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Philanthropy Sowing Change

 Bill Clinton on Creative Cooperation

 Jeffrey Sachs Profiled

 LIBOR Explained

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March of the Billionaires: The Art of Giving

BY combating malaria with mosquito nets or building schools and providing basic sanitation, philanthropy is helping transform the developing world. Rich donors are devoting fortunes—many of them earned through computer software, entertainment, and venture capitalism—to defeating poverty and improving lives, supplementing and in some cases surpassing official aid channels.

From billionaires Bill and Melinda Gates and Warren Buffett to Aliko Dangote and George Soros, the titans of capitalism are backing good causes with their cash. Whether financing new vaccines, building libraries, or buying up Amazon rain forest to protect the environment, philanthropists are supporting innovations and new approaches that are changing lives and building dreams.

This issue of *F&D* looks at the world of targeted giving and social entrepreneurship.

“Philanthropy’s role is to get things started,” says Microsoft co-founder Bill Gates, who is the world’s most generous giver. “We used foundation funds to set up a system to make market forces work in favor of the poor.” He says that catalytic philanthropy can make a big difference. “Good ideas need evangelists. Forgotten communities need advocates.”

Former U.S. President Bill Clinton tells us that networks of creative cooperation between government, business, and civil

society can get things done better to solve the world’s most pressing problems.

Also in this issue, Prakash Loungani profiles superstar economist Jeffrey Sachs, who helped campaign for debt relief for developing economies and championed the Millennium Development Goals. We look at how, instead of spending commodity price windfalls on physical investments, which are often sources of corruption, governments of poor countries are sometimes well advised to hand some of the income over to their citizens. We examine moves by major central banks to ease our way out of the crisis enveloping advanced economies in our Data Spotlight column, and we hear about how China’s growth inspires creativity in the West.

After a decade working in different roles on *F&D*, this will be my final issue as Editor. I am moving to the job of Publisher of the Fund. Jeff Hayden will take the baton as Editor-in-Chief, ably supported by the editorial team led by Managing Editor Marina Primorac and our design team, long headed by Luisa Menjivar. *F&D* is nearing a half century of spotlighting global development issues and has never been in finer fettle.

Jeremy Clift
Editor-in-Chief

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Moving up the ranks

Global foreign direct investment (FDI) inflows rose 16 percent in 2011, surpassing the 2005–07 precrisis level, the United Nations Conference on Trade and Development reports. The agency's *World Investment Report 2012* predicts that the growth rate of FDI slowed in 2012, however, with flows leveling off at about \$1.6 trillion.



Bayterek Tower, Astana, Kazakhstan.

The report's FDI attraction index, which measures the success of economies

in attracting FDI, features more developing and transition economies in the top 10 than in previous years. Newcomers in 2011 to the top ranks include Ireland and Mongolia. Resource-rich Chile, Kazakhstan, Turkmenistan, and the Republic of Congo also made the list.

Just shy of the top 10, a number of countries, including Ghana and Peru, exhibited sustained improvement in their ranking: both these countries moved up the list in each of the past six years.

Better educated, lower paid

Despite recent narrowing, the wage gap between men and women in Latin America prevails, according to a new study by the Inter-American Development Bank and the World Bank.

New Century, Old Disparities: Gender and Ethnic Earnings Gaps in Latin America and the Caribbean compares surveys



Students in Buenos Aires, Argentina.

of representative households in 18 Latin American and Caribbean countries. It finds that men earn 17 percent more than women of the same age and educational level. This wage gap has been decreasing in recent years, but at an unacceptably slow pace, the report says.

Though slightly better educated on average than men, women still dominate lower-paid occupations such as teaching, health care, and the service sector, the study says. According to the household surveys, women hold only 33 percent of the better-paid professional jobs in the region, which include those in the fields of architecture, law, and engineering. In these professions, the wage gap between men and women is significantly higher: 58 percent on average.

A change in household roles and stereotypes is essential to achieving gender equality in the labor market, the study concludes.

Smart growth

Global urbanization will have significant implications for biodiversity and ecosystems if current trends continue, according to a new assessment by the United Nations Convention on Biological Diversity.

The *Cities and Biodiversity Outlook* report, which draws on contributions from more than 123 scientists worldwide, says that more than 60 percent of the land projected to be urban by 2030 has yet to be developed. This presents a major opportunity to improve global sustainability by promoting low-carbon, resource-efficient urban development that can reduce adverse effects on biodiversity and improve quality of life, the report says.

The world's total urban area is expected to triple between 2000 and 2030, with the urban population set to double to about 4.9 billion in the same period. This expansion will draw heavily on water and other natural resources and will consume prime agricultural land.

The new report highlights a wide range of successful initiatives at various levels of government both in developed and developing economies. In Bogotá, Colombia, for example, measures such as closing roads on weekends, improving the bus transit system, and creating bicycle paths resulted in increased physical activity among residents and a reduction in greenhouse gas emissions.



Events in 2013

January 15–17, Abu Dhabi, United Arab Emirates
World Future Energy Summit

January 23–27, Davos Klosters, Switzerland
World Economic Forum Annual Meeting

March 14–18, Panama City, Panama
Inter-American Development Bank Annual Meeting

April 19–21, Washington, D.C.
Spring Meetings of the World Bank Group and the International Monetary Fund

May 2–5, New Delhi, India
Asian Development Bank Annual Meeting

May 10–11, Istanbul, Turkey
European Bank for Reconstruction and Development Annual Meeting

May 30–31, Marrakech, Morocco
African Development Bank Annual Meeting



Malnourished children in Zimbabwe line up for food.

One in eight is hungry

Nearly 870 million people, or one in eight, were suffering from chronic undernourishment in 2010–12, according to a United Nations (UN) report on hunger.

The *State of Food Insecurity in the World 2012*—jointly published by the UN Food and Agriculture Organization, the International Fund for Agricultural Development, and the World Food Program—finds that the number of hungry people worldwide declined by 132 million since 1990.

But hunger has risen in Africa and the Near East, and overall progress in reducing hunger has stalled since 2007, the report says.

With appropriate action, the Millennium Development Goal of halving the number of hungry people in the developing world by 2015 can still be achieved, the report notes.

2013: Year of water cooperation

The United Nations has designated 2013 the International Year of Water Cooperation.

The objective is to raise awareness of the potential for increased cooperation and of the challenges facing water management in light of the increase in demand for water access, allocation, and services. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) will lead the outreach efforts.

In its awareness campaign, UNESCO will highlight the history of successful water cooperation initiatives and identify key issues in water education, water diplomacy, transboundary water management, financing cooperation, national and international legal frameworks, and linkages with the Millennium Development Goals.



Anisakan Falls, Pyin u Lwin, Myanmar.

Addressing climate change in Afghanistan

The government of Afghanistan has launched a \$6 million climate change initiative, the first of its kind in the country's history.

This landmark effort—to be implemented by the United Nations Environment Program (UNEP)—aims to help communities vulnerable to such effects of climate change as drought and build Afghan institutions' capacity to cope with climate change risk.

UNEP has identified Afghanistan as one of the most vulnerable countries in the world to climate change, because it is both more exposed to and less able to grapple with the effects.

