systemic risk that could trigger the use of macroprudential instruments. But as attractive as such a statistic would be—because it could be easily communicated and used to gauge the effectiveness of policy actions—finding one has proved impossible so far.

Instead policymakers are moving toward employing a set of indicators (IMF, 2011c). This approach recognizes that systemic risk has more than one dimension. More pieces of information also help policymakers identify which tool or combination of tools would be most effective in addressing potential problems. For example, to capture aggregate risk, the macroprudential authority must monitor overall credit, liquidity, and market risks, as well as any concentrations of those risks in a particular sector, such as housing or consumer credit. It should then analyze those risks to decide which policy tool is most effective to address them.

The international dimension: Because national financial systems are interconnected globally and financial services are provided across national borders, macroprudential policies must be coordinated among countries. International coordination is necessary because credit booms and asset bubbles can be fed by credit provided from abroad. Coordination also limits the potential for international systemic institutions to move operations to the least restrictive jurisdictions, thereby playing one country against another.

Coordination can be facilitated by common tools and international agreement on the "reciprocal" use of such tools. A good example is the dynamic capital buffer established under the auspices of the Financial Stability Board. But what happens when countries find they need to employ tools for which there are no reciprocity standards? This is unclear and should be the focus of international talks as the global financial system evolves.

No panacea

Even the best macroprudential policies cannot prevent all financial crises. As a result, there is a need for a strong and flexible lender of last resort—typically a central bank—to ease temporary shortages in liquidity and for credible policies to resolve or close failing financial institutions. Moreover, macroprudential policy does not operate in a vacuum. Sound monetary, taxing, and spending policies are essential to creating a stable environment conducive to a healthy financial system.

Finally, policymakers should be mindful that macroprudential policy, like any public policy, is not free of costs and that there may be trade-offs between the stability and the efficiency of financial systems. For instance, when requiring financial institutions to maintain a high level of capital and liquidity, policymakers may enhance the stability of the system, but they also are employing measures that make credit more expensive and thus may reduce economic growth. Balancing benefits and costs will often require difficult judgments. ■

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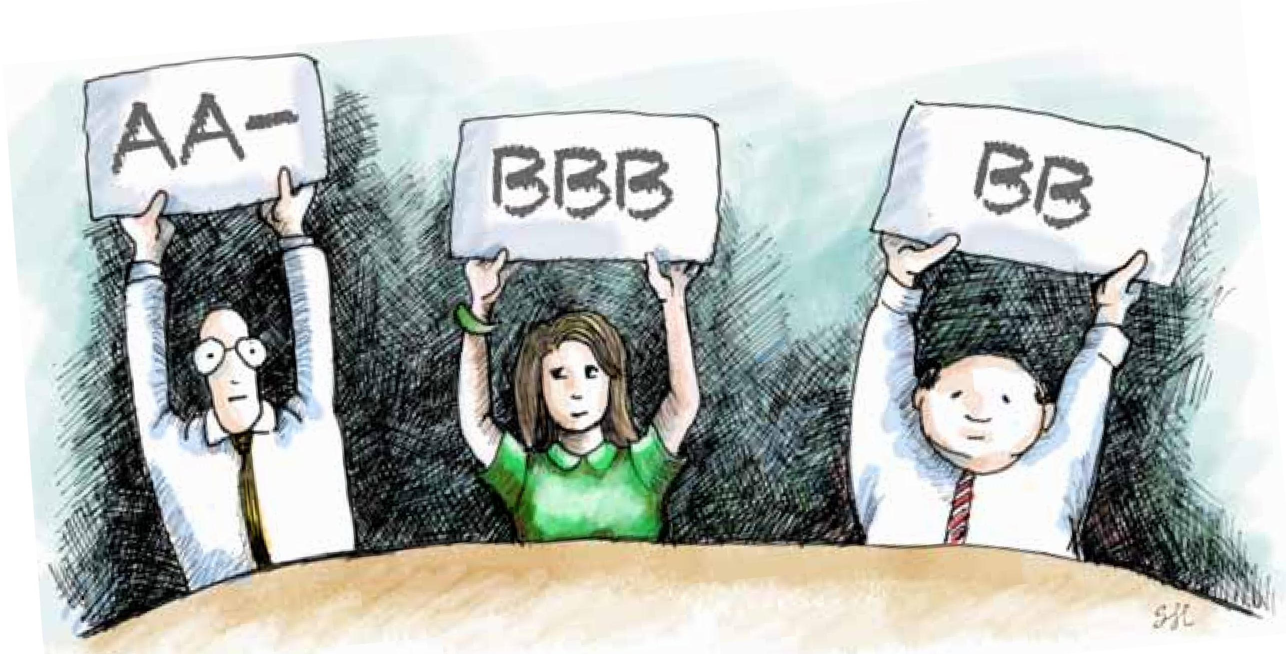

RATINGS GAME

Panayotis Gavras

Private credit rating agencies have been thrust into providing a public function because regulators have not come up with an alternative

CREDIT rating agencies have become an essential part of the financial landscape. These private companies assess credit risk for companies and governments seeking to take out loans and issue fixed-income securities, such as bonds. Reliance on these agencies is so entrenched that prospective borrowers often must obtain a credit rating before they try to raise money in capital markets. The ratings provide prospective lenders with guidance on the borrower's creditworthiness, which contributes to the determination of the interest rate, or price, the borrower must pay for financing.

But these private rating agencies' assessments, which are designed for private financial markets, have been inserted into the public domain—regulators across the globe use them, for example, to assess the riskiness of bank portfolios and determine how much capital institutions must hold to guard against insolvency. With regulators' growing emphasis on risk as the basis of capital adequacy, the credit rating agencies' assessment of that risk has, in effect, been turned into a public good.

Putting credit rating agencies—mainly Standard & Poor's, Moody's, and Fitch (see Box 1)—into the public regulatory domain has had two consequences. First, it changed the nature of banking regulation from reliance on static, fixed percentages to use of dynamic scores that can change according to a rating agency's assessment of credit risk. This introduced greater sophistication, but also greater complexity and the possibility of incorrect, outdated, or otherwise misleading risk assessments. Second, it led to the entrenchment of private entities in regulation—a domain normally reserved for the public sector. Most discussion of rating agencies has focused on conflict of interest and other problems as they relate to assessment quality. Far less has been said about the potential for a serious conflict of interest between the objectives of privately owned credit rating agencies seeking to maximize shareholder value and the objectives of the regulatory role they play, even if they did not seek that role.

As authorities reexamine the regulatory and supervisory failures during the run-up to the global crisis, they must look at the reliance on credit rating agencies. Although any assessment must take into account the costs of making changes, there are a variety of potential paths—including reforming the rating agencies, bringing them under public control, or finding alternatives to them.

Evolution of credit ratings

As financial markets grew increasingly complex, borrowing opportunities expanded

dramatically and the ability of a lender to obtain full information about potential borrowers became ever more difficult. Through economies of scale, rating agencies are able to offer cost-effective information services that narrow the gap between what an investor knows about a borrower and what the borrower knows, assigning each borrower a grade, called a rating. By narrowing such information asymmetries between borrowers and lenders, agencies promote liquidity in markets, increasing financial activity and reducing costs. Borrowers with higher (that is, better) credit ratings typically enjoy greater and easier access to financing at lower cost, because they are deemed less risky and more likely to repay in full what they owe, including interest. Frequently, ratings represent the initial reference point in the due diligence process.

Although credit rating agencies are private firms, their role in financial regulatory frameworks has expanded since the 1970s—especially as a result of an international agreement to assess bank portfolios based on the risk of their assets and set capital requirements accordingly. This so-called Basel II Accord sought to add nuance to regulatory standards (see Box 2). A key justification for the incorporation of rating agencies' credit assessments was the belief that they offered a more sophisticated approach to measuring credit risk than did the simpler regulatory practice of basing capital requirements on a fixed percentage of total assets—the approach in the earlier Basel I Accord, which allowed for much less differentiation.

Hardwired

The postcrisis debate over the role of credit rating agencies in financial regulation has focused primarily on issues such as conflict of interest and adequacy of performance. Among the questions are how the rating agencies assign ratings, what they rate, and whether ratings fueled the precrisis lending boom and resulting asset bubbles and provoked an opposite and pernicious effect after the crisis. These are valid concerns, but they also underscore how credit rating agencies have become an essential part of the financial system—"hardwired" if you will, in such a way that they take the place of due diligence rather than supplement informed decision making (BIS, 2009). This hardwiring results, in part, from the investment strategies of banks, investment funds, and other private entities. Primarily, though, it stems from credit rating agencies' institutionalized role in public policy activities—chiefly in banking regulation, but also in areas such as determination of the eligibility of collateral in central bank operations and investment decisions of publicly controlled or operated funds, such as pension funds.

The use of agency ratings in financial regulation amounts both to privatization of the regulatory process—inherently a government responsibility—and to abdication by government of one of its key duties in order to obtain purported benefits such as lower regulation costs and greater efficiency and nuance.

Box 1

The big three

Credit rating agencies, some of which trace their origins to the 19th century, assess the credit risk of debt issued by companies and governments and assess investment products such as collateralized debt obligations. The agencies generally assign a grade, called a rating, that ranges from highest quality with little risk to lowest quality with little or no likelihood of repayment.

The rating business is dominated by three firms—Moody's, Standard & Poor's, and Fitch. Moody's and Standard & Poor's, headquartered in New York City, each have about 40 percent of the global business, and Fitch, with headquarters in New York and London, has about 10 percent. Smaller rating agencies are scattered across the globe, mostly in country- and product-specific niches.

A form of government failure

This surrender of regulatory responsibility to private agencies can be considered a form of government failure because the state in effect transfers regulatory authority to private firms but retains responsibility for the overall outcome. This approach is problematic for a number of reasons:

- Credit rating agencies aim to maximize profits and shareholder value. Although they have a powerful incentive to provide trustworthy information, they do not have the same mandate as a regulatory agency charged with providing information in the interest of the public. When the private motive and the public imperative are not fully compatible, there is potential for conflict and confusion. One or both may suffer. If the public imperative suffers, it undermines the credibility of the regulatory process.
- The licensing and regulation of credit rating agencies have been astonishingly limited (Katz, Salinas, and Stephanou, 2009). Agencies are selected mainly because of market recognition, rather than codified regulatory requirements or licensing. Systems of assessment and validation of methodologies used, processes for authorization of the rating agencies, and monitoring systems to ensure accountability have been weak—cursory at best.
- Even if a rating agency enjoys an excellent track record, the credibility of the regulatory process risks erosion because ratings are inherently fallible; they depend on judgments. In the marketplace, if a credit rating agency crosses a threshold of unreliability, it will lose customers and eventually fail. However, if it is part of the regulatory framework, its mistakes may have severe implications, and even if a poor performer can eventually be removed, how can a credit rating agency fail as long as it is part of the regulatory framework? Who will be liable if the agency's opinions result in distortions—especially if financial institutions end up holding too little capital? A faulty rating would mislead those dependent on it, with a potentially high price to pay. Rating agencies regularly caution that their ratings are only opinion and that they are not accountable for the outcome of ratings being incorporated into regulation. Perhaps they understand the nature of the problem better than government authorities do.

• Rating changes move markets, affecting the value of assets and thus capital requirements. They also affect whether those assets can be used as collateral. This is not inherently bad (indeed such changes are intended to affect assessments of riskiness and asset prices), but a change may cause sudden destabilization, unnecessarily raise volatility, and/or lead to overshooting of the asset's value, particularly in the event of a downgrade. Ratings changes, then, can cause regulation-induced crises. Moreover, the due diligence of investors whose decisions are tied to ratings (for example, certain pension funds) is diminished or even overridden because of the overwhelming importance of credit ratings.

• Credit rating agencies have long enjoyed considerable influence over market movements because of the faith placed in them by those who demand their services. The enshrinement of their role in regulation multiplies their potential power. It further distorts competition in an industry that has oligopolistic tendencies, because consumers benefit not only by being able to compare different asset classes under one rating system but also by not having to decipher the methodologies of numerous credit rating agencies. For users, fewer agencies are easier and better.

Moreover, even if eligible private credit rating agencies do their job admirably, there is always the potential for the appearance of impropriety—including whether ratings judgments are consciously or unconsciously affected by the fact that rating agencies are paid by the potential borrowers rather than potential lenders. The possibility of impropriety can as easily undermine the credibility of the process as any actual wrongdoing.