Many of the agricultural activities in Afghanistan depend on the

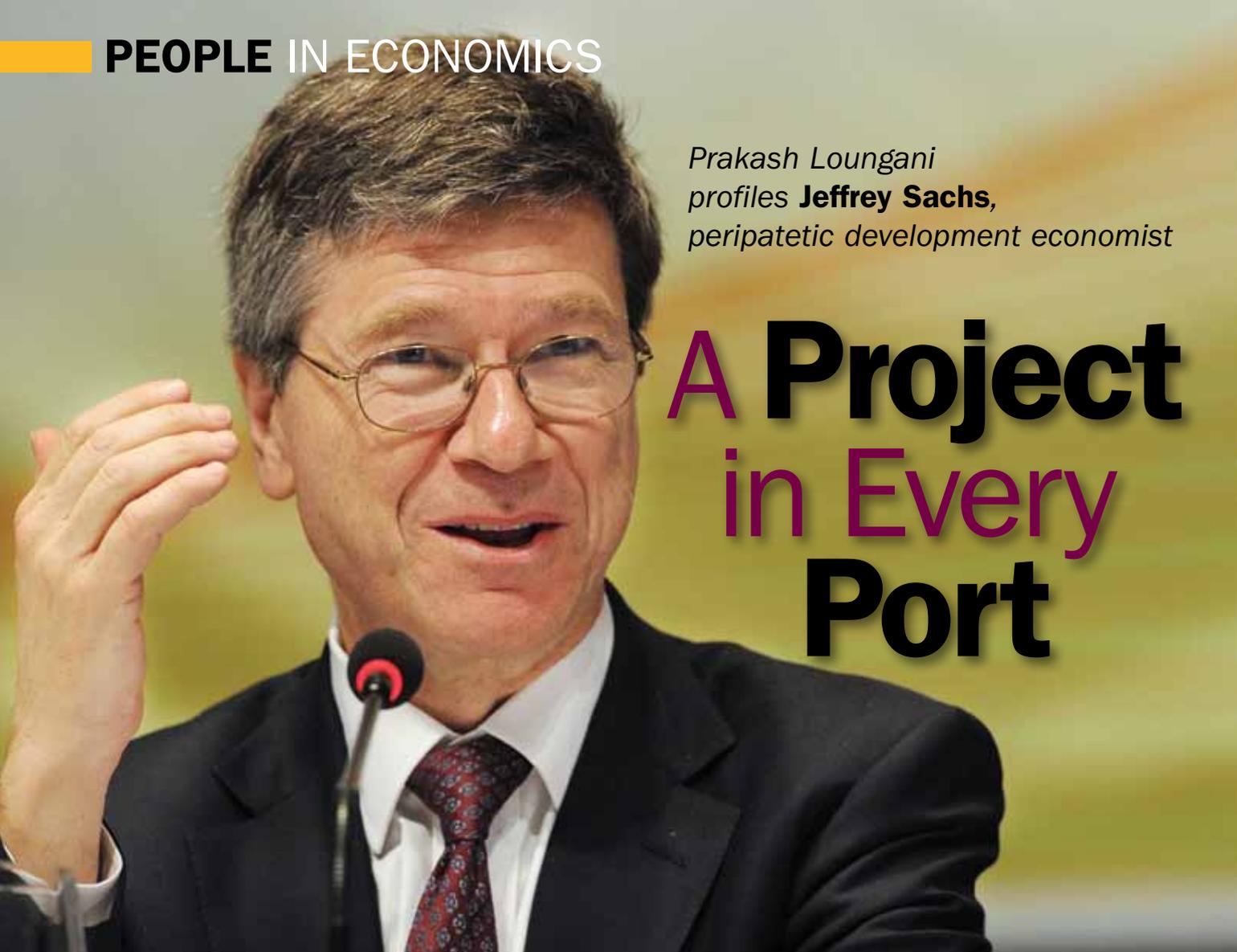
flow of rivers that originate in the Central Highlands area. Natural ecosystems throughout the country are very fragile, however, and the degrading effects of increasing human activity in many areas are worsened by current climatic variability, mainly frequent droughts and extreme-weather-induced floods and erosion.

The initiative includes plans for more efficient water management and use, community-based watershed management, improved terracing, agroforestry, climate-related research and early warning systems, improved food security, and rangeland management.

Agriculture provides a livelihood for more than 60 percent of the Afghan population.



Irrigated fields in Bamiyan province, Afghanistan.



Prakash Loungani profiles Jeffrey Sachs, peripatetic development economist

A Project in Every Port

IT IS HARD to imagine a more accomplished—and more varied—career than that of Jeff Sachs. Harvard University granted him tenure in 1982 when he was only 28. In his early thirties, he helped Bolivia end its hyperinflation and restructure its debt. Only a few years later, he was drafting the Polish government’s blueprint for transition from communism to capitalism. Stints as advisor to the governments of Russia, Estonia, Burkina Faso, and India—among many others—followed. Sachs campaigned for debt relief for poor countries and, as an advisor to UN Secretary General Kofi Annan, developed a plan to achieve the Millennium Development Goals. Since 2002, as director of the Earth Institute at Columbia University, Sachs has set his sights even higher. The Institute, an interdisciplinary group of 850 people, addresses some of the world’s most difficult problems, from eradication of disease to global warming.

All this has given Sachs a superstar status few economists enjoy. In 2005, MTV aired a documentary of Sachs traveling in Africa with the actress Angelina Jolie. Earlier, he had toured with Bono, the lead singer of the band U2, as part of a campaign for debt relief. One of Sachs’s Harvard colleagues

at the time, noted economist Robert Barro, recalls that Sachs once invited him to lunch with Bono to discuss the campaign. Barro says his “instinct was to decline,” but he was overruled by his teenage daughter, who said: “Dad, this is the coolest thing imaginable . . . Of course you have to go.”

Sachs’s work also provokes criticism that the policies he champions often have painful side effects. It’s a charge he vigorously denies: “In Bolivia, Poland, and Russia, my work was like an emergency room doctor’s. The patient was already in shock: hyperinflation, mass shortages, political instability, a collapsing currency, and pervasive fear. Armchair critics have little concept of the nature of such tumult, and of the challenges of devising policies in such confusion. Don’t blame the doctor for the condition of the patient coming into the emergency room.”

Harvard ties

Sachs was born in Detroit in 1954. His family’s roots are in Grodno, once part of Poland and then of the Soviet Union. His father was a prominent labor attorney who was active in U.S. Democratic Party politics. His sister, Andrea, recalls that their father always reminded them “to do good while you are doing

well.” After considering becoming a lawyer like his father, he turned down Harvard’s law school in favor of its economics department. It was to become his home for 30 years.

As an undergraduate he completed all the course requirements for a doctorate in economics. In 1982, he published a paper in the profession’s leading technical journal, *Econometrica*, titled “Multiple Shooting in Two-Point Boundary Value Problems.” It’s true he had some help on the paper; his coauthors were David Lipton, now the IMF’s first deputy managing director; Jim Poterba, now president of the National Bureau of Economic Research (the pre-eminent U.S. economic research organization); and Larry Summers, former U.S. treasury secretary and former president of Harvard. Even among such a talented cohort at Harvard, Sachs stood out, which the university recognized by giving him tenure at age 28.

What singled out Sachs, however, was not just his technical brilliance but also his interest in tackling the pressing economic issues of the day, formulating solutions, and lobbying for their adoption. Paul Krugman, the economics Nobel laureate, once wrote that “what sets Jeff apart is that he is a first-rate theorist who is also a major political force. It’s a pretty amazing combination.”

Miracle cure

Sachs’s first major project was as economic advisor to Bolivia in 1985. The country was grappling with an annual inflation rate of 60,000 percent. Sachs says inflation rates that high mean that “if by accident you leave [money] in your wallet for a week or two you’ve lost a quarter of the value.”

Of course, in such a situation people don’t generally leave their money in their wallets. In fact, people get paid with huge stacks of money and immediately run to the market to try to turn the soon-to-be-worthless paper into goods that will retain value. Sachs says that “you really feel the urgency, and you, you really rack your brain to try to figure out anything that might work.”

The answer in the end, says Sachs, was “very, very simple.” Hyperinflation arises when governments face a budget deficit they try to close by printing money. The key to stopping hyperinflation is therefore to give governments some source of real revenue. In Bolivia, this required a sharp increase in the price of government-owned oil, which had been heavily subsidized by the state. Raising the price of oil to a realistic level ensured that when the government sold the oil, it “was earning enough money to pay the teachers.” This closed the budget deficit enough that the hyperinflation stopped.

Sachs says the end of the oil price subsidies was “a progressive step.” He says the poor bore the burden of the hyperinflation through the erosion of the value of their cash while “the rich benefited from the very low prices of gasoline.” The biggest “beneficiaries were actually the smugglers, who bought petroleum products in Bolivia and smuggled them into Peru.”

Along with the increase in oil prices, Sachs also fought for debt relief for Bolivia—the country’s public debt in 1984 was 110 percent of its income. This put him at odds with the IMF, and not for the last time (see box). Sachs says that

“this was a battle royal with the IMF and the banks, since the principle of debt reduction was not yet established in international circles.” Sachs led the negotiations for the Bolivians, and in the end 90 percent of the external debt on the books was canceled.

By early 1986, the hyperinflation was gone, “and Bolivia’s been one of the lowest-inflation countries in all of the Americas.” The country’s economic growth, however, remained modest, which gnawed at Sachs and led him later to important work on the roadblocks to growth.

Walesa’s woes

Sachs’s success in Bolivia led to business in many other capital cities. In early 1989, Poland’s government approached him for help with the transition to capitalism. Sachs had long discussions with the leaders of the Solidarity union movement “about market economics and what could be done.” The leaders were pessimistic about the chances for Poland’s economic transformation.

Sachs assured them that it could be done. Markets could work if they were liberalized—that is, if prices were set by demand and supply rather than fiat. Once markets got going, domestic investment and foreign investment from the rest of Europe would rejuvenate Polish industry. And, echoing the advice he gave the Bolivians, Sachs told Solidarity: “Forget the foreign debt—it’s going to be canceled.”

After a few months, Solidarity began to come around. One night, Sachs and Lipton—his Harvard comrade—went to the apartment of one of the leaders, Jacek Kuroń. Sachs and Lipton sketched out a plan for the transformation. At last, Kuroń said, “Clear—write up the plan.” Sachs said that he and Lipton would write it up once they were back in the United

Asian drama

Sachs has been a longtime critic of the IMF, and this did not change during the Asian crisis of 1997–98. In joint work with Steve Radelet, Sachs wrote that “explanations that attribute the contraction to deep flaws in the Asian economies, such as Asian crony capitalism, seem to us to be strongly overstated.” Radelet and Sachs attributed the crisis rather to a “combination of financial panic, policy mistakes by the Asian governments at the start of the crisis, and poorly designed international rescue programs,” which deepened the crisis more than was “necessary or inevitable.”

Although they agreed that interest rates had to rise following the withdrawal of foreign capital, Radelet and Sachs questioned the “IMF’s insistence on raising interest rates even higher and demanding a fiscal surplus on top of the huge withdrawal of funds that was already under way.” The IMF’s advice was based on the assumption that higher interest rates would lead to “stability or appreciation of the currency and that the benefits of currency stabilization in terms of lower external debt servicing costs would outweigh the short-run output costs from higher interest rates.”

Radelet and Sachs, like many other observers, such as Nobel laureate Joseph Stiglitz, questioned whether the benefits were worth the cost.

States and send it in as soon as they could. Kuroń said, “No. Tomorrow morning I need the plan.”

So Sachs and Lipton headed back to their office, where Sachs says they had put “slabs of wood over the sinks so you could put down a computer terminal.” They wrote up a plan that night, “working from about 10 in the evening until I don’t know if it was 3 or 4 in the morning.” The Solidarity leaders looked at it and told Sachs, “You can get on an airplane and go to Gdansk. It is time for you to go see Mr. Walesa.”

Polish pride

Work on the essential elements of the Sachs-Lipton all-nighter continued over the course of 1989, with the country’s finance minister, Leszek Balcerowicz, playing a key role. Finally, Solidarity’s economic plan was announced on January 1, 1990. Sachs says the moment was “terrifying [because] here was a country in hyperinflation, in chaos, in despair, financially bankrupted, shops empty, starting an experiment, as it were, that had never been done before.”

Andrew Berg, now in the IMF’s Research Department, was then a Massachusetts Institute of Technology Ph.D. student working in Poland: “You could say I was the Polish resident representative for Sachs-Lipton Associates,” says Berg. He recalls that working with Sachs was “empowering; the hierarchy that mattered was the hierarchy of good ideas.” Sachs’s ideas often turned out to be the best. Berg says, “Jeff could cut to the bottom of complicated things,” knowing exactly which “two-dimensional graph would really summarize the situation.”

As Sachs and Lipton had advocated, the economic plan quickly liberalized prices and immediately opened up the economy to trade to relieve shortages of consumer goods and key production inputs. The plan deferred privatization of major state-controlled industries, Sachs says, since he “did not have detailed plans and this would take years to complete.”

But the economic plan also led to a surge in prices, compounding the hyperinflation. Food prices doubled in a month, and the price of coal, critical to Poland’s energy production, went up sixfold. Wages stagnated. “You go into this knowing that wages won’t be able to rise as fast as prices,” says Sachs. “That’s the whole idea.”

Sachs also lobbied for financial support for Poland from Western governments and international agencies. Berg recalls using his AT&T phone calling card so that Polish Finance Minister Balcerowicz could call IMF Managing Director Michel Camdessus to request assistance.

The initial pain caused by the plan led to criticism of Sachs then and since, but there can be little question about the longer-term gain.

A bigger challenge

As Poland started to turn the corner, its experience attracted interest in Russia. Sachs started working in 1990–91 with the Soviet economist Grigory Yavlinsky to design a plan of democratization and economic reform, backed by Western technical assistance and financial support of \$150 billion over five years. The plan took the name “Grand Bargain.”

At the end of 1991, Sachs was officially appointed an economic advisor to Boris Yeltsin. Lipton and Anders Åslund, now a senior fellow at the Peterson Institute for International Economics, were his key associates. Åslund says that “apart from the Gaidar team of leading young Russian reformers, there was little domestic expertise to draw on.” Therefore, the team consisted of young Russian economists with Western training and economists recruited from the West, including Berg and Andrew Warner, then a recent Harvard graduate and now in the IMF’s Research Department.

Sachs says they “were given the ultimate measure of trust in those days: a permanent pass to the Council of Ministers building and a few offices inside for our permanent Moscow-based employees.” Berg recalls that when he landed at the Moscow airport, he was whisked through immigration into a waiting limousine, and “there were separate lanes for limos.” Yet, Berg says, there was an air of disintegration: “There was a smell of gasoline in the air which I was told was because it was being stored in the trunks of limos and cars.” Russia’s economic mainstay, oil and gas production, had been hit by the plummeting oil prices of the mid-1980s.

The region lacked the history and practice of market economics. Warner says that much of what Sachs and his team did was “commonsense economics,” explaining the basics. “We were trying to stop credit from growing 25 percent a month and carry out basic budget reform.” Sachs was “intellectually honest,” says Warner, “always trying to get the numbers right and promote good analysis.”

Russian reversal

In Russia, however, Sachs and his team could not pull off the success they had achieved in Poland. In a long defense of his record titled “What I Did in Russia,” Sachs argues that the results were disappointing because his advice was ignored to a large extent by the Russian team and almost entirely by the West. While Sachs’s recommended elimination of price controls took place at the start of 1992, his advice to tighten the money supply and end subsidies to firms was ignored. As a result, high inflation “continued unabated for several years,” giving the reforms a bad name.

Åslund says that Sachs and his team also “did not manage to get through the deregulation of energy prices and foreign trade.” This meant that “some people could buy oil for a dollar and sell it for \$100 on the world markets and hence had no incentive to reform.” Sachs’s advice that the large natural resource companies remain in state hands was also ignored; instead, says Åslund, the “sector was privatized in a corrupt manner, giving rise to the oligarchs.”

But Åslund says the biggest reason for the failure was that, contrary to Sachs’s advice, “the West didn’t lift a finger for Russia.” The Group of Seven (G7) countries (Canada, France, Germany, Italy, Japan, United Kingdom, United States) gave little financial assistance themselves, but instead passed the buck to international financial institutions such as the World Bank and the IMF. John Odling-Smee, then director of the IMF department with oversight over operations in Russia, has written that “by not provid-

ing large-scale financial support themselves” the G7 put the IMF in roles that “were sometimes contradictory.” On the one hand, the IMF was expected to lend to Russia on the basis of policies that met the “normal standards” of the institution. On the other hand, the institution was expected to relax those standards when the G7 wanted to show its political support for the Russian government.