The way forward

Because capital requirements are an important facet of the overall regulatory framework and credit ratings are key to the determination of those requirements, the role of credit rating agencies must be considered in any postcrisis regulatory reform. There are at least four possible directions reform could take.

Box 2

The Basel Accords

The first Basel Accord, dubbed Basel I, agreed to in 1988 by a forum of central bank governors of the world's 10 largest economies, was meant as guidance for regulators of internationally active banks.

The group—now called the Basel Committee on Banking Supervision, with 27 members—is hosted in Basel, Switzerland, by the Bank for International Settlements, an independent organization of central banks.

There have been three formal accords—which look at such issues as how to determine the amount of capital banks should be required to maintain. Basel II was agreed to in 2004, while agreement on Basel III, a comprehensive set of reforms, was reached in September 2010. Implementation of its recommendations is still under discussion.

Regulatory enhancement: This would involve modifying existing rules, but keeping credit rating agencies in essentially the same regulatory role. Regulations could be tighter. For example, authorities might require rating agencies to be more open about how they operate. The way they are remunerated might also be changed to resolve conflicts of interest. Fees might be regulated. Governments could establish more effective evaluation and accreditation processes for rating agencies and their methodologies and enhance quality control. Investor boards could be established to request credit ratings, which would keep clients and rating agencies separate. Regulators could acknowledge fallibility and establish acceptable levels of accuracy, although this would raise questions about recourse or compensation when inaccuracy occurs. Some or all of these approaches could mitigate certain problems, improve accuracy and responsiveness, and reduce the conflict of interest when the entity seeking a favorable rating is also paying for it. However, such reforms cannot resolve

The possibility of impropriety can as easily undermine the credibility of the process as any actual wrongdoing.

the fundamental conflict between private incentives and regulation's public imperative for ratings accuracy.

An alternative might be to regulate private credit rating agencies so extensively that they would become essentially public utilities. This approach would substantially reduce conflict of interest and would cost much less than establishing a new public credit rating agency. It would also raise important questions about how to select a rating agency. Would prospective borrowers be compelled to use a particular agency? Would agencies be asked to volunteer? Would there be a competitive selection process?

The public solution: One or more of the private credit rating agencies could be brought under public control, or all private agencies could be excluded from regulatory activity and replaced by a new public agency. The new agency would follow a transparent and approved rating methodology. It would be paid to cover its operating costs, but instead of profit maximization, provision of accurate information to optimize the regulatory process would be its main objective. Setting up such an agency may be beyond the ability of individual countries and could lead to other problems, such as regulatory protectionism. At the same time launching such an agency at the supranational level would be complicated, requiring international cooperation and considerable good faith.

The public solution would resolve certain conflict of interest problems, but arguably would generate new ones with respect to the rating of sovereigns, which would be rating themselves or being rated by an entity they own (wholly or partially). Moreover, a public agency would have to establish

Box 3

Postcrisis reforms

Following the 2008 crisis, reforms have focused on rating agencies, particularly in the United States and the European Union. In the United States, the Dodd-Frank Act increased oversight of rating agencies, to enhance information disclosure requirements and address conflict of interest related to the "user pays" model. The legislation also requires regulators to explore approaches that reduce reliance on rating agencies and to prepare regular reviews.

The European Union does not plan to reduce reliance on agencies; instead it is expanding regulation and changing the agency business model. It has proposed much tighter rules affecting accreditation, disclosure requirements, and conflict of interest, including a proposal to require issuers of debt to rotate rating agencies every three years, or annually if an agency rates more than 10 consecutive debt instruments of the issuer.

Other proposals include permitting an EU regulator to bar publication of sovereign credit ratings in "exceptional circumstances" and establishment of a public EU rating agency.

credibility and independence from political influence and prove itself a reliable source. It would be costly because it would involve establishment of one or more new institutions. It would also not be immune to problems such as regulatory capture, fallibility of ratings, failures of timeliness, moral hazard, and political repercussions emanating from its decisions. Existing rating agencies would likely suffer a drop in business.

Return to simpler capital rules: The role of rating agencies could also be eliminated and regulators could return to a few simple and predetermined capital requirements for borrowers. What is lost in nuance and sophistication would be offset by greater simplicity, and therefore transparency. It would also be more predictable and easier for regulators to apply and monitor. A return to static ratios would eliminate errors in judgment arising from ratings changes, although determination of the ratios would be a significant point of contention. Without private rating agencies' conflicts of interest, transparency and predictability would improve. Greater simplicity would also likely reduce the potential for market participants to evade regulations. However, the simplified capital rules could increase the cost of raising funds and make it harder for some entities to do so, which would curtail financial activity and could impair economic growth. Moreover, because the simpler rules would not differentiate among risks, they could create a perverse incentive for banks to lend more to riskier entities, thus increasing the likelihood of future financial crises. So a simple-rules approach would have to be monitored carefully and implemented in conjunction with other regulatory tools and indicators. Its relative simplicity and lack of institutions render it the cheapest proposal for governments to implement. From a political point of view, any return to simple rules could suggest the failure of the Basel II approach, which supported risk-based capital charges.

Market-linked capital charges: This approach would turn to the market to determine the level of capital an institution must hold to support an asset (Rosenkranz, 2009). Instead of a credit rating, the market price would be used to gauge the asset's risk profile. In essence, the amount of capital required to hold a fixed-income security would be related to its yield. The capital required for a security would rise in proportion to its spread over a designated benchmark: the market would determine the risk.

Such an approach would remove credit rating agencies from regulation while retaining a sophisticated, transparent, and market-friendly process. Indeed, because market determinations change frequently, capital adjustments could be made more often—in a more gradual and nuanced fashion than the credit rating agencies' grade changes, which often lead to sudden, destabilizing movements. But this approach requires deep and liquid markets and might have to be supplemented with minimum and maximum capital charges—turning it into a variant of the simple capital rules option. Additional safeguards during periods of market crisis would require regulators to intervene when prices cross certain thresholds and diverge significantly from underlying values. The market could serve as a guide to regulators, without removing them from the regulatory process—as happens when they rely on credit rating agencies. But there is the potential for manipulation, especially when liquidity is constrained or an asset is traded infrequently and therefore susceptible to volatile movements.

The drawbacks and costs of each option must be weighed against expected benefits—which must be identified and, where possible, quantified. In some ways, it is a case of pick your poison because there will always be risks associated with regulation, and those who are regulated will always find creative ways to evade or subvert rules not to their liking. Any reform of credit rating agencies must be part of a broader revamping of regulation, because many regulatory failings were identified in the aftermath of the 2008 global financial crisis (see Box 3). Moreover, the transition costs of moving to a new system must be examined carefully, because they will surely be considerable. Cost, however, should not become an excuse for inaction—which would perpetuate government failure and erode the credibility of financial regulation. That could jeopardize the health of the financial sector and the economy—both nationally and globally. ■

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What Is a Bank?

Institutions that match up savers and borrowers help ensure that economies function smoothly

Jeanne Gobat

YOU'VE got $1,000 you don't need for, say, a year and want to earn income from the money until then. Or you want to buy a house and need to borrow $100,000 and pay it back over 30 years.

It would be difficult, if not impossible, for someone acting alone to find either a potential borrower who needs exactly $1,000 for a year or a lender who can spare $100,000 for 30.

That's where banks come in.

Although banks do many things, their primary role is to take in funds—called deposits—from those with money, pool them, and lend them to those who need funds. Banks are intermediaries between depositors (who lend money to the bank) and borrowers (to whom the bank lends money). The amount banks pay for deposits and the income they receive on their loans are both called interest.

Depositors can be individuals and households, financial and nonfinancial firms, or national and local governments. Borrowers are, well, the same. Deposits can be available on demand (a checking account, for example) or with some restrictions (such as savings and time deposits).

Making loans

While at any given moment some depositors need their money, most do not. That enables banks to use shorter-term deposits to make longer-term loans. The process involves *maturity transformation*—converting short-term liabilities (deposits) to long-term assets (loans). Banks pay depositors less than they receive from borrowers, and that difference accounts for the bulk of banks' income in most countries.

Banks can complement traditional deposits as a source of funding by directly borrowing in the money and capital markets. They can issue securities such as commercial paper or bonds; or they can temporarily lend securities they already own to other institutions for cash—a transaction often called a repurchase agreement (repo). Banks can also package the loans they have on their books into a security and sell this to the market (a process called *liquidity transformation* and *securitization*) to obtain funds they can relend.

A bank's most important role may be matching up creditors and borrowers, but banks are also essential to the *domestic and international payments system*—and they *create money*.

Not only do individuals, businesses, and governments need somewhere to deposit and borrow money, they need to move funds around—for example, from buyers to sellers or employers to employees or taxpayers to governments. Here too banks play a central role. They process payments, from the tiniest of personal checks to large-value electronic payments between banks. The payments system is a complex network of local, national, and international banks and often involves government central banks and private clearing facilities that match up what banks owe each other. In many cases payments are processed nearly instantaneously. The payments system also includes credit and debit cards. A well-operating payments system is a prerequisite for an efficiently performing economy, and breakdowns in the payments system are likely to disrupt trade—and, therefore, economic growth—significantly.

Creating money

Banks also create money. They do this because they must hold on reserve, and not lend out, some portion of their deposits—either in cash or in securities that can be quickly converted to cash. The amount of those reserves depends both on the bank's assessment of its depositors' need for cash and on the requirements of bank regulators, typically the central bank—a government institution that is at the center of a country's monetary and banking system. Banks keep those required reserves on deposit with central banks, such as the U.S. Federal Reserve, the Bank of Japan, and the European Central Bank. Banks create money when they lend the rest of the money depositors give them. This money can be used to purchase goods and services and can find its way back into the banking system as a deposit in another bank, which then can lend a fraction of it. The process of relending can repeat itself a number of times in a phenomenon called the multiplier effect. The size of the multiplier—the amount of money created from an initial deposit—depends on the amount of money banks must keep on reserve.

Banks also lend and recycle excess money within the financial system and create, distribute, and trade securities.

Banks have several ways of making money besides pocketing the difference (or spread) between the interest they pay on deposits and borrowed money and the interest they collect from borrowers or securities they hold. They can earn money from

- income from securities they trade; and
- fees for customer services, such as checking accounts, financial and investment banking, loan servicing, and the origination, distribution, and sale of other financial products, such as insurance and mutual funds.

Banks earn on average between 1 and 2 percent of their assets (loans and securities). This is commonly referred to as a bank's return on assets.

Transmitting monetary policy

Banks also play a central role in the transmission of monetary policy, one of the government's most important tools for achieving economic growth without inflation. The central bank controls the money supply at the national level, while banks facilitate the flow of money in the markets within which they operate. At the national level, central banks can shrink or expand the money supply by raising or lowering banks' reserve requirements and by buying and selling securities on the open market with banks as key counterparties in the transactions. Banks can shrink the money supply by putting away more deposits as reserves at the central bank or by increasing their holdings of other forms of liquid assets—those that can be easily converted to cash with little impact on their price. A sharp increase in bank reserves or liquid assets—for any reason—can lead to a "credit crunch" by reducing the amount of money banks have to lend, which can lead to higher borrowing costs as customers pay more for scarcer bank funds. A credit crunch can hurt economic growth.

The need for regulation

Bank safety and soundness are a major public policy concern, and government policies have been designed to limit bank failures and the panic they can ignite. In most countries, banks need a charter to carry out banking activities and to be eligible for government backstop facilities—such as emergency loans from the central bank and explicit guarantees to insure bank deposits up to a certain amount. Banks are regulated by the laws of their home country and are typically subject to regular supervision. If banks are active abroad, they may also be regulated by the host country. Regulators have broad powers to intervene in troubled banks to minimize disruptions.

Bank safety and soundness are a major public policy concern, and government policies have been designed to limit bank failures and the panic they can ignite.

Banks can fail, just like other firms. But their failure can have broader ramifications—hurting customers, other banks, the community, and the market as a whole. Customer deposits can be frozen, loan relationships can break down, and lines of credit that businesses draw on to make payrolls or pay suppliers may not be renewed. In addition, one bank failure can lead to other bank failures.

Banks' vulnerabilities arise primarily from three sources:

- a high proportion of short-term funding such as checking accounts and repos to total deposits. Most deposits are used to finance longer-term loans, which are hard to convert into cash quickly;
- a low ratio of cash to assets; and
- a low ratio of capital (assets minus liabilities) to assets.