Odling-Smee says that as a result of these dual roles “an atmosphere was sometimes created, for example at the end of 1993 . . . in which the IMF felt that it should err on the side of supporting weak policies rather than interrupt” loans to Russia. Sachs continued to advise the Russian government

After 30 years focusing on problems around the globe, Sachs has now also turned his attention to ills closer to home.

through 1993, but when that year turned out to be “even more dreadful [in terms of policy actions] than 1992,” he and Åslund publicly announced their resignation in January 1994. Berg says that Russia turned out to be an “eye-opener about the limits of good people and smart ideas to bring about change for the better.”

Resource curse

In the mid-1990s, Sachs turned his attention to the question of why some countries were rich and others poor. His experience in Bolivia and Russia was a motivating factor. Bolivia licked hyperinflation in the 1980s but its economic growth remained modest. Sachs felt that this was due to the country’s “precarious reliance on a few primary commodity exports,” as well as “its extraordinary geographical situation as a landlocked Andean country divided between the extreme highlands and tropical forest lowlands.”

At first blush, commodity exports would appear to confer easy riches on a country. But Sachs and Warner noted the empirical regularity that growth was slow in many resource-rich countries, tapping into an early vein of work claiming that “easy riches lead to sloth.” The French philosopher Jean Bodin wrote in 1576 that “men of a fat and fertile soil are most commonly effeminate and cowards,” whereas a barren country makes men “careful, vigilant, and industrious.”

Sachs and Warner noted that several historical examples appeared to bear out Bodin’s belief. The Netherlands outstripped gold-rich Spain in the 17th century. In the 19th and 20th centuries, resource-poor Switzerland and Japan surged ahead of Russia. And in the 1970s and 1980s, several Asian countries, such as Korea and Singapore, raced ahead of resource-rich African and Latin American countries.

Sachs and Warner confirmed the adverse effect of resource abundance on growth through a worldwide comparative

study. Their statistical analysis established that “resource-poor economies often vastly outperform resource-rich economies in economic growth.”

An end to poverty

Over the past decade or so, Sachs’s attention has been focused on Africa and on bringing about an end to poverty there. He was instrumental in the success of the Jubilee 2000 debt relief campaign to persuade creditor nations to cancel the huge debt of developing nations. Sachs and Bono lobbied presidents and prime ministers—and Pope John Paul II. The effort was successful. In 1999, the Group of Eight (G8) countries (G7 plus Russia) committed to \$100 billion in debt cancellation by the end of 2000. “When this man gets going, he’s more like a Harlem preacher than a Boston bookworm,” wrote an admiring Bono about Sachs.

In 2002, Sachs left Harvard after more than 20 years as a professor to become director of Columbia University’s Earth Institute. There he launched his most ambitious project to date. Called the Millennium Villages Project, it is Sachs’s attempt, with the backing of the United Nations, to help rural Africa achieve the Millennium Development Goals, the global targets for improving human development, by 2015. The project provides large-scale aid to a total of 15 villages in 10 countries to help combat poverty and disease. The villages receive high-yield seeds, fertilizer, drinking wells, materials to build schools and clinics, insecticide-treated nets, and antiretroviral drugs.

The early returns from the project are in. Human development indicators are better on most counts in the millennium villages. But it’s possible that these improvements would have occurred even without help from Sachs’s project. Establishing that the project made a decisive impact—say, by comparing the results to those of villages that were not part of the project—is a matter of active debate.

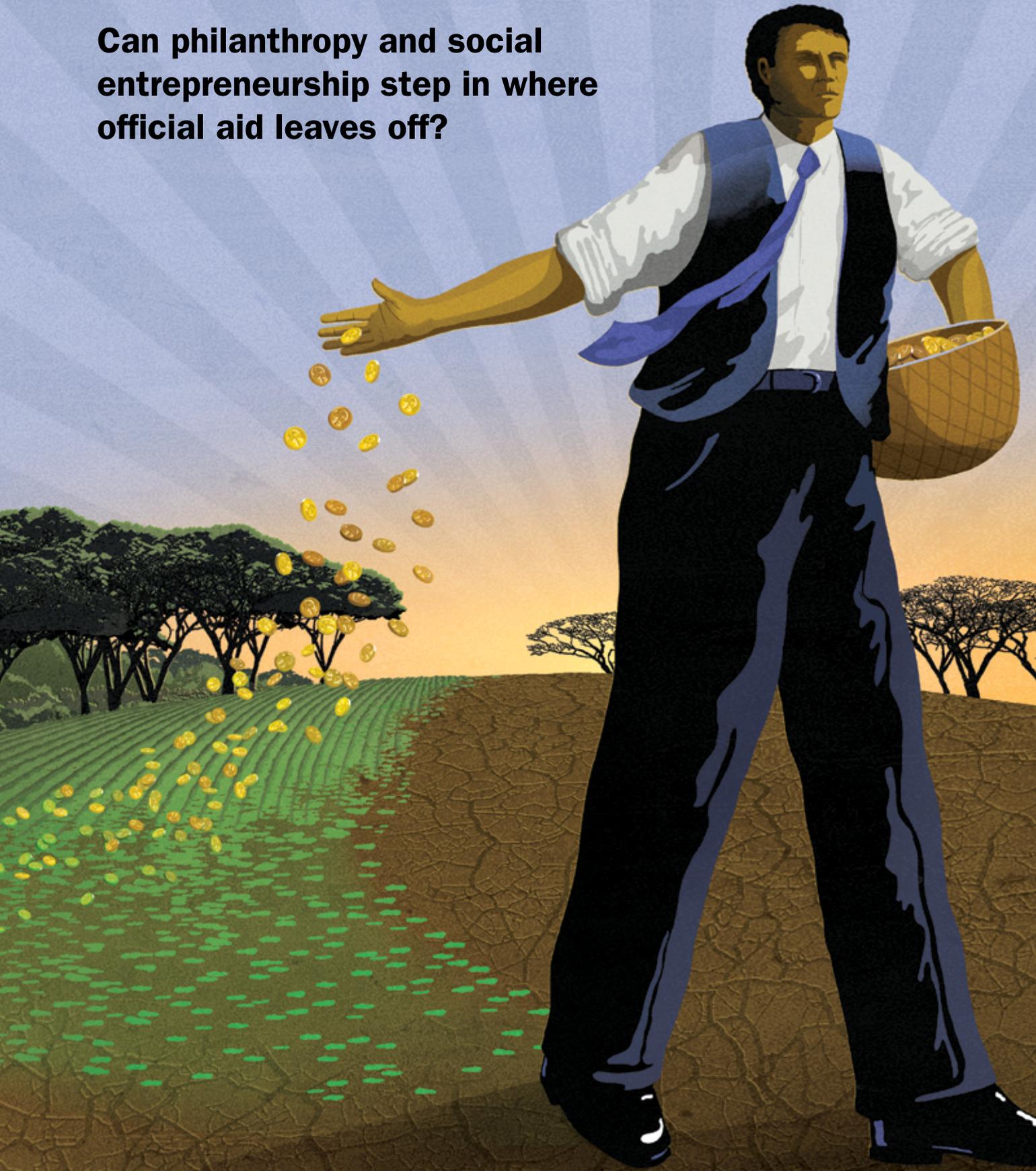
Homeward bound?

On a trip to Washington, D.C. in 1972 as a high school senior, Sachs sent his girlfriend a postcard of the White House and wrote “Home at last” on the back. After 30 years focusing on problems around the globe, Sachs has now also turned his attention to ills closer to home. His latest book is titled *The Price of Civilization: Reawakening American Virtue and Prosperity*. The *Financial Times* says that Sachs “has the air of the world traveler who returns home to find his country a much worse place than he remembered.” Sachs laments such U.S. problems as lack of job creation, decaying infrastructure, falling educational standards, increasing inequality, soaring health care costs, and blatant corporate dishonesty.

Sachs is characteristically optimistic about the United States despite this laundry list of complaints. “If Poland can make it from communism to capitalism,” he says, “we can surely make it from one form of capitalism to a better form.” ■

Prakash Loungani is an Advisor in the IMF’s Research Department.

Can philanthropy and social entrepreneurship step in where official aid leaves off?



Good Works

Marina Primorac

CHARITY and social entrepreneurship are nothing new. Andrew Carnegie, John D. Rockefeller, and the Vanderbilt family helped build the cultural infrastructure of the United States. Maria Montessori, John Muir, and Florence Nightingale were early social entrepreneurs in the fields of education, conservation, and public health.

But philanthropy is becoming an increasingly important part of the fabric of the global economy. While many governments contemplate pulling back, rich people are becoming more creative and strategic about their giving, and—if Bill Gates has his way—more generous and proactive.

Warren Buffett and Bill and Melinda Gates established The Giving Pledge in June 2010: a public commitment by some of the world's richest people to give away at least half of their wealth, which in turn is meant to inspire more giving. To date, 81 billionaires have signed on, with Buffett alone pledging \$37 billion.

Philanthropists are motivating their peers to do the same, and more. Donating fortunes and solving social problems today has taken on more cachet than passing on a huge inheritance or setting up posthumous monetary contributions.

U.S. universities, from Stanford to Georgetown, from Duke to Michigan, have established courses and even centers for the study of philanthropy. One approach is to study how to increase philanthropy, to get more funds for a project. Another is how to measure the effect—the impact—of philanthropy, to get more out of giving. But there are gaps in the research: limited data are available on private giving from countries other than the United States, though anecdotal evidence tells us that it is becoming more important. For example, Li Ka-shing, a Hong Kong-based businessman and billionaire, has given away over \$1.5 billion and has pledged a third of his fortune—an estimated contribution of \$9 billion—to charitable causes.

How much a person gives is one thing. How much change it effects is another. So philanthropists and academics are focusing on impact—what difference a contribution makes—and the best way to measure that impact.

Gates says the private sector underinvests in innovations because investors—those taking the risk—receive only a small portion of the returns. The state has traditionally interceded to meet needs that fall between the cracks, but Gates argues that governments—at least those democratically elected—don't take the long view and are averse to risk.

That is where the philanthropist can fill the gap, with what Gates calls “catalytic philanthropy.” Government is good at finding a few likely winners, but philanthropy is good at sup-

porting a lot of possible winners, increasing the odds that someone will find new solutions to any given social problem.

Companies are increasingly under pressure to contribute to society, or at least to appear to be doing so. Cynics argue that the corporate world does only what is necessary to help the bottom line. Large firms are setting up corporate

Philanthropy is becoming an increasingly important part of the fabric of the global economy.

social responsibility divisions and touting their products' do-good qualities, in the realms of the environment, education, health, and culture. When pharmaceutical companies offer lifesaving medications such as AIDS or tuberculosis medications at reduced cost in poor countries or free up patents for generic production companies' use, are they doing so to improve the lot of the sick and poor or under legal or political pressure?

Forbes, a magazine for and about the wealthiest people in the world, hosted a summit on philanthropy in June of this year, inviting 161 billionaires and nearly-there to listen to keynote speakers Buffett, Steven Case, Gates, and Oprah Winfrey talk about how they could change the world. And the World Economic Forum now holds a session on social entrepreneurship—what Greg Dees defines as “pursuit of an innovative solution to a social problem.”

New York City is experimenting with creative financing to solve social problems—financing that not only measures but in fact depends on results. Goldman Sachs has invested in a “social impact bond” that is funding a nonprofit to design and run a program to reduce recidivism in the city by a target amount. If the project achieves that target, Goldman Sachs gets its money back; if it exceeds the target, the investment firm will profit. Losses are limited to one-fourth of the initial \$9.6 billion investment, thanks to a subsidy by Mayor Bloomberg's philanthropic foundation—demonstrating once again the importance of philanthropic risk takers.

In this issue of *F&D*, we look at the intersection of philanthropy, private investment, and social entrepreneurship: how people are finding better ways to solve society's most pressing problems. ■

Marina Primorac is Managing Editor of F&D.



Dean Karlan

Every Which Way We Can

Philanthropy and private investment are increasingly important in the global fight against poverty

GLOBAL poverty reduction was once a battle financed by well-off countries with the support of international organizations such as the United Nations and the World Bank. But times are changing.

Philanthropic contributions by the likes of the Bill & Melinda Gates Foundation and George Soros's Open Society Foundation, social enterprises such as the Grameen Bank, and the increasing flow of investment funds to developing countries are now taking on a higher profile in the fight against poverty.

Developing economies are attracting more direct investment. But they still need official aid and money from private donors to help correct market failures and catalyze solutions for the poor (see box).

Giving trends

The total flow of financial resources to developing economies has been rising. The absolute level of global foreign aid (also known as official development assistance), private investment, and philanthropic grants to developing economies combined has increased since 1960 (see Chart 1). However, total bilateral and multilateral foreign aid has fallen as a percent of global GDP over the past half-century.

Consistent with global trends, foreign assistance from the United States, which is the largest single contributor world-

wide in nominal terms (but not nearly the largest as a share of GDP) has fallen as a proportion of GDP over the past 50 years. Much of this decline was driven by a drop in assistance from 1980 to 2000—aid actually increased percentage-wise from 2000 to 2010.

The U.S. government now contributes about 0.2 percent of its gross national income to foreign assistance; the Scandinavian countries Denmark, Norway, and Sweden

Spectrum of aid

Financial flows to developing economies for poverty reduction run the gamut from grants to private sector investment.

Grants, of course, are 100 percent subsidies to a government or nongovernmental organization to provide some service or transfer. In the middle of the spectrum are investments that aim to generate a social return above and beyond their private return—in the form of loans to governments or equity or loans to private firms. Such social net benefits may arise through positive externalities such as a smaller carbon footprint or a reduction in contagious diseases.

At the other end of the spectrum is private investment that generates strictly private returns, benefiting the investor, the firm, and the clients of the firm. Falling nowhere on the spectrum are investments that cause negative externalities, with a social return lower than private returns.

all give close to 1 percent (United Nations Millennium Development Goals Indicators database). In absolute amounts, the United States contributed \$31 billion in 2011, while France, Germany, and the United Kingdom combined—with two-thirds the population of the United States—contributed \$58 billion. On a per capita basis, the United States contributed \$99 in official aid, while these three European countries combined gave \$280.

Some aid is direct budget support, whereas other aid takes on particular forms, such as technical assistance (e.g., Japan) or investment in infrastructure and industry (e.g., China). All these approaches ultimately aim to improve the quality of life in developing economies, while often also serving the donor country's interests.

Shifts in public opinion

U.S. views on foreign aid can seem paradoxical. A 2010 survey showed that most people in the United States vastly overestimate how much federal spending goes to foreign aid, pegging it at 25 percent on average. The actual figure is less than 1 percent. Ironically, most Americans would like to “reduce” the foreign aid budget to 10 percent of overall spending—a sum that would actually represent a tenfold increase in aid (WorldPublicOpinion.org, 2010).

Attitudes toward aid are changing, however. In the United States, the share of people who would like to cut back on aid has declined steadily over the past 40 years, from a high of 79 percent in 1974 to a low of 60 percent in 2010, with a comparable increase in those who consider aid levels about right or even too low (General Social Survey, 2010). But even though they mistakenly believe that aid is quite high, Americans are on average more likely to say it should be higher still. They are also increasingly likely to commit their charitable dollars abroad: private donations to international causes began rising steadily as a percent of GDP beginning in the early 1980s (see Chart 2).

The growth of private philanthropy may be driven by Americans' perception that nongovernmental assistance is more effective than government aid in promoting development (KFF, 2012). The accuracy of this perception is subject to debate, but new approaches, such as microcredit, led by nongovernmental organizations are certainly getting more media attention than reliable-yet-stodgy aid standbys like budget support.

Microcredit is in fact a particularly apt example of this phenomenon. A recipient of both private philanthropy and investment, it has risen to prominence on the back of tremendous fanfare, including a Nobel Peace Prize to the Grameen Bank and Muhammad Yunus in 2006. Web 2.0 services like Kiva also helped bring an already popular approach to a large retail audience, by promoting personal connectedness to aid recipients. Kiva allows donors to read the stories of individual clients and track their loan repayment, and it offers donors social recognition by featuring their stories and giving histories on its website. These are the Facebook generation's equivalent of sponsor-a-child programs. New approaches, such as GiveDirectly, take the idea of direct con-

nection to the next level and allow individual donations to flow directly to beneficiaries without an intermediary.