Depositors and other creditors can demand payment on checking accounts and repos almost immediately. When a bank is perceived—rightly or wrongly—to have problems, customers, fearing that they could lose their deposits, may withdraw their funds so fast that the small portion of liquid assets a bank holds becomes quickly exhausted. During such a "run on deposits" a bank may have to sell other longer-term and less liquid assets, often at a loss, to meet the withdrawal demands. If losses are sufficiently large, they may exceed the capital a bank maintains and drive it into insolvency.

Essentially, banking is about confidence or trust—the belief that the bank has the money to honor its obligations. Any crack in that confidence can trigger a run and potentially a bank failure, even bringing down solvent institutions. Many countries insure deposits in case of bank failure, and the recent crisis showed that banks' greater use of market sources of funding has made them more vulnerable to runs driven by investor sentiment than to depositor runs.

Regulations are generally designed to limit banks' exposures to credit, market, and liquidity risks and to overall solvency risk (see "Protecting the Whole" in this issue of *F&D*). Banks are now required to hold more and higher-quality equity—for example, in the form of retained earnings and paid-in capital—to buffer losses than they were before the financial crisis. Large global banks must hold even more capital to account for the potential impact of their failure on the stability of the global financial system (also known as systemic risk). Regulations also stipulate minimum levels of liquid assets for banks and prescribe stable, longer-term funding sources.

Regulators are reviewing the growing importance of institutions that provide bank-like functions but that are not regulated in the same fashion as banks—so-called shadow banks—and looking at options for regulating them. The recent financial crisis exposed the systemic importance of these institutions, which include finance companies, investment banks, and money market mutual funds. ■

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Women farmers in their paddy fields near Bagabar village in the Maharai Gani district of India.

Empowering Women Is Smart Economics

Ana Revenga and Sudhir Shetty

Closing gender gaps benefits countries as a whole, not just women and girls

NOT long ago women faced tremendous barriers as they sought opportunities that would set them on an equal footing with men. Going back a mere quarter century, inequality between women and men was widely apparent—in university classrooms, in the workplace, and even in homes. Since then, the lives of women and girls around the world have improved dramatically in many respects. In most countries—rich and developing—they are going to school more, living longer, getting better jobs, and acquiring legal rights and protections.

But large gender gaps remain. Women and girls are more likely to die, relative to men and boys, in many low- and middle-income countries than their counterparts in rich countries. Women earn less and are less economically productive than men almost everywhere across the world. And women have less opportunity to shape their lives and make decisions than do men.

According to the World Bank's 2012 *World Development Report: Gender Equality and Development*, closing these gender gaps matters for development and policymaking. Greater gender equality can enhance economic productivity, improve development outcomes for the next generation, and make institutions and policies more representative.

Many gender disparities remain even as countries develop, which calls for sustained and focused public action. Corrective policies will yield substantial development payoffs if they focus on persistent gender inequalities that matter most for welfare. To be effective, these measures must target the root causes of inequality without ignoring the domestic political economy.

Mixed progress

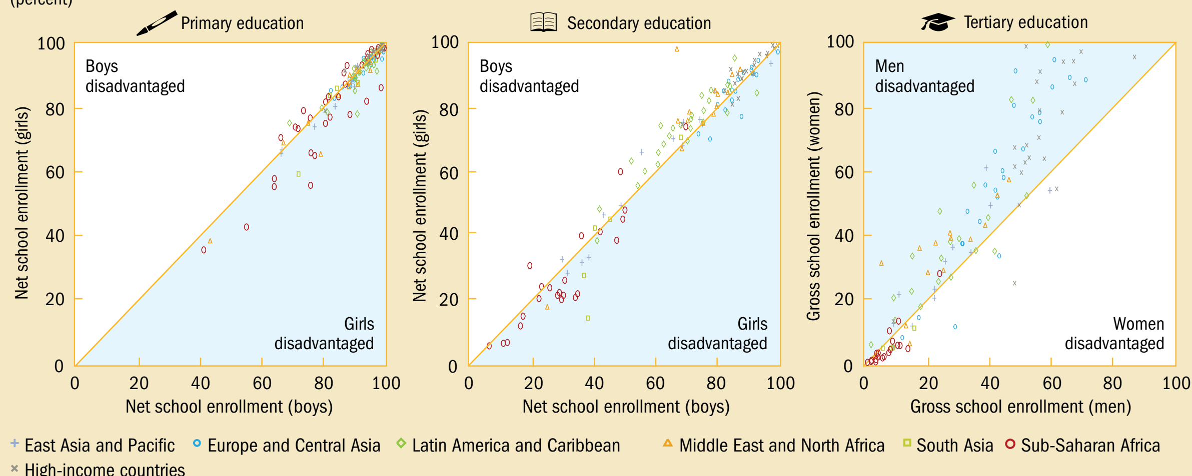
Every aspect of gender equality—access to education and health, economic opportunities, and voice within households and society—has experienced a mixed pattern of change over the past quarter century. In some areas, such as education, the gender gap has closed for almost all women; but progress has been slower for those who are poor and face other disadvantages, such as ethnicity. In other areas, the gap has been slow to close—even among well-off women and in countries that have otherwise developed rapidly.

In primary education, the gender gap has closed in almost all countries, and it is shrinking quickly in secondary education. Indeed, in almost one-third of developing countries, girls now outnumber boys in secondary schools. There are more young women than men in universities in two-thirds of the countries for which there are data: women today represent 51 percent of the world's university students (see Chart 1). Yet more than 35 million girls do not attend school in developing countries, compared with 31 million boys, and two-thirds of these girls are members of ethnic minorities.

Chart 1

Off to school

Gender parity has been achieved in primary and secondary enrollments, while tertiary enrollments favor young women.



Source: World Bank, World Development Indicators database.
Note: The 45° line in each panel shows gender parity in enrollments. Any point above that line means more women are enrolled than men.

Since 1980, women have been living longer than men in all parts of the world. But across all developing countries, more women and girls still die at younger ages relative to men and boys, compared with rich countries. As a result of this "excess female mortality," about 3.9 million girls and women under 60 are "missing" each year in developing countries (see table). About two-fifths of them are never born, one-sixth die in early childhood, and more than one-third die during their reproductive years. Female mortality is growing in sub-Saharan Africa, especially for women of childbearing age and in the countries hit hardest by the HIV/AIDS pandemic (World Bank, 2011, Chapter 3).

More than half a billion women have joined the world's labor force over the past 30 years, and women now account for more than 40 percent of workers worldwide. One reason for increased workforce participation is an unprecedented reduction in fertility in developing countries as diverse as Bangladesh, Colombia, and the Islamic Republic of Iran, along with improvements in female education. Yet women everywhere tend to earn less than men (World Bank, 2011—especially Chapter 5). The reasons are varied. Women are more likely than men to work as unpaid family laborers or in the informal sector. Women farmers cultivate smaller plots and less profitable crops than male farmers. And women entrepreneurs operate smaller businesses in less lucrative sectors.

As for rights and voice, almost every country in the world has now ratified the Convention on the Elimination of All Forms of Discrimination Against Women. Yet, in many countries, women (especially poor women) have less say than men when it comes to decisions and resources in their households. Women are also much more likely to suffer domestic violence—in developing and rich countries. And in all countries, rich and poor alike, fewer women participate in formal politics, especially at higher levels.

Gender equality and development

Gender equality is important in its own right. Development is a process of expanding freedoms equally for all people—male and female (Sen, 2009). Closing the gap in well-being between males and females is as much a part of development as is reducing income poverty. Greater gender equality also enhances economic efficiency and improves other development outcomes. It does so in three main ways:

- First, with women now representing 40 percent of the global labor force and more than half the world's university students, overall productivity will increase if their skills and talents are used more fully. For example, if women farmers have the same access as men to productive resources such as land and fertilizers, agricultural output in developing countries could increase by as much as 2.5 to 4 percent (FAO, 2011). Elimination of barriers against women working in certain sectors or occupations could increase output by raising women's participation and labor productivity by as much as 25 percent in some countries through better allocation of their skills and talent (Cuberes and Teignier-Baqué, 2011).
- Second, greater control over household resources by women, either through their own earnings or cash transfers, can enhance countries' growth prospects by changing spending in ways that benefit children. Evidence from countries as varied as Brazil, China, India, South Africa, and the United Kingdom shows that when women control more household income—either through their own earnings or through cash transfers—children benefit as a result of more spending on food and education (World Bank, 2011).
- Finally, empowering women as economic, political, and social actors can change policy choices and make institutions more representative of a range of voices. In India, giving power to women at the local level led to greater provision of

public goods, such as water and sanitation, which mattered more to women (Beaman and others, 2011).

Gearing up development

How gender equality evolves as development proceeds can best be understood through the responses of households to the functioning and structure of markets and institutions—both formal (such as laws, regulations, and delivery of government services) and informal (such as gender roles, norms, and social networks).

Markets and institutions help determine the incentives, preferences, and constraints faced by different individuals in a household, as well as their voice and bargaining power. In this way, household decision making, markets, and formal and informal institutions interact to determine gender-related outcomes. This framework also helps show how economic growth (higher incomes) influences gender outcomes by affecting how markets and institutions work and how households make decisions. The impact of economic growth is shown in Chart 2 by the "growth" arrow that turns the gears in the direction of greater gender equality. The "gender equality" arrow shows how closing gender gaps in turn can contribute to higher growth.

This framework helps demonstrate why the gender gap in education enrollment has closed so quickly. In this case, income growth (by loosening budget constraints on households and the public treasury), markets (by opening new employment opportunities for women), and formal institutions (by expanding schools and lowering costs) have come together to influence household decisions in favor of educating girls and young women across a range of countries.

The framework also helps explain why poor women still face sizable gender gaps, especially those who experience not only poverty but also other forms of exclusion, such as living in a remote area, being a member of an ethnic minority, or suffering from a disability. In India and Pakistan, for instance, while there is no difference between the number of boys and girls enrolled in education for the richest fifth of the population, there is a gap of almost five years for the poorest fifth. The illiteracy rate among indigenous women in Guatemala is twice that among nonindigenous women and 20 percentage points higher than for indigenous men. Market signals, improved service delivery institutions, and higher incomes, which have generally favored the education of girls and young women, fail to reach these severely disadvantaged populations.

Policy implications

To bring about gender equality, policymakers need to focus their actions on five clear priorities: reducing the excess mortality of girls and women; eliminating remaining gender disadvantages in education; increasing women's access to economic opportunity and thus earnings and productivity; giving women an equal voice in households and societies; and limiting the transmission of gender inequality across generations.

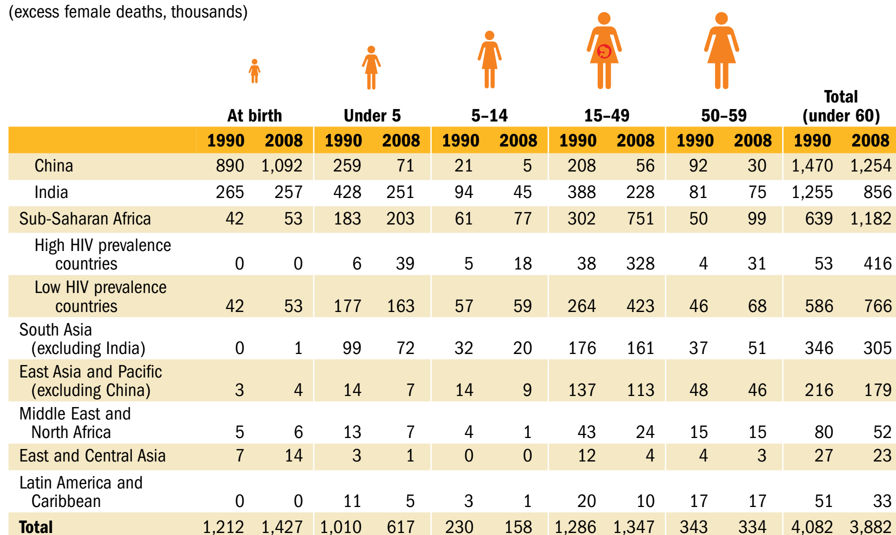
To reduce the excess mortality of girls and women, it is necessary to focus on the underlying causes at each age. Given girls' higher susceptibility (relative to boys') in infancy and early childhood to waterborne infectious diseases, improving water supply and sanitation, as Vietnam has done, is key to reducing excess female mortality in this age group (World Bank, 2011). Improving health care delivery to expectant mothers, as Sri Lanka did early in its development process and Turkey has done more recently, is critical. In the areas of sub-Saharan Africa most affected by the HIV/AIDS pandemic, broader access to antiretroviral drugs and reducing the incidence of new infections must be the focus. To counter sex-selective abortions that lead to fewer female births, most notably in China and northern India, the societal value of girls must be enhanced, as Korea has done.

To shrink education gaps in countries where they persist, barriers to access because of poverty, ethnicity, or geography must come down. For example, where distance is the key problem (as in rural areas of the Islamic Republic of Afghanistan), more schools in remote areas can reduce the gender gap. When customized solutions are hard to implement or too costly, demand-side interventions, such as cash transfers conditioned on school attendance, can help get girls from poor families to school. Such conditional cash transfers have succeeded in increasing girls'

Where are they?

About 4 million females were "missing" in 2008.

(excess female deaths, thousands)



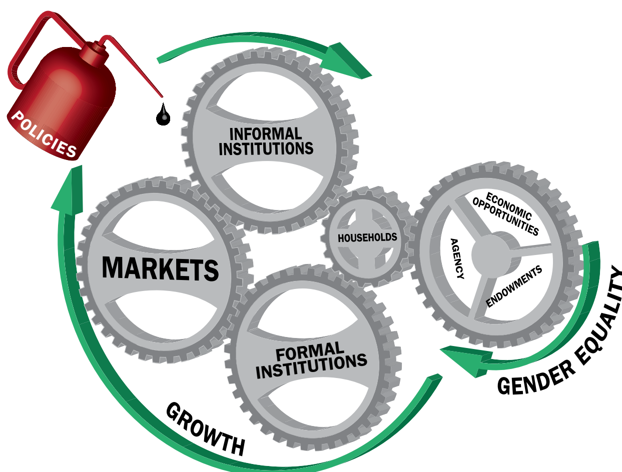
	At birth		Under 5		5–14		15–49		50–59		Total (under 60)	
	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008	1990	2008
China	890	1,092	259	71	21	5	208	56	92	30	1,470	1,254
India	265	257	428	251	94	45	388	228	81	75	1,255	856
Sub-Saharan Africa	42	53	183	203	61	77	302	751	50	99	639	1,182
High HIV prevalence countries	0	0	6	39	5	18	38	328	4	31	53	416
Low HIV prevalence countries	42	53	177	163	57	59	264	423	46	68	586	766
South Asia (excluding India)	0	1	99	72	32	20	176	161	37	51	346	305
East Asia and Pacific (excluding China)	3	4	14	7	14	9	137	113	48	46	216	179
Middle East and North Africa	5	6	13	7	4	1	43	24	15	15	80	52
East and Central Asia	7	14	3	1	0	0	12	4	4	3	27	23
Latin America and Caribbean	0	0	11	5	3	1	20	10	17	17	51	33
Total	1,212	1,427	1,010	617	230	158	1,286	1,347	343	334	4,082	3,882

Source: World Development Report 2012 team estimates based on data from the World Health Organization and the Population Division of the United Nations Department of Economic and Social Affairs.

Chart 2

Shifting into high gear

Gender outcomes result from interactions between households, markets, and institutions.



Source: World Bank, 2011, *World Development Report 2012.*

enrollment rates in countries as diverse as Mexico, Turkey, and Pakistan (World Bank, 2011).

To broaden women's access to economic opportunity, thereby reducing male-female disparity in earnings and economic productivity, a combination of policies is called for. Solutions include freeing up women's time so they can work outside the home—for example, through subsidized child care, as in Colombia; improving women's access to credit, as in Bangladesh; and ensuring access to productive resources—especially land—as in Ethiopia, where joint land titles are now granted to wives and husbands. Addressing lack of information about women's productivity in the workplace and eliminating institutional biases against women, for example by introducing quotas that favor women or job placement programs as in Jordan, will also open up economic opportunity to women.

To diminish gender differences in household and societal voice, policies need to address the combined influence of social norms and beliefs, women's access to economic opportunities, the legal framework, and women's education. Measures that increase women's control over household resources and laws that enhance their ability to accumulate assets, especially by strengthening their property rights, are important. Morocco's recent family law reforms strengthened women's property rights by equalizing husbands' and wives' ownership rights over property acquired during marriage. Ways to give women a greater voice in society include political representation quotas, training of future women leaders, and expanding women's involvement in trade unions and professional associations.

To limit gender inequality over time, reaching adolescents and young adults is key. Decisions made during this stage of life determine skills, health, economic opportunities, and aspirations in adulthood. To ensure that gender gaps do not persist over time, policies must emphasize building human and social capital (as in Malawi with cash transfers given directly to girls to either stay in or return to school); easing the transition from school to work (as with job and life skills training programs for young women in Uganda); and shifting aspirations (by exposing girls to such role models as women political leaders in India).

Domestic policy action is crucial, but the international community can complement efforts in each of these priority areas. This will require new or additional action on multiple fronts—some combination of more funding, coordinated efforts to foster innovation and learning, and more effective partnerships. Funding should be directed particularly to the poorest countries' efforts to reduce excess deaths of girls and women (through investment in clean water and sanitation and maternal services) and to reduce persistent education gender gaps. Partnerships must also extend beyond those between governments and development agencies to include the private sector, civil society organizations, and academic institutions in developing and rich countries.

And while so much remains to be done, in many ways the world has already changed by finally recognizing that gender equality is good for both women and men. More and more, we are all realizing that there are many benefits—economic and others—that will result from closing gender gaps. A man from Hanoi, Vietnam, one of thousands of people surveyed for the *World Development Report*, observed, "I think women nowadays increasingly enjoy more equality with men. They can do whatever job they like. They are very strong. In some families the wife is the most powerful person. In general, men still dominate, but women's situation has greatly improved. Equal cooperation between husband and wife is happiness. I think happiness is when equality exist between a couple." ■

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This article is based on the World Development Report 2012: Gender Equality and Development, *published by the World Bank in 2011. The evidence and analysis referred to are cited in the relevant sections of the report.*

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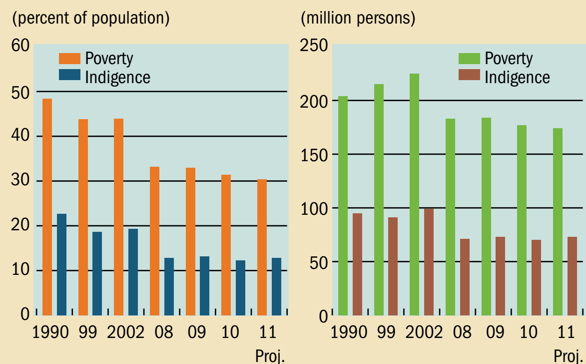
Growing Out of

Poverty in Latin America is a

Families fill containers with water in Lima, Peru.

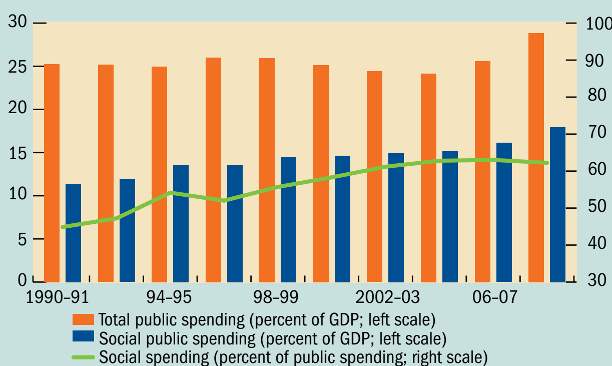
POVERTY in Latin America and the Caribbean fell from 48.4 percent in 1990 to 31.4 percent in 2010, reaching its lowest level in 20 years, according to a new report from the United Nations Economic Commission for Latin America and the Caribbean. The rate of extreme poverty or indigence (a level of income that does not cover nutritional needs) also fell during this period—from 22.6 percent to 12.3 percent. Despite these achievements, 177 million people remain in poverty, including 70 million in extreme poverty. The report predicts a slight drop in the poverty rate in 2011, although the indigence rate could increase due to higher food prices.

Poverty and indigence in Latin America have declined significantly since 1990.



Source: United Nations Economic Commission for Latin America and the Caribbean.
Note: Estimate for 19 countries of the region.

Social spending in Latin America as a percent of GDP increased during the crisis.



Source: United Nations Economic Commission for Latin America and the Caribbean.
Note: Estimate for 21 countries of the region.

Spending better on the poor

The main reasons for the reduction in poverty are strong economic growth, higher wage earnings, a decline in fertility rates, and better social programs. Efforts to reduce the effects on the poor during the 2008–09 economic crisis led to large increases in social expenditure and spending on public education. Total public spending increased by 3 percent of GDP during 2008–09 compared with 2006–07, and social spending increased by 2 percent of GDP over the same period. In the countries where social expenditure is less than $300 per person, the main expense is education. It is only in the relatively more developed countries (per capita social spending over $1,000) that social security and assistance account for more. But social protection systems are still far from inclusive, and large gaps remain—especially in access to social security.

POVERTY

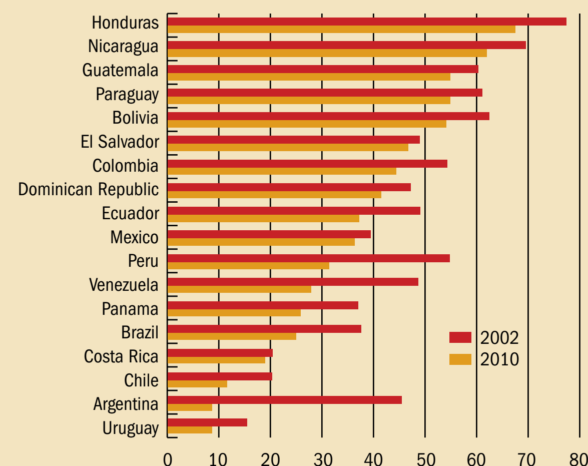
t its lowest level in 20 years

Working smart

The decline in poverty is very good news, particularly in the midst of an international economic crisis. However, this progress is threatened by persistent productivity gaps and by labor markets that generate employment in low-productivity sectors without social protection. The ingrained differences between countries range from productivity asymmetries to significant differences in institutional development, access to international financial markets, and ability to generate national savings. Disparities within countries further complicate poverty reduction in the region. Continued progress in the fight against poverty will require greater efforts to improve access to education, upgrade cash transfers to the most vulnerable sectors, overhaul labor market institutions, and create inclusive social protection systems. ■

Poverty has declined in all countries, but with great variation.

(percent of population in poverty)



Source: United Nations Economic Commission for Latin America and the Caribbean.
Note: Estimate for 19 countries of the region. Based on the most recent year for which data are available.

Girls and boys drink porridge in a rural Guatemalan school.

Prepared by Alicia Bárcena, Executive Secretary of the United Nations Economic Commission for Latin America and the Caribbean (ECLAC). The text and charts are based on Social Panorama of Latin America, *published by ECLAC in November 2011. The report is available at www.eclac.org*

The Global Land RUSH

Rabah Arezki, Klaus Deininger, and Harris Selod

Foreign investors are buying up farmland in developing countries

THE sharp increase in international food prices during 2007–08 triggered a spate of cross-border land acquisitions by sovereign wealth funds, private equity funds, agricultural producers, and other key players in the food and agribusiness industry—fueled by mistrust in international food markets, concern about political stability, and speculation on future demand for food.

Throughout the world, it is estimated that 445 million hectares of land are uncultivated and available for farming, compared with about 1.5 billion hectares already under cultivation (Deininger and others, 2011). About 201 million hectares are in sub-Saharan Africa, 123 million in Latin America, and 52 million in eastern Europe.

While commodity prices soon returned to more moderate levels following the 2007–08 upsurge, investor interest in land persisted. From 1961 to 2007, an average 4.1 million hectares of land were opened to agricultural production annually, of which 1.8 million were in Africa. In 2009 alone deals finalized or under negotiation involved at least 56.6 million hectares. Most were in Africa, where deals totaled 39.7 million hectares—more than the combined agriculturally cultivated areas of Belgium, Denmark, France, Germany, the Netherlands, and Switzerland.

Agriculture is characterized by long periods between investment and production with low margins and is complicated by the vagaries of weather and microclimatic conditions. Small farmers all over the world have had to live with those challenges, but in many developing countries their ability to do so is hampered by low public spending on technology and infrastructure and by inadequate institutions. Therefore, some commentators welcome these transnational purchases as an opportunity to overcome decades of underinvestment in developing countries' agricultural sectors, to create jobs, and to bring new technology to the local agricultural sector. Others, though, denounce the transnational investments as a "land grab," neglecting local rights, extracting short-term profits at the cost of long-term environmental sustainability, neglecting social standards, and fostering corruption on a large scale. In Madagascar the government fell in 2009 after news reports that it intended to transfer 1.3 million hectares to a South Korean company for free. Our research clarifies the factors underlying large transnational land acquisitions. This is a critical first step in the assessment of potential long-term effects of those investments and in identifying how governments can respond, through policy and regulation, to use land acquisitions in a way that promotes long-term economic development and reduces poverty.