Thinking about sustainability

A major question for today's philanthropists involves that alluring yet vaguely defined term “sustainability.” Charitable donations often play an important role in supporting the vulnerable in times of need when markets or governments can't or won't do so. But nonprofits' dependence on donations makes them vulnerable to fluctuations in their funding, which can threaten their ability to achieve their goals—in other words, they're not financially sustainable. Given the shortfalls of the nonprofit approach, some potential charitable donors have shifted from the grant-based end of the spectrum toward the middle—investments with social returns higher than private returns—and even off the spectrum, to investments with no social benefit beyond the private benefits.

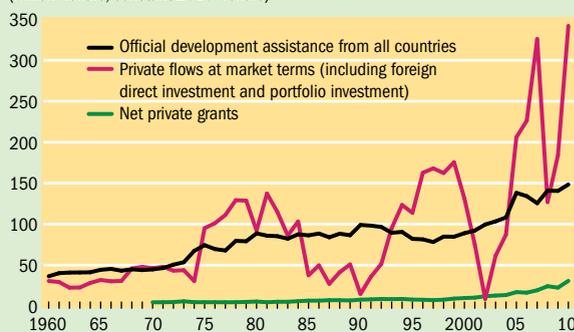
The primary advantage for-profit firms have over nonprofits is that their revenues are tied directly to their products

Chart 1

Going up

Total aid, investment, and grants to developing countries has risen over the past 50 years.

(billion dollars, constant 2010 dollars)



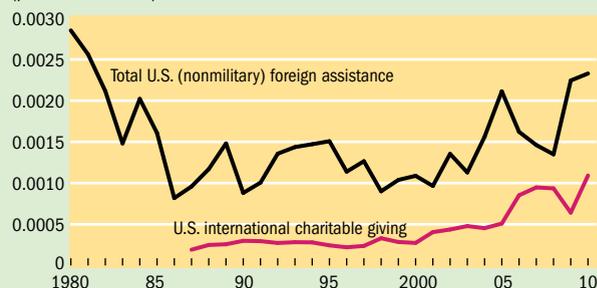
Source: Organization for Economic Cooperation and Development.

Chart 2

Giving another way

U.S. aid to developing countries is lower than in 1980 but private charitable donations have steadily increased.

(percent of U.S. GDP)



Sources: U.S. Census Bureau (foreign assistance); and Giving USA (charitable giving).

and services, providing financial feedback when the goods on offer are rejected by the market and ensuring financial sustainability when they're in demand.

For donors concerned about financial sustainability, investment in developing countries offers the chance to better align revenues with beneficiaries' outcomes and to create more financially sustainable organizations in the process, because demand from beneficiaries keeps successful programs afloat. Microcredit was one of the first major development industries to shift from a donation-dependent model to one that provides services at market rates to low-income clients.

In fact, it took some creativity to figure out how to lower market rates from moneylender levels to rates closer to those offered by commercial banks to wealthier individuals. For-profit microcredit banks have been criticized for valuing revenues over poverty alleviation, but often the product delivered to the client is more or less the same, and the few randomized trials to date do show more of an impact on poverty compared with the nonprofit model. Few programs have been tested rigorously, but the burden of proof is shifting, and proponents of the nonprofit model must show just how it is more effective than one driven by profit.

Of course, other factors may also influence investment levels. Donors likely turned their interest to financial sustainability because they were disillusioned by the ability of traditional aid to produce lasting change in developing economies. Although the impact of donor disenchantment is hard to gauge and perhaps plays a smaller role than other factors, it is likely no less real. Among the other influences on investment flows are technological innovation, trade barriers, international tax policy, U.S. monetary policy, and the policy environment in the recipient country.

Despite good reasons for enthusiasm about investment, a basic conundrum persists: many ideas indeed require and deserve a subsidy to make up for a market failure. And some level of redistribution makes good policy sense for reasons both positive (improved welfare of the poor helps society function better) and normative (ethics dictates some level of altruism and charity to those less fortunate). We cannot rely on investors to solve all the world's problems.

An understanding of the structural shifts from aid and philanthropy to investment and a grasp of the appropriate levers for specific problems call for a good look at markets and when and why they work or fail. When market failures do exist, innovations can help solve them. Sometimes the answer lies in technology, such as cell phones or better bed nets to ward off disease-carrying mosquitoes, or in medicine. Sometimes it is about a business process, such as microcredit. When the problem is solvable without subsidy, market forces pull in investment.

The belief that the developing world's problems are increasingly solvable without subsidies motivates many to focus on investment. Microcredit, for example, began as a nonprofit idea, blossomed, and is now dominated by for-profit investors seizing profit-making opportunities. This is akin to supporting basic growth theory: low-income countries should

grow faster than their high-income counterparts because of expected higher marginal returns to capital, which is likely to attract investment.

Investment on the upswing

Investment in developing countries has been on a variable but generally upward path in the past half-century.

Such countries saw a large upswing during the global boom after World War II, an even larger drop during the

When market failures do exist, innovations can help solve them.

political and economic turmoil of the 1980s, and a rebound from the 1990s to today (aside from temporary drops in the aftermath of the September 11, 2001, attacks in the United States and the 2008 financial crisis).

Two shifts in policy and the economic environment in developing economies deserve particular credit for higher investment: lower transaction costs and better information—concepts straight out of Economics 101. Market efficiency requires perfect information and zero transaction costs. The world may not work that way, but it is a good starting point for analysis and a way to figure out where things went wrong.

First, take “information,” which to economists has a particular meaning. Beyond mere data, information means the ability to complete transactions, to trust that a contract will be fulfilled, to ensure that all parties have symmetric information about the risks and rewards of a transaction. Improvements in institutional quality, in the spirit of Douglass North and, more recently, Daron Acemoglu, Simon Johnson, and James Robinson, are all about removing information asymmetries.

Improved information can lead to the creation and improvement of actual markets. For example, Robert Jensen's seminal work on information and markets in Kerala, India, found that the introduction of cell phone towers allowed fishermen to call or text colleagues on shore about market prices before choosing a port. Access to this information led to a dramatic reduction in price differences across villages, higher incomes, more transactions, and less wasted fish (Jensen, 2007).

Transaction costs have fallen considerably over the past half-century. In the aftermath of the Cold War, as it became clear that state management of the economy was bad for growth, many developing economies adopted market-oriented economic policies with an eye toward removing information asymmetries for investors and reducing transaction costs.

To promote domestic investment, developing economies found it increasingly necessary to compete for international funds on the open market, which sparked additional rounds of reform to outdated tax codes and regulations for investor

protection. Improved roads, less-restricted capital markets, lower trade barriers, faster and more reliable telecommunications, and of course the Internet have all helped lower the everyday cost of doing business. The result has been a steady reduction in the cost of starting a business. Data from the World Bank's Doing Business index show a steady decline in the number of days it takes to start a business or register property in the average low-income country since 2005, when such data were first collected. And as institutions improve, investment flows.

Making an impact

What is investment's impact on poverty reduction in the developing world? Where on the philanthropic spectrum does a given type of investment fall? And does it really matter?

"Impact investment" is a term many people use to describe investment in developing economies that carries considerable societal benefits, meaning that citizens in these countries are better off receiving "impact investment" funds than mere investment funds. But *all* investment should leave people better off than they were before, even in developing economies, as long as it doesn't have negative consequences—"externalities" (and assuming away behavioral irrationalities that lead people to addictions, for example, to tobacco or alcohol, that they prefer not to have). Impact investment suggests causality, but rarely do the investors or firms produce rigorous research that convincingly demonstrates a program or investment produced a change in people's lives that wouldn't have happened otherwise.

Economists agree that not all investments are equal. Investments that produce negative externalities—pollution, for example—may actually leave people worse off than before. And in some cases, an investment may merely shift wealth from one place to another. Investing in a firm that offers products already available in a community but whose advertising is more persuasive does not improve the lot of the poor; it simply shifts profits from one firm to another. But in the aggregate, any investment that improves competition and efficiency without causing negative externalities is likely to make people better off.

If impact investing is to be anything more than a marketing slogan, it must be more than an ordinary beneficial market transaction.

The question is, does the gain in societal welfare benefit third parties? In other words, are the social returns higher than the private returns? For example, a firm may come up with clean cookstove technology that uses less firewood than ordinary stoves. Customers save time and money when they need to collect less wood, other household members enjoy better indoor air quality, and the entire population benefits from reduced carbon dioxide emissions. Unfortunately, the rigorous evidence we have doesn't support this picture perfect story for the cookstoves.

Similarly, the production of insecticide-treated bed nets doesn't just protect customers from malaria, it also lowers the prevalence of the disease in the neighborhood. Investors who choose projects with the potential for both profits and

positive externalities could claim to be more impact oriented than traditional investors.

Still, the *belief* that an investment will generate positive externalities doesn't absolve firms from the ethical responsibility and pragmatic need to *evaluate* the actual benefits, just as charities must take a realistic look at the effects of their programs.

Impact investors can point to profit as an indication that their bed nets or cookstoves are in demand, but sales and participation rates alone do not prove that an investment has improved customers' lives. After all, some of the most profitable products sold in the developing world are alcohol and tobacco (or local substitutes like khat), hardly known for their widespread societal benefits.

Microcredit is a case in point. For decades, microcredit practitioners made grand claims about poverty reduction based on assumptions rather than evidence and quantified their so-called success simply by tallying the number of participants. But stories appeared in the media that warned of overindebtedness, and people began to worry that microcredit was actually harming its participants. To make things more complicated, the negative stories suffered from as little analysis and data as the positive ones. Half a dozen recent randomized controlled trials have taught us that despite some positive impact from access to microcredit, it is not lifting millions out of poverty.

Philanthropist investors start out with a desire to generate broad social benefits, believing investment is the way to get there. But good cost-benefit analysis has a high price tag, and it is naïve to expect for-profit investors to pay for it if it doesn't improve their bottom line. So who should pay? It needs to be a philanthropist who wants to measure whether the social returns exceed the private returns. This philanthropist could also be the investor. Not all investments (or aid projects for that matter) should be rigorously evaluated; that would be an unethically high allocation of resources to research. But we need more evidence than we have now.

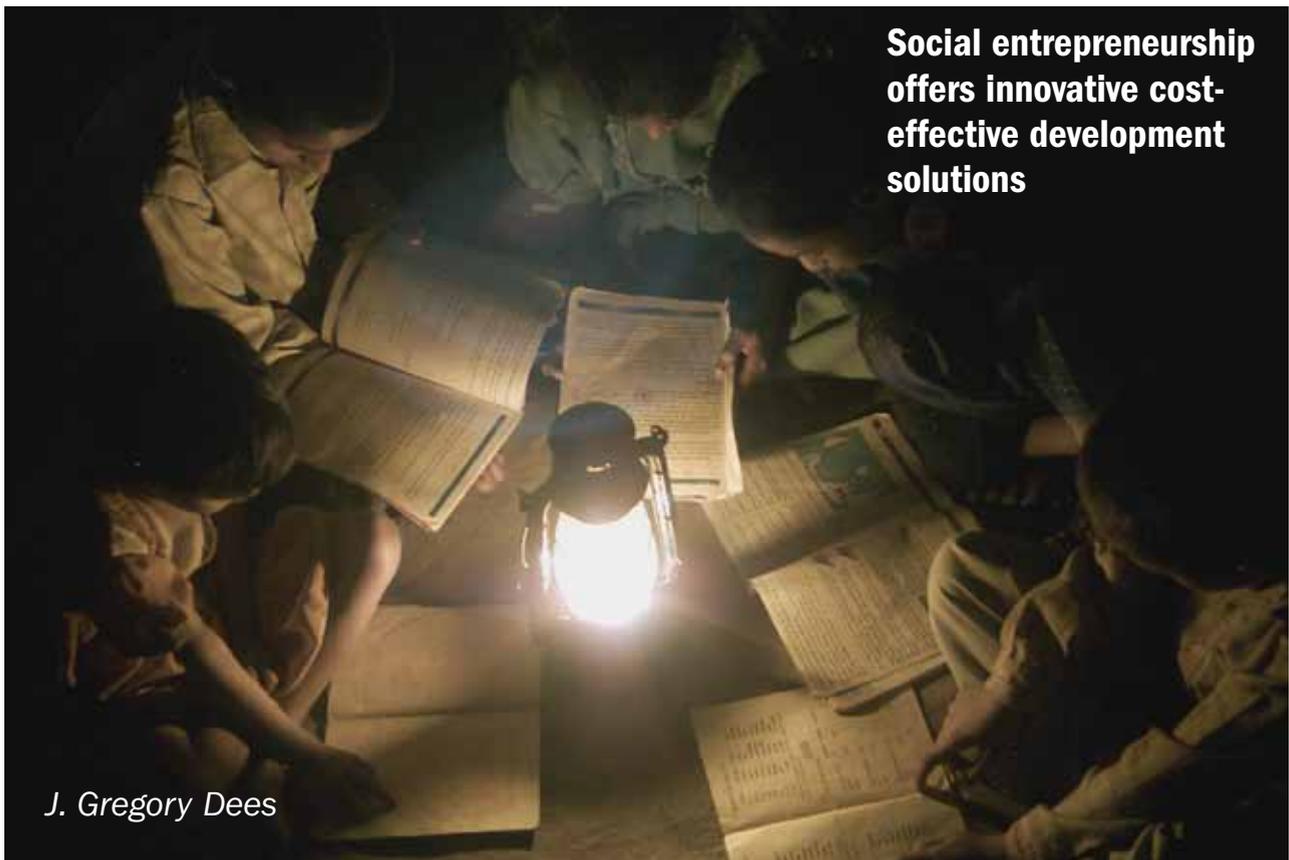
Money flows will continue through foreign aid, private philanthropy, and investment. Each has its purpose, its merits, its drawbacks. But if our goal is to make a dent in societal problems, we owe it to our future selves and to future generations to make the time and effort to sort out what is good from what only sounds good. ■

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Learning Laboratory



Social entrepreneurship offers innovative cost-effective development solutions

J. Gregory Dees

Children study by kerosene lamp in Lucknow, India.

A PREGNANT South African mother diagnosed with HIV is scared and has no idea what to do. She is reassured when introduced to a “mentor mother” from the nonprofit mothers2mothers who also has HIV; her mentor’s counseling helps raise her chance of survival and lower her baby’s likelihood of infection.

A young Cambodian woman faces a bleak future of poverty and a terrible job market until she spots an opportunity to learn about digital data conversion and get a job in the field with the social enterprise Digital Divide Data (DDD) while earning a scholarship for higher education.

In India, a father spots a stall in the marketplace selling solar-powered lanterns, manufactured by the for-profit d.light. His home has no electricity. He replaces his kerosene lamp with the d.light lantern, saving on kerosene and providing better light for his children to study in the evenings.

These are just three examples, out of thousands, of how social entrepreneurs are working to address development problems such as HIV/AIDS, youth unemployment, and lack of reliable electricity. Their scope of activities is nearly boundless, covering microfinance, sustainable forestry, water purification, sanitation, agricultural productivity, women’s employment,

education, health care (from drug and technology development to delivering supplies, selling products, and providing care), and much more. Sometimes their work is effective; sometimes it is not. Often, success depends on credibility and relationships with major players—government agencies, prominent foundations, multilateral development organizations, large established nongovernmental organizations (NGOs), and corporations. If those players can reach beyond the hype and the moving stories to draw out and apply hard lessons about effective and scalable solutions, the payoff can be significant.

Social entrepreneurs bring private resources, ingenuity, determination, business skills, and, in some cases, deep local knowledge to the problems that hold societies back. They innovate, test, and refine new approaches. Their successes and failures, once identified, are a source of valuable information about what works and what doesn’t. These social endeavors form a living—and vastly underutilized—learning laboratory for development innovation. We have a long way to go before governments and development institutions take full advantage of this creative problem-solving activity. But as rigorous assessment becomes more common, we can begin to identify which solutions are effective and have the potential to scale up

and learn what we can from those ideas that looked promising but failed to deliver cost-effective results. (See “Every Which Way We Can” in this issue of *F&D*.)