A look at history

Large transnational land acquisitions go back at least centuries, to the era of conquests

and colonial expansion. But often only a small portion of the land acquired was used for productive purposes; the rest was held idle, denying opportunities to the local population (Binswanger, Deininger, and Feder, 1995). In fact, many of these ventures survived only because they benefited from subsidies and distortions in land, labor (often slave labor), and capital markets—including restrictions on land ownership by natives, vagrancy laws, large subsidies for machinery, and monopoly of marketing channels.

These distortions were often difficult to eliminate and affected economic and social outcomes for decades and sometimes centuries (Banerjee and Iyer, 2005). Subsequent spikes in the assembly of large tracts of land were driven by changes in the cost of transportation, such as those associated with steamships and refrigeration, or with technology shifts that made previously economically unviable lands usable.

Large or small farms?

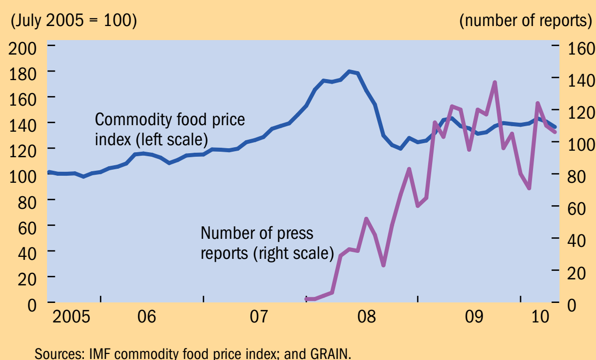
The analysis of large-scale land deals relates to key development issues, including which agricultural production structure makes the most efficient use of existing resources and thus contributes to overall development. For instance, owner-operators usually are more motivated to adjust to microvariations in climate and seasonality because they better internalize the benefits resulting from their operations. Family-owned farms, rather than large companies run by hired labor, have thus been the most competitive all over the world, including in developed countries such as the United States. Such farms have contributed to poverty reduction in a wide range of settings (Lipton, 2009). On the other hand, while some family farms can be quite large, investors usually aim to assemble tracts of land far larger than can be operated by a family. Is such a large-farm strategy viable in sub-Saharan Africa, where land is more abundant, as some have suggested (Collier, 2008)? What does the apparent export competitiveness of mega farms in Latin America and eastern Europe during the 2007–08 global food crisis suggest about optimum farm structure?

There has been a perception that such large tracts of land were not necessarily efficient. But some of the recent emergence of large farms is rooted in technological developments in crop breeding, cultivation, and information technology that make labor supervision easier (Deininger and Byerlee, forthcoming). These developments may indeed reduce the problems that have traditionally been associated with large agricultural operations and increase the benefits from vertical integration throughout the value chain from planting to food production. In cases such as Argentina, this can lead to situations where efficient management companies that are well integrated in the value chain can lease land from farmers at prices higher than what farmers could obtain by cultivating the land themselves.

But not all developments favor larger farms. Many technological innovations are not particularly scale biased. Information technology, for example, which can be used to better control a large farm, can also be used by small farmers to coordinate their efforts. Moreover, very large units of production often emerge because they can deal with market imperfections (access to finance), lack of public goods (infrastructure, education, or technology), and weak governance better than small ones. But, in a competitive and transparent environment where public goods are effectively provided, much smaller operational farm sizes could prevail. Indeed, anecdotal evidence suggests that, in many settings, farms are very large not because of inherent advantages of the technology but because of the superior ability of large operators to deal with market imperfections.

Rush to buy

The run-up in food prices in 2008 triggered an increase in news reports of large transnational land acquisitions that did not abate when food prices receded.



Sources: IMF commodity food price index; and GRAIN.

Investigating the phenomenon

To get a global picture of the recent demand for large-scale land acquisition we turned to news accounts because of the difficulty in obtaining consistent data from official sources. Our sample is based on articles published between October 1, 2008, and August 31, 2009, inventoried by the nongovernmental organization GRAIN—which reports all articles on its website Food Crisis and the Global Land Grab (see GRAIN). The website systematically records press reports on large-scale land acquisitions worldwide, an approach that is likely to limit potential bias. Nevertheless, we have cross-checked the accuracy of these data against information obtained by the World Bank for a selection of countries (Deininger and others, 2011). The chart shows that demand for large transnational land acquisitions grew dramatically after the 2007–08 food price surge and continued thereafter.

In our research, we have constructed a global database with country-level information both on foreign demand for land and on projects as documented in international and local press reports. We complement it with country-specific assessments of the amount of potentially suitable land and other relevant variables. We then use bilateral investment relationships from the database to identify determinants of foreign land acquisition, among which land availability and the potential for agricultural production in destination countries are expected to be a key factor.

Ecological potential

The attractiveness of a country for new investment in large farming indeed depends on the availability and easy accessibility of uncultivated land with agricultural potential that can be developed without negative environmental consequences. So a measure is needed to gauge the potential agro-ecological suitability of land compared with its current use. Past attempts to measure the amount of land potentially available for agriculture suffered from conceptual and technical limitations. If potentially suitable land is either covered by forest or home to traditional communities, much of what could be available for agriculture may at the same time provide environmental and social benefits whose loss would significantly affect the economic desirability of an investment.

To establish a benchmark for an area's potential that takes these factors into account, we first divide the earth into some 2.5 million grid cells. We then use climatic and biophysical information (including soil quality) to compute maximum potential output of key agricultural commodities under given agro-ecological conditions (for example, without irrigation) for each grid cell (Fischer and Shah, 2011). Superimposing on this information layers of current land use and population density allows us to exclude areas already used for agriculture as well as forests, protected areas, and areas with a population threshold above a designated maximum. In this way, we derive a measure of countries' potentially suitable agricultural area. Valuing this at world market prices allows us to determine the "optimum" crop choice as well as the net output value that can be obtained for that crop. The resulting output values, unadjusted for transportation costs, are illustrated in the map.

Why foreign investors want land

As expected, use of these measures together with a range of other measures to analyze determinants of bilateral land deals, suggests, not surprisingly, that a country's attractiveness to investors correlates directly to large amounts of uncultivated land with the potential to generate significant output. A 10 percent increase, say, in potentially cultivable land in a host country would increase the number of projects in that country by about 5 percent, all other things equal.

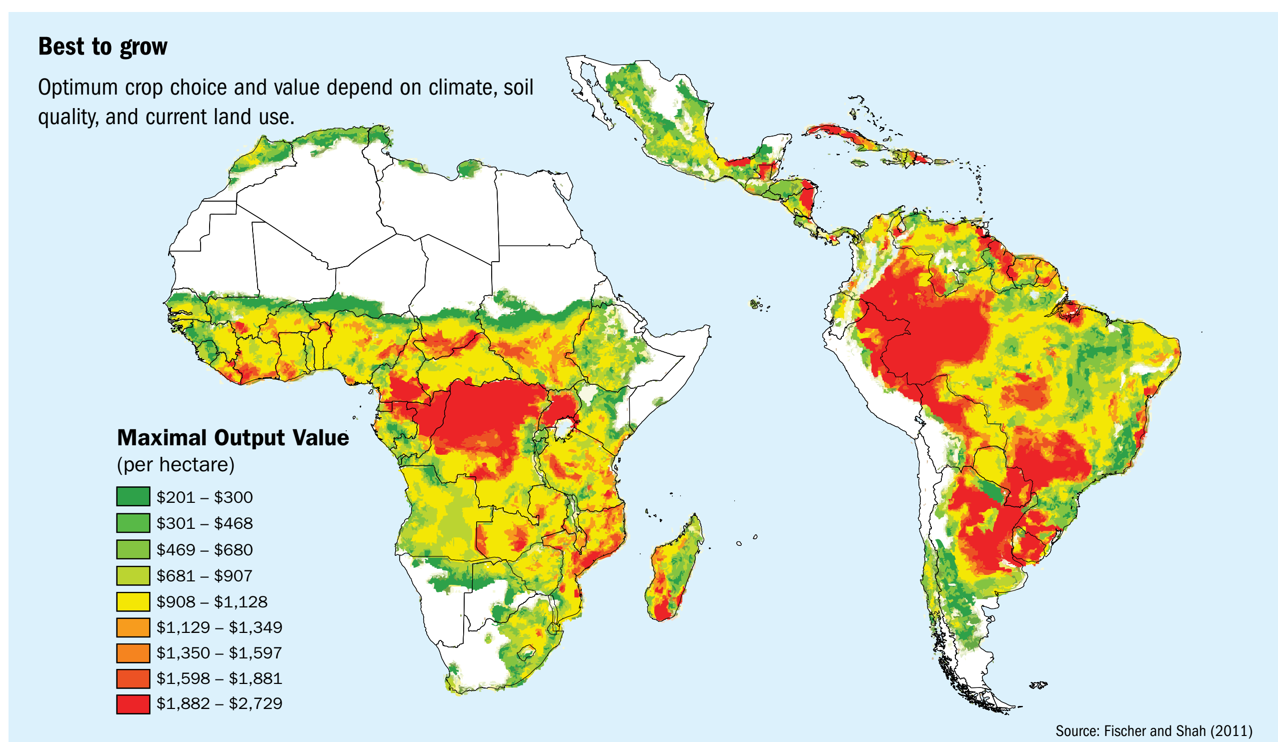
But comparing potential yields with yields that are achieved on currently cultivated land also suggests that there is an immense possibility of increasing productivity on that land. In Africa, for example, none of the countries of interest to large investors achieves 25 percent of its potential yield, suggesting that enormous gains can be made by investments to increase productivity by smallholders on land they already farm, rather than by costly expansion into uncultivated lands. In line with this idea, our results suggest that countries with low yields and a potential to catch up are attractive targets for land acquisition. A strategy to attract investors to agriculture to fill these gaps and allow local farmers to thrive can yield large benefits—provided local community rights are respected and investors pay a fair price for the land. Translating potential into efficient farming activity, however, is not easy, partly because closing yield gaps in many cases requires government support—including in the area of technology, institutions, and infrastructure—in addition to efforts by private investors.

Land governance

There is indeed growing evidence that resource abundance can contribute to growth and poverty reduction only under the management of well-governed institutions (Mehlum, Moene,

Best to grow

Optimum crop choice and value depend on climate, soil quality, and current land use.



Source: Fischer and Shah (2011)

and Torvik, 2006). Otherwise, discoveries of oil, minerals, or diamonds often give rise to a "resource curse" characterized by widespread corruption and social polarization—or even violence—rather than broad-based development. Secure property rights, transparent processes to ensure ventures' legitimacy, and a legal framework to enforce rights are generally considered a precondition for foreign direct investment. The large land areas required for agricultural production are more vulnerable to attack, pilferage, and sabotage and are more costly to fence off and police than, say, manufacturing plants, and the time it takes to start up production, especially for perennials such as oil palm, suggests that such ventures are particularly sensitive to a country's investment climate.

Surprisingly, though, our econometric analysis provides evidence to the contrary. Countries with weak land sector governance (as measured in the Institutional Profiles Database; see de Crombrugghe and others, 2009) are the ones most attractive to investors—at least as gauged by the number of land-related investments. A possible explanation is that it is easier to obtain land quickly and at low cost where the existing protection of land rights is weak, given that public protection may not matter to investors who can muster their own resources to defend their property rights. There is a danger, however, that the economic viability and long-term sustainability of investments can become compromised, and it may constitute a bad deal for host governments that transfer land well below its fair value.

Efforts to increase the transparency of individual investments and establish better land governance in target countries are needed.

This finding, which resonates with concerns raised by sectors of civil society, suggests that such investments may be at risk of failing to benefit local populations. Efforts to increase the transparency of individual investments and establish better land governance in target countries are needed to minimize both economic and social risks. Over the long term, better land governance, including the scope for independent monitoring of investments, may well be a key factor in determining countries' ability and competitiveness when it comes to attracting well-conceived agricultural investment.

Looking forward

The renewed interest in large-scale land acquisition in developing countries represents an opportunity to overcome decades of underinvestment in those countries' agricultural sector, create employment, and foster technology transfer. At the same time the apparent attractiveness of host countries with weak land governance accentuates the associated risks and suggests that host countries' policy and regulatory frameworks will be critical to the realization of this potential.

Concern about the potential negative effects of large-scale investment has given rise to draft legislation to limit land purchases by foreigners in a number of countries—including Argentina, Brazil, and Ukraine. If foreigners can use nationals as intermediaries, such measures do little to address the underlying issues and may exacerbate governance challenges by limiting competition. A more appropriate policy response would place priority on efforts to improve land governance—by recognizing local rights and educating local populations about the value of their land, their legal rights, and ways to exercise those rights. The terms of land transfers must be well known and understood and must conform to basic social and environmental safeguards; and compliance with them must be monitored. Many countries have declared a moratorium on land purchases by outsiders until such safeguards are in place. Also, given the size of the phenomenon and the dangers it can pose, a global effort is needed to document cross-national investments in coordination with domestic authorities. Such an effort—which should be led by a suitable multilateral institution—could also provide the empirical basis for better understanding and regulation of this new and growing phenomenon. ■

Rabah Arezki is an Economist in the IMF Institute; Klaus Deininger and Harris Selod are, respectively, Lead Economist and Senior Economist in the World Bank's Development Research Group.

This paper is based on the IMF Working Paper "What Drives the Global Land Rush?" by Rabah Arezki, Klaus Deininger, and Harris Selod.

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Snapshot of Another Monetary Union

Moving forward with reforms should help the Eastern Caribbean Currency Union weather the current economic uncertainties

Alfred Schipke

THE Eastern Caribbean Currency Union (ECCU), one of four monetary unions in the world, is—despite some differences—in many respects a microcosm of the European Economic and Monetary Union. Surging fiscal deficits, a lack of fiscal integration, unsustainable debt, and challenges in the financial sector are threatening the ECCU's very foundation. As in the euro area, the common currency's continued success rests on the region's ability to collectively enforce fiscal discipline and harmonize financial sector regulation and supervision.

Six of the members of the ECCU are independent countries—Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines. Two are territories of the United Kingdom—Anguilla and Montserrat. All eight are small, open island economies that depend to a large extent on tourism, especially from the United States, the countries' major trading partner. As such, they are highly vulnerable to external shocks.

Economies of scale, risk sharing, rationalizing public services, and stronger representation in international settings are benefits the ECCU stands to gain from closer integration. Unlike the euro area, and given the small size of the economies, benefits from increased intraregional trade will be more limited.

But the 2008–09 global economic and financial crisis exposed significant weaknesses in the setup of the currency union. The crisis led to a surge in already very high public debt and revealed shortcomings in the financial sector. The authorities have responded on a number of fronts, but policies have been piecemeal and uneven, and many difficulties remain.

It's not all bad news

The Eastern Caribbean dollar is pegged to the U.S. dollar and underpinned by a quasi-currency-board arrangement, which has contributed to macroeconomic stability and low inflation rates and a relatively sophisticated financial system. With bank assets topping 200 percent of GDP, the region is among the world's most highly monetized economies.

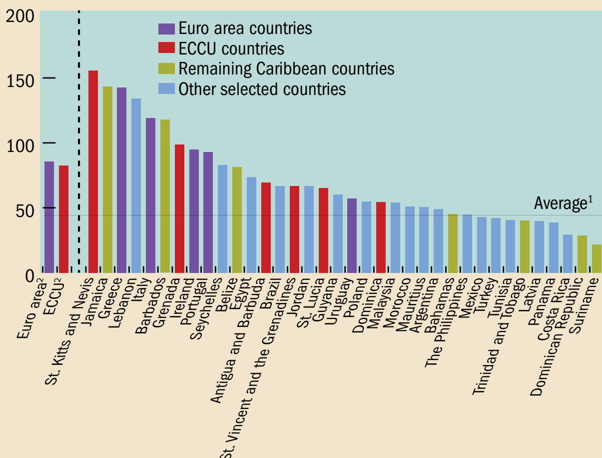
The Eastern Caribbean Central Bank (ECCB) is responsible for monetary policy and for regulating and supervising the banking sector. Given the quasi-currency-board arrangement, which—unlike in the euro area—limits the use of monetary policy tools and lender-of-last-resort capacity, the ECCB's main job is preserving the currency's external value. It also manages a common pool of reserves and extends credit to governments and banks when needed—up to a limit determined both by the reserve coverage and by individual country limits. Under the quasi-currency-board arrangement, the ECCB must hold foreign exchange equivalent to at least 60 percent of its demand liabilities (mainly currency in circulation and commercial banks' non-interest-earning reserves), but operationally it targets 80 percent coverage; and in practice it has been close to 100 percent.

In addition to having a monetary union and a regional central bank, the Eastern Caribbean region is a free trade area—but still an incomplete customs union and common market. A customs union is in place in most sectors of the economy, but tariffs are not fully harmonized and the countries still depend on import-related revenue. As for a common market, so far, free movement of labor is limited to skilled labor and the informal sector, but the region is implementing measures to

Debtor remorse

Average debt in the European and Eastern Caribbean monetary unions is almost identical; so is public debt in Greece and St. Kitts and Nevis.

(public sector debt, percent of GDP, 2010)



Sources: IMF, *World Economic Outlook*; and IMF staff calculations.
[1]Emerging markets and developing economies.
[2]Weighted average; ECCU = Eastern Caribbean Currency Union.

Coming out from under

With public debt at almost 160 percent of GDP—a ratio similar to that in Greece—St. Kitts and Nevis is the most indebted country in the Eastern Caribbean Currency Union and one of the most heavily indebted countries in the world. The majority of the debt is domestic, and the government has relied heavily on short-term financing, which exposes it to significant rollover risks. To address these challenges, the government embarked on a comprehensive and multipronged reform program with the objective of bringing the debt-to-GDP ratio to 60 percent by 2020.

- **Fiscal adjustment:** The cornerstone of the program included a new value-added tax, a drastic 80 percent increase in electricity tariffs, as well as measures to contain wages. Although the fiscal adjustment would reduce public debt to about 130 percent of GDP by 2016, that debt remains unsustainable and extremely susceptible to growth shocks.
- **Debt restructuring:** In June 2011, the government publicly announced the start of a comprehensive debt restructuring seeking a significant debt reduction.
- **Guarantee:** To support the government's debt restructuring, the Caribbean Development Bank agreed to provide a partial guarantee for the new exchange instruments, which should significantly improve the success of the debt exchange.
- **Debt-for-equity swap:** To address the country's extraordinary debt levels, the government is also using a debt-for-equity/land swap.
- **Stabilization fund:** To maintain the health of the financial system during the debt restructuring, the government established a special banking sector reserve fund at the Eastern Caribbean Central Bank to provide temporary liquidity to domestic financial institutions, if needed.
- **IMF loan**. To accompany the government's economic reform program, the IMF approved a three-year Stand-By Arrangement in the amount of $80.7 million.

ensure the free movement of its citizens. With an open capital account and companies and financial institutions free to operate anywhere in the region, the financial sector is already well integrated. And despite its small size, the region has started to develop a relatively well-functioning regional government securities market for treasury bills and bonds.

Forging ahead

Faced with the impact of the global economic and financial crisis, the region has accelerated its efforts to integrate. In 2010, the Caribbean heads of government committed themselves to stabilizing their economies and creating better conditions for strong economic growth. Shortly thereafter, the region ratified a revised economic union treaty. The revised treaty will strengthen governance by delegating some legislative authority directly to the heads of government. In another step, the region agreed to establish an assembly comprising elected parliamentarians from each member of the currency union (including both ruling and opposition parties), which could serve as a precursor to a regional parliament. The revised union treaty also mentions fiscal policy coordination, but unlike trade, financial, and monetary policy, it remains the sole purview of national governments.

As the European experience shows, coordinating fiscal policy can be especially difficult, and in the ECCU, it remains in its infancy. A ceiling on debt-to-GDP ratios of 60 percent—to be achieved by 2020—was supposed to bring significant peer pressure to bear on budget policies, but has proven difficult to achieve. Some of the members of the currency union are among the most highly indebted in the world (see chart), and all independent countries, except Dominica, exceed the target debt-to-GDP ratio of 60 percent.

The weakest link

The success of the common currency will depend on simultaneously satisfying eight national budget constraints, since cross-border spillovers—especially via the financial sector—from the weakest member could undermine confidence and trigger a regionwide crisis.

The current high debt calls for a short-term mechanism to enforce fiscal discipline. In the medium term a fiscal union or a more centralized regional fiscal authority should be considered. As a first step, in 2011, the governments announced annual fiscal targets, and a number of countries have successfully implemented comprehensive fiscal reforms to address the debt overhang (see box on St. Kitts and Nevis). However, other countries must set more ambitious targets to achieve the 2020 public-debt-to-GDP ratio goal of 60 percent, and the union currently lacks enforcement mechanisms.

Although the ECCB is responsible for banking supervision in the eastern Caribbean, financial institution licensing and supervision of nonbank financial entities remain in the hands of national governments, which can lead to regulatory arbitrage and overbanking. Capacity constraints and a significant risk of spillovers between banks and nonbanks and across countries call for a competent regional regulator or supervisor to oversee the nonbanking sector. Closer collaboration between bank and nonbank supervisors and consolidation of the financial sector are needed as well.

Setting the example

The ECCU has taken a number of steps in recent years to strengthen integration as a way to deliver stronger economic growth and a more stable financial sector. But continued very high debt, financial sector challenges, and insufficient progress in coordinating regional policies have left the region vulnerable and could undermine confidence in the future.

Yet with strong leadership, the time is ripe for bold reforms to strengthen the currency union, especially when it comes to fiscal policy and the financial sector. ■

Alfred Schipke is a Division Chief in the IMF's Western Hemisphere Department.

This article draws on the forthcoming book Macroeconomics and Financial Systems in the Eastern Caribbean Economic and Currency Union (OECS/ECCU)—A Handbook, *ed. by Aliona Cebotari, Alfred Schipke, and Nita Thacker (Washington: International Monetary Fund).*

And the Walls Came Tumbling Down

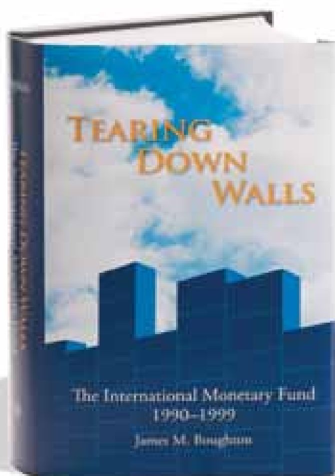
Atish Rex Ghosh interviews IMF historian **James Boughton**

ACCORDING to the Spanish-American philosopher George Santayana, "those who cannot remember the past are condemned to repeat it." As the IMF's official historian, James Boughton has aimed both to prevent the institution from repeating the mistakes of the past and to offer a unique behind-the-scenes insight into the workings of an organization long criticized for its secrecy and lack of transparency.

The IMF has just published Boughton's official history of the institution in the 1990s, the second such history he has written for the Fund. *Tearing Down Walls: The International Monetary Fund, 1990–1999* covers a tumultuous period not only in the life of the IMF, but also globally. The end of the preceding decade witnessed the fall of the Berlin Wall, which was swiftly succeeded by the collapse of the Soviet Union and the transition of many former Eastern Bloc countries to market economies. As the IMF grappled with the political transformation of the USSR's successor republics, it was also drawn into the turmoil of successive financial crises. Meanwhile, back in Washington D.C., historic internal reforms were being implemented at IMF headquarters.

To coincide with the publication of this latest history, Atish Rex Ghosh, of the IMF's Research Department, spoke with Boughton about the turbulent period described in the book, and his years as the IMF's official chronicler.

F&D: The title of your forthcoming book is *Tearing Down Walls: The International Monetary Fund 1990–1999*. What is behind the choice of that title?



Boughton: The title is meant to evoke several things that happened in the 1990s. The first major event was the collapse of the Soviet Union at the end of 1991. That created 15 new countries. These were all countries that had little or no experience with market economics, and the IMF was called upon to help these countries in that transition. It was a huge challenge.

The other thing that happened was a devastating series of financial crises that started with the Mexican peso crisis that hit in December 1994, continued across east Asia in Thailand, Indonesia, and Korea, and spread to Russia in 1998 and really affected the whole world economy in a major way. So that series of financial crises created a tremendous amount of work for the IMF, posing new challenges for the staff and management of the Fund.

It was a decade of globalization. Walls between countries, walls that limited trade between countries, walls that limited financial flows between countries—all of those walls came tumbling down. I've tried to write the book in a way that conveys that drama.

F&D: This was also a period in which "surveillance" as we understand it—in other words, monitoring a country's performance and looking at their exchange rate to make sure that the world economy is functioning well—took on a greater role. Can you talk a little bit about what happened there?

Boughton: When the Mexican crisis hit at the end of 1994, it was apparent to the Fund that it had not had enough data in real time to understand what was going on in Mexico, and that led to a lot of soul-searching in the [IMF] building.

We had to work more closely and intensely with countries to understand what was going on in their economies. So all through the second half of the decade, this whole idea of the Fund itself being more transparent and the Fund encouraging countries to be more transparent in their dealings both with the Fund and with other countries became a major focus of what the Fund did. It was a really major cultural change.

F&D: What sorts of messages do you think come out of the history over this period?

Boughton: The positive message is that when these major challenges hit, world leaders turn to the IMF. I think it's fair to say that the IMF was able to rise to that challenge. Part of the evidence for that is that when the current world economic crisis hit in 2008, again countries turned to the IMF more than to any other institution for help.

But behind all this I think there's a darker message, which is that these crises keep happening. People have learned that this is a problem that's not going to go away, and I think that the future is going to see countries calling on the IMF time and time again.

It's a very different institution from the one I joined 30 years ago, in 1981. The biggest change has been a cultural

shift from secrecy to openness. It was a much smaller institution. It was a much more closed institution.

F&D: The 1990s was a controversial time for the IMF, partly because of our involvement in the Asian crises and in Latin America, where we were accused of pushing the "Washington consensus." What's your reading of whether those criticisms were valid?

Boughton: I think some of the criticisms are valid. There were various times in the 1990s when the IMF was a little behind the curve and was unable to anticipate what was happening. That usually came about because we didn't have the data. One thing that I found very striking when I was doing the research for this book was that Stanley Fischer—one of the most prominent and successful macroeconomists in the world and then the IMF's First Deputy Managing Director—told me he was shocked when he joined the Fund to find out that the staff didn't really have anywhere near as much information about what was going on as he had expected. He thought that we knew everything, that there were people on the outside who didn't know anything. But it turns out nobody knew enough.

The most severe criticism the Fund ever faced was because of the Asian crisis. We saw some problems out there, especially in Thailand, but it's extremely difficult to predict when a crisis will occur.

I happened to have been at a conference at Cambridge University in England in July 1997 when we all learned that Thailand was devaluing the baht. The country was being forced into crisis mode and was calling in the IMF for advice. Stan Fischer was also at that conference. He knew immediately, having been in the Fund for almost three years at that point, that this was not just a little isolated problem in Thailand.

F&D: Your book has many fascinating details, some anecdotes, a lot of very solid research going through the archives and historical facts. Could you give us some reflections on being the IMF historian?

Boughton: People ask me all the time, "Why does the IMF even have an historian?" It's because the management of the Fund realized that nobody outside the building had any idea what was going on here, what kind of work we are really doing.

Witness to history

"I have always felt that I was standing on the shoulders of those who came before me. I saw myself as carrying on an important tradition," says James Boughton of his work as the IMF's official historian.

Boughton—who, coincidentally, was born the year the Fund was founded—is the third person to have held the post of IMF historian. Trained as an economist, he has researched and written two books of the multivolume series that composes the official history of the Fund to date.

The first appointee, Keith Horsefield, originated the series with *The International Monetary Fund 1945–1965,* which covered the founding of the IMF and its first 20 years.

"When I first took the job, Keith Horsefield was still alive, and he encouraged me to take on the work," recalls Boughton. The two men never met, but Boughton kept up a lively correspondence with Horsefield, who had retired to the Isle of Wight.

Horsefield was succeeded by Margaret Garritsen de Vries, whose two publications *The System Under Stress* and *Cooperation on Trial* cover the workings of the Fund from the 1960s to the late 1970s. They trace the negotiations leading to the creation of the IMF's "special drawing rights"—the Fund's unique international reserve asset; the recurrent crises that culminated in the collapse of the Bretton Woods system, and the Fund's response to the tectonic shifts in the global monetary and financial system.

Boughton's own contribution to this series began with *Silent Revolution: The International Monetary Fund 1979–1989*, which centered largely on the Latin American financial crises of the period. The books were never intended to fall into neat, 10-year-long narratives, but coincidentally, each volume seemed to "constitute a natural decade of Fund history," says Boughton.

Following the publication of *Tearing Down Walls,* Boughton suggests the next volume will likely center around the current global crisis: "How the IMF was written off as a global institution before being called in to deal with the crisis," he says.

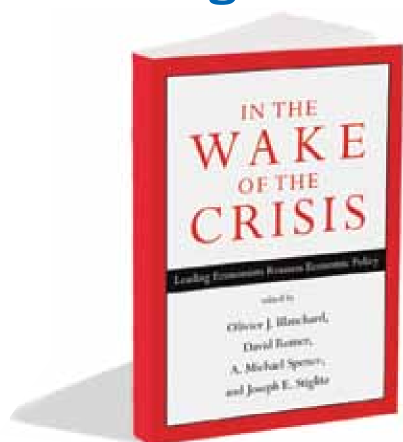
Boughton is now preparing for his own retirement, but the position of IMF official historian is likely to remain empty for a while before the naming of a successor. The IMF has always allowed for a hiatus between appointments, as history—including this current crisis—plays itself out before being committed to paper. Perhaps the time has come, he suggests, to make the position permanent and continuous.

I also get asked a lot of questions by IMF staff. When there's a policy paper to be written, people need to know what's been tried before, and I can explain why things that might seem workable on the surface have been tried and haven't been accepted in the past. So there are a lot of facets to the job.

What I've enjoyed most is interviewing senior officials all over; I meet wonderful people and I hear great stories. What I've learned in 20 years of doing this job is hard to summarize, but trying to put it into words is great fun and a wonderful challenge. ■

Atish Rex Ghosh is an Assistant Director in the IMF's Research Department and author of Nineteenth Street, NW.

Thinking Anew



Olivier J. Blanchard, David Romer, A. Michael Spence, and Joseph E. Stiglitz (editors)

In the Wake of the Crisis

Leading Economists Reassess Economic Policy

MIT Press, Cambridge, Massachusetts, 2012, 174 pp. $19.95 (cloth).

If ever an event ought to have caused a profession to indulge in an orgy of self-doubt, it ought to have been the financial crisis of 2007–08. The world plunged into a deep recession that was not predicted by most economists, as a result of factors (inflated asset markets, excessive leverage in the financial sector) that barely feature in most economic models. Ben Bernanke, head of the U.S. Federal Reserve, in 2005 dismissed a question about a housing crash by saying, "It's a pretty unlikely possibility. We've never had a decline in house prices on a nationwide basis." In March 2007 he opined that "the impact on the broader economy and financial markets of the problems in the subprime market seems likely to be contained."

After such failed predictions, a bit of humility might be in order.

The IMF held a conference in March last year to discuss the post-crisis response, and the papers have duly been gathered in a book. As IMF Chief Economist Olivier Blanchard notes in his opening piece, economists are having to think in a new way—most notably that "even with stable inflation and a stable output gap, things might not be going well behind the macroeconomic scene."

The 23 essays are not a coherent framework for a new macroeconomic policy but a series of thought-provoking pieces on monetary and fiscal policies, the financial sector, capital controls, pro-growth policies, and the structure of the international monetary system. Some pieces inevitably raise more questions than they answer, but nearly all provide important insights into the challenges ahead.

Take the idea of macroprudential policy, the "great white hope" of economic management. Future crises can be avoided (or at least their impact can be reduced) if the authorities are alert to systemic risks in the financial sector. But as Blanchard points out, macroprudential policy requires more instruments than just interest rates (changing the maximum loan-to-value ratio for mortgages, for example). A central bank would end up interfering in many different elements of the economy: would such a stance be compatible with the idea of an independent central bank, free from democratic control?

Another issue for central banks is that they have become huge players in the capital markets via their quantitative easing (QE) programs—in which central banks directly buy government and other securities to pump funds into the economy rather than cutting interest rates. Traders wait eagerly for news of further rounds of QE as a buy signal for bonds and equities. But as Nobel Prize–winning economist Joseph Stiglitz points out, that is a bit of a puzzle, since the programs have been declared temporary. "If the government's purchase of bonds leads to higher prices for stocks and bonds, its later sales should lead to a lower price." If markets anticipate the temporary nature of QE, the current price increases should be limited; if not, central banks could incur losses later on. As Stiglitz remarks, "the fact that the central bank does not use mark-to-market accounting does not make these losses any less real."

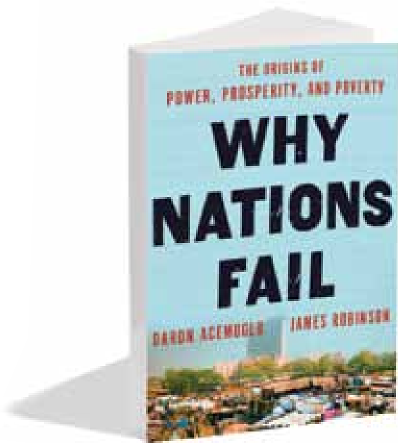
On fiscal policy, one or two Chicago economists might choke on their cornflakes at the assertion by David Romer, of the University of California, Berkeley, that "we should view the question of whether fiscal stimulus is effective as settled." A rather more nuanced view is taken by Parthasarathi Shome, who examines the circumstances in which fiscal policy is most (and least) effective; the overall level of government debt and the openness of the economy (tax cuts may simply be spent on imports) are surely factors to examine. Here, as elsewhere, the book might have benefited from input from Carmen Reinhart, now of the Peterson Institute for International Economics, or Harvard's Kenneth Rogoff, authors of a history covering eight centuries of successive economic crises.

Perhaps the other great shift in economic (and in particular, IMF) orthodoxy is a greater willingness to embrace capital controls. After all, if markets can have bubbles, they are not always efficient. And inefficient markets can destabilize economies. This is not really a new orthodoxy but a return to an old one: John Maynard Keynes thought trade flows were much more important than capital flows and devised the Bretton Woods system accordingly. China, the world's burgeoning economic power, also thinks capital flows should be subservient to broader economic goals. European politicians seem very keen to throw sand in the wheels of the markets.

So the comment by former Reserve Bank of India Deputy Governor Rakesh Mohan that "at least for emerging market economies, capital account management in its broad form should become part of the normal overall toolkit for macroeconomic management" will not provoke calls of "heresy" as it might have 10 years ago. That is a good lesson: the best way to review the crisis is to keep an open mind.

Philip Coggan
Buttonwood Columnist for The Economist *and author of* Paper Promises: Debt, Money and the New World Order

Getting to Growth



Daron Acemoglu and James A. Robinson

Why Nations Fail

The Origins of Power, Prosperity, and Poverty

Crown Publishing Group, New York, 2012, 544 pp., $30 (cloth).

This book provides a wondrous dose of healthy skepticism for anyone who thinks she knows how to get the machinery of growth and prosperity going in Malawi, Nepal, Egypt—or for that matter how to restart that machinery in Greece and Italy. Whether in your gut you follow Friedrich Hayek (a free society will prosper) or Karl Marx (an unequal system is bound to implode), or like most economists and students of development you believe in the possibility of "engineering prosperity" with good policy advice and support, this book will make you think again.

It's also a great read: ambitious and compelling in its combination of broad scope and fascinating detail. The authors argue that in the absence of inclusive political and economic institutions, nations inevitably and eventually (more on that below) fail. Without inclusive institutions to challenge and constrain the political elite (the absolutists, the monarchy, the shogun, the tribal chiefs) there is no creative destruction. The elite use political power to protect the status quo and preserve "extractive" economic rents (excessive returns from market power). The people have no reason to invest and no incentive to innovate. Economies can grow for a long time on the basis of extraction (the Roman Empire, China in the past three decades). But without the engagement and empowerment and enterprise of the majority of people, extractive regimes eventually run out of steam and succumb—to infighting and implosion or to outright defeat by outside conquerors.

The argument is illustrated by examples over many millennia (the Natufians on the Euphrates in the Neolithic Age, Mayan cities in 500 BC, England in 411), and in many places (the Transkei, the Kingdom of Kongo, New South Wales, Aksuma—now part of Ethiopia, Somalia, Japan, China, Russia). New phrases capturing key turning points enliven the story: the Venetian commend contracts, parliamentary petitioning, the Black Death, the iron law of oligarchy, the "irresistible charm of authoritarian growth."

Where do inclusive institutions come from? Why did they emerge in England (a backwater in 750 AD when the Mayan city of Copan had 28,000 people) with the Industrial Revolution, and not then or even yet in Ghana, Peru, or Russia? Why did the relatively inclusive Roman Republic yield to imperial absolutism? Why did Venice manage inclusion and then lose it? The authors don't pretend the process is simple or predictable. Nations succeed in part because they are lucky; sufficient centralization keeps chaos and instability at bay, and pluralism provides incentives for work and invention. Small differences in initial conditions combined with accidents of history ("critical junctures") lead societies in entirely different directions. The 14th century Black Death undid serfdom in western Europe but not in Russia; the rise of Atlantic trade empowered Parliament in England, but strengthened the absolutist and extractive monarchy in Spain. The Dutch East Indies monopoly destroyed indigenous inclusive institutions in Aceh, Indonesia, to enrich itself. The royal Virginia Company, its counterpart in 17th century Jamestown, Virginia, had no such luck; with land plentiful and labor scarce its workers had many options and developed their own inclusive economy and polity.

But the book is far from complete, leaving the authors room, perhaps, for a follow-on. They never define failure. What they mean is not only complete collapse (Sierra Leone, the Roman Empire, the Venetian city-state) but the failure of most nations to develop the inclusive institutions that have brought high and sustained prosperity to people in North America, western Europe, Australia, Japan—and a few other places, such as South Korea and Botswana. The story is about levels, not about managing transitions from exclusive to inclusive. And what's the relevant time frame? The "extractive" Roman Empire spanned at least 300 years of reasonably good living for a broad group of its own citizens, and the Mayan city-states even longer. Extractive politics in China has brought longer and better lives to millions of people in the past three decades, and might deliver further gains without inclusion for decades to come.

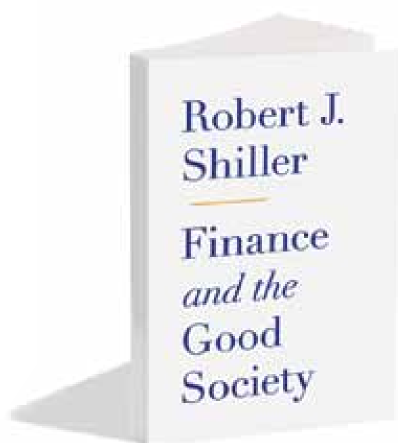
The authors argue that ultimately politics matters, not economics (or culture or geography). But they also sometimes invoke economic realities to explain political outcomes. It was the scarcity in Jamestown and the economic aftermath of the Black Death in Europe that triggered inclusive politics—not the other way round. In Peru and the Caribbean it was gold and cotton, economic endowments, that made elite extraction too easy. In postwar Korea, good economics—an inclusive economic system (the Americans imposed land reform)—eventually ushered in inclusive politics. Are not healthy global market pressures (and changing global norms about democracy, and Twitter and Facebook, and maybe even sensible advice from the IMF and the World Bank) helping that process along now in Ghana, Indonesia, and Mexico?

The authors decry the development industry's "ignorance hypothesis." They are right that the problem is not that leaders in poor countries don't know what to do—rather it is local incentives and constraints that make them unable or unwilling to follow outsiders' good advice. On the other hand, perhaps IMF "hectoring" (their term) about the ingredients of good macroeconomic policy contributed to recent steady growth in much of Africa. Perhaps access to life-saving technologies and mobile phones, the women's movement, the fight against sex trafficking, the growth of the microfinance industry, even much maligned privatization and dismantling of agricultural marketing boards—perhaps these, besides improving lives in extractive countries right now, could also, as in the Arab Spring, trigger a new generation of inclusive politics and sustained growth and prosperity in the developing world.

Or is this reviewer suppressing the healthy skepticism this book should provoke—about the influence of outsiders in an increasingly global world—and succumbing to naïve or, worse, self-interested pragmatism? If you work in the development industry—as activist, student, bureaucrat, academic, official—do read and then ask yourself that question.

Nancy Birdsall
Founding president of the Center for Global Development

Finance for All



Robert J. Shiller

Finance and the Good Society

Princeton University Press, Princeton, New Jersey, 2012, 304 pp., $24.95 (cloth).

In the wake of the crisis, I was a speaker at a seminar for senior African financial policymakers—to whom donors and international financial institutions had preached the virtue of financial capitalism. How was it, they asked, that the United States, which had been lauding the benefits of financial capitalism and privatization, was now nationalizing venerable entities such as AIG and Fannie Mae?

The collateral damage from the crisis has extended beyond sharp declines in trade and capital flows. It includes increasing hostility to the market economy itself. Robert Shiller's thoughtful analysis of the beneficial social consequences of financial capitalism then is timely.

The book draws from Shiller's rich background in finance and behavioral finance—where he has made landmark contributions—and his extensive reading in other fields, including economics, modern financial theory, behavior economics, history, psychology, sociology, and political science. This makes his analysis of finance truly interdisciplinary.

To a finance specialist, the perspectives that the author brings from the other fields contextualize many ideas that are widely and separately held by finance professionals with a silo mentality.

The digressions are fascinating—for example, the discussion on "goals and our lives" seems inspired by spirituality and Zen Buddhism—but at times he goes too far afield in discussing nonfinancial areas, and the thesis of the book—a defense of the social good of finance—is lost.

Shiller advances the need to democratize and humanize financial capitalism. His book is anchored by advances in modern finance, including financial innovation, market efficiency, financial incentives, and conflicting interests among stakeholders vis-à-vis modern corporations. Shiller argues for a broader role for finance beyond mere money making.

The author is not averse to money making, but in his analysis of the human instinct behind it, he argues that money is a means to produce positive externalities. One might invoke charitable giving, but Shiller illustrates the broader social dimension of finance that pervades our lives consciously and unconsciously. Why are the superwealthy resented? Why do we have "occupy" movements? How do the superwealthy fit into Shiller's idealized world of democratized financial capitalism?

Finance can engender excesses; it can also be an engine of growth and poverty alleviation.

Shiller's answers are, at times, provocative. The logical conclusion of Marxist thought is the self-destruction of capitalism. However, capitalism, particularly financial capitalism, has survived and even improved over the years, according to Shiller. Moreover, financial capitalism has survived modern information technology, which the author believes will leverage human capacity and accelerate the democratization of finance.

Many countervailing forces have evolved over the years to inspire a wider sense of social ownership of financial capitalism, such as employee stock ownership plans, retirement savings through wider stock and financial asset holdings, financial regulation, and corporate governance schemes to rein in the excesses of financial capitalism.

Marx did not predict such countervailing forces. Democratization of

finance reduces resentment to financial capitalism. In fact, in such a setting it is not hard to imagine an environment where the superwealthy are welcome so long as they make their fortunes fairly by following the rules of the game.

Shiller also advances the idea of humanizing finance by exploiting human impulses (both positive and negative) and explores how those instincts might be used to encourage the very rich to view their wealth accumulation as a source for the greater good. So while finance can engender excesses, it can also be an engine of growth and poverty alleviation.

The book promotes a form of financial capitalism that fosters such social good. The goal is broad and the approach interdisciplinary, and Shiller is uniquely suited to provide such rich interdisciplinary analysis.

Although the book is anchored by advances in modern finance, the first part is devoted to a myriad of actors in the financial system and their roles and responsibilities. This is an excellent tutorial for those who have no substantial familiarity with finance. There are about 20 classes of actors, including CEOs, investment bankers, lawyers, traders, insurers, and even lobbyists and philanthropists.

The book is organized in a way that is useful to the understanding of specific roles and responsibilities, but I would have preferred to see it organized according to functions within the world of finance, such as savings and capital mobilization, information production, financial intermediation, risk sharing and management, and governance.

The book also advocates too much dependence on government. The author proposes a number of innovative schemes for government to implement, such as futures contracts on nonstandard products. Such proposals raise misgivings about encouraging heavy-handed government intervention.

I would also have liked to see more on the role of incentives and corporate governance in fostering finance for the social good. The size and incentive features of executive compensation have played prominently in current regulatory debates, but the book has very little to say about this. In fact, the issue of inequality of wealth and income has been attributed, in some circles, to the distorted incentives in executive pay.

These shortcomings apart, the book is eminently readable. Although the thesis is explained intuitively with very little data and complicated methodologies, the multitude of anecdotes and analogies drawn from various disciplines are powerful and encourage the reader to think laterally. Shiller should be applauded not only for advancing the democratization of financial capitalism but also for helping democratize knowledge of finance.

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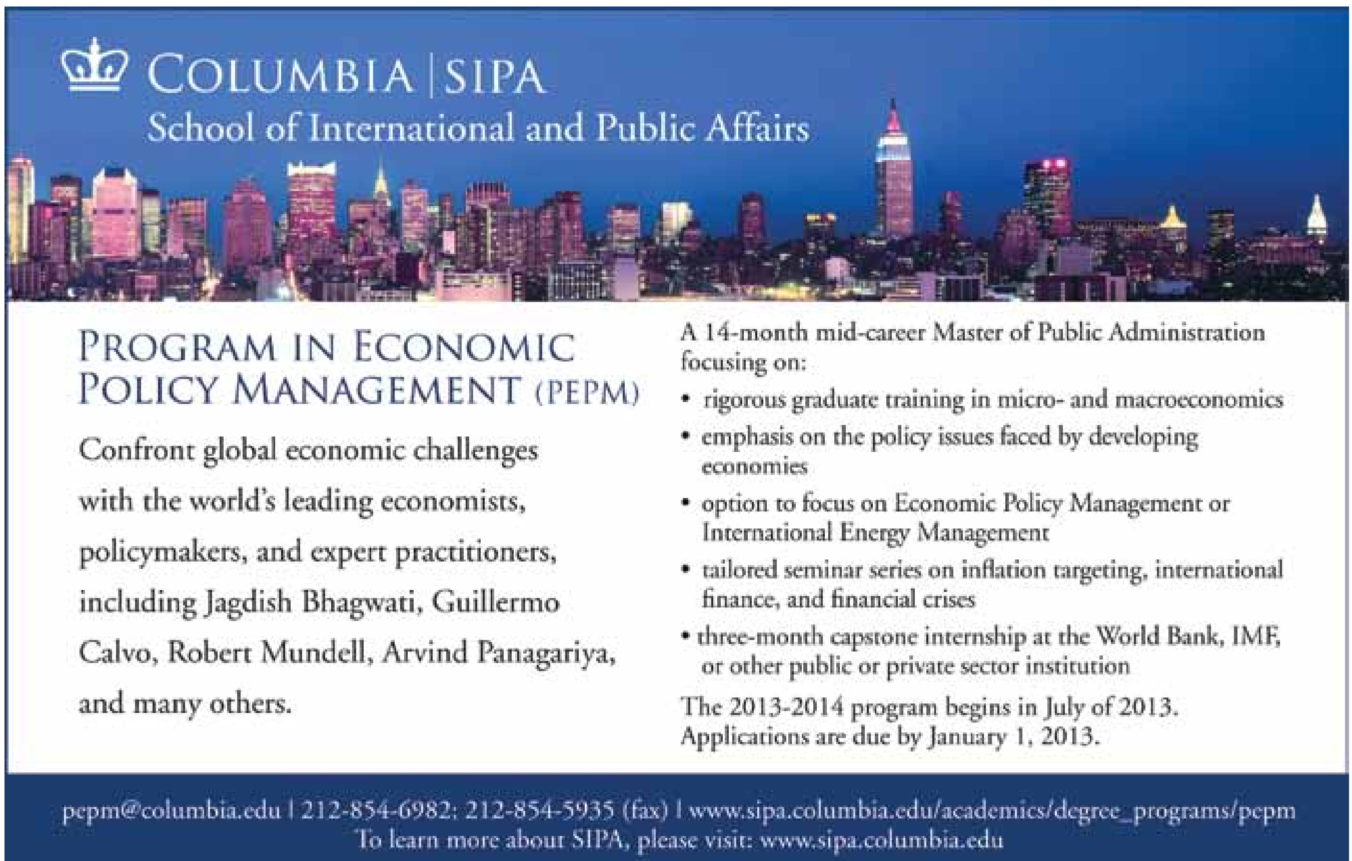

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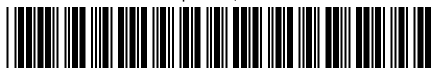

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