Misunderstood concept

Many people confuse social entrepreneurship with a narrower idea of “social business,” moneymaking enterprises that also create social good. Combining powerful social innovation with a fully profitable business model may be the Holy Grail for many social entrepreneurs, but it is not an essential characteristic. This is apparent in leading proponents’ definitions of the concept (see box). What is essential is pursuit of new ways to tackle a social problem. Business models range from grant-dependent nonprofits to commercially viable for-profits.

Whatever the model, social entrepreneurs use business tools in creative ways as they attempt to craft more cost-effective, sustainable, scalable solutions. They often draw on creative business models to generate a better social return on investment. Although it is not necessary to show a profit, these entrepreneurs must be savvy when it comes to cost structures, revenue streams, and capital requirements. If they want to change the world, they need to find an economically viable path for getting there.

Our three examples illustrate a range of business models.

mothers2mothers (m2m) is a South Africa-based NGO that employs mothers with HIV as mentors to HIV-positive pregnant women to reduce mother-to-child transmission of the virus. The NGO has demonstrated that in health care facilities with mentor mothers, more women access and continue with prenatal care and fewer babies are infected with HIV. Without treatment, between 20 and 45 percent of babies born to HIV-positive mothers become infected (about 390,000 infants a year worldwide as of 2008). Without treatment, approximately half will die before their second birthday. With treatment, transmission can be reduced to about 1 to 2 percent in non-breast-feeding

populations and to less than 5 percent where breast-feeding is the norm.

Founded in 2001, m2m now operates in more than 600 sites in seven sub-Saharan African countries and employs nearly 1,500 mentor mothers to serve the 240,000-plus expectant mothers enrolled in its programs in 2011. Mentor mothers educate and empower their peers and are a more effective and lower-cost resource than a nurse or professional health care provider.

Funding for m2m comes largely from aid agencies, foreign government grants, corporate contributions, and the like, but its model saves health systems the significant expense of treating a generation of children born with HIV. It has worked to pivot its operating model: in addition to direct service delivery m2m now advises governments, helping them embed Mentor Mother programs in national health systems—an approach launched in Kenya in 2010 with the help of the United States Agency for International Development (USAID). In 2011, the United Nations Program on HIV/AIDS endorsed mentor mothers as a best practice.

DDD is a social enterprise that provides data entry, conversion, and digital preservation to a wide range of customers. It trains, employs, and awards higher-education scholarships to disadvantaged young people in Cambodia, Kenya, and Laos so they can develop marketable skills to move out of poverty. Initiated in 2001 in Cambodia, DDD moved into Laos in 2003 and into Kenya in 2011. In 11 years, it has trained more than 2,500 young people, 900 of whom are currently employed in its three offices. These numbers may seem small given the magnitude of the problem in each of the countries, but DDD has been recognized as a pioneer and model in the now sizable and growing “impact sourcing” field (business process outsourcing that also achieves positive social impact by employing poor and vulnerable people). A recent report by consulting firm Avasant, commissioned by the Rockefeller Foundation, places impact sourcing sector employment at more than 560,000, with the potential to grow to 2.9 million by 2020.

It is hard to predict the long-term effect of these jobs, but DDD’s recent impact assessment shows its graduates are earning incomes four times higher than comparable high school graduates. While DDD has a thriving business, generating over \$2.4 million in revenue in 2011, it is legally set up as a nonprofit and raised an additional \$2 million in contributions to support its extensive training and scholarship programs. This is not the business model of all the organizations classified as “impact sourcing service providers”—indicating that they employ poor or otherwise vulnerable people. Organizations that do not provide the same level of training or scholarships may not see the same results, but this conclusion awaits further comparative evaluation.

d.light design, Inc., is a for-profit social enterprise started in 2007 to provide affordable lighting to poor people who do not have reliable electricity. Its primary products are inexpensive solar-powered lights, ranging from small study lanterns to higher-powered household lanterns that can also charge now ubiquitous cell phones. It sells products in more than 45 countries. In its brief life, d.light has reached nearly 10 million people and aims to reach 50 million by 2015. By replacing kerosene

What are social entrepreneurs?

Leading organizations define them in various ways.

Ashoka: Innovators for the Public—“Social entrepreneurs are individuals with innovative solutions to society’s most pressing social problems. They are ambitious and persistent, tackling major social issues and offering new ideas for wide-scale change.” See www.ashoka.org/social_entrepreneur

Skoll Foundation—“Social entrepreneurs are society’s change agents, creators of innovations that disrupt the status quo and transform our world for the better.” See www.skollfoundation.org/about

Schwab Foundation for Social Entrepreneurship, an affiliate of the World Economic Forum—“Social entrepreneurs drive social innovation and transformation in various fields including education, health, environment and enterprise development. They pursue poverty alleviation goals with entrepreneurial zeal, business methods, and the courage to innovate and overcome traditional practices.” See www.schwabfound.org/sf/SocialEntrepreneurs/Whatisasocialentrepreneur/index.htm

lamps, d.light products not only provide better light, they also save households money, prevent loss of life from accidental fires, and reduce health costs from indoor pollution. The company estimates that it has benefited more than 2.2 million school-age children, offset an equivalent of 276,000 tons of carbon dioxide, and saved its customers over \$100 million in energy-related expenditures—though these numbers have not yet been confirmed by independent assessment. (An IMF study—Anand and others, forthcoming—suggests that d.light and others may have overestimated the amount households spend on kerosene, particularly in markets such as India, where kerosene is heavily subsidized by the government.) Because d.light is a private company its financial information is also private, but it hopes to be profitable and has promised to set aside 10 percent of the net proceeds from sales in the United States and Canada to provide lighting to distressed communities through partnerships with best-in-class established nonprofits.

It is only one of many experiments to bring solar and other forms of distributed electrical power to rural areas in developing countries that lack electricity. These kinds of market-based interventions must pass the market test. If the products do not provide value, through savings or improved quality of life, people will not buy them. Performance in the marketplace demonstrates value to customers, but from a development perspective, these products must be evaluated against other solutions. For instance, widespread adoption of d.light or other alternatives (such as whole-house solar panels or village-based microgrids) might reduce or eventually eliminate the need for government subsidies for kerosene—a major expense for the Indian government. Even this market-based experiment is worth serious scrutiny from a development perspective.

All three projects are works in progress that will surely evolve over time and stimulate further innovation, both within these organizations and by others. The examples were selected to illustrate various kinds of ventures at different stages of progress rather than large-scale success. Examples of large-scale success are Aravind Eye Care System, the largest ophthalmological services center in the world, providing nearly 350,000 surgeries a year—at least half to the poor—and the Bangladesh Rural Advancement Committee (BRAC), an NGO that touches the lives of more than 100 million people in Bangladesh and 10 other countries, through innovative schools, health outreach programs, and businesses that employ poor people. Aravind funds itself through fees from patients who can afford them, and BRAC pays the bulk of its expenses through income from its enterprises. Some experiments have blossomed into great successes, but we need to be more systematic in harvesting the benefits of this learning laboratory.

Global practice

The concept of social entrepreneurship is relatively new, but the practice is widespread, according to the Global Entrepreneurship Monitor (GEM). In 2009, the GEM network conducted a survey of social entrepreneurship activity in 49 countries as part of its general annual entrepreneurship survey. For the survey, the GEM project adopted a broad definition of social entrepreneurship: “individuals or organiza-

tions engaged in entrepreneurial activities with a social goal” (Terjesen and others, 2012, p. 8). The average proportion of the adult population ages 18–65 engaged in some form of social entrepreneurship activity (from nascent to established social enterprises) was significant at 2.8 percent—more than 1 in 40 adults—ranging from 0.2 percent in Malaysia to 7.6 percent in Argentina (see chart). The variations between countries present fascinating research opportunities, but the data clearly show that the activity is widely distributed.

Wide-ranging benefits

From a development perspective, the potential benefits of social entrepreneurship fall into three categories.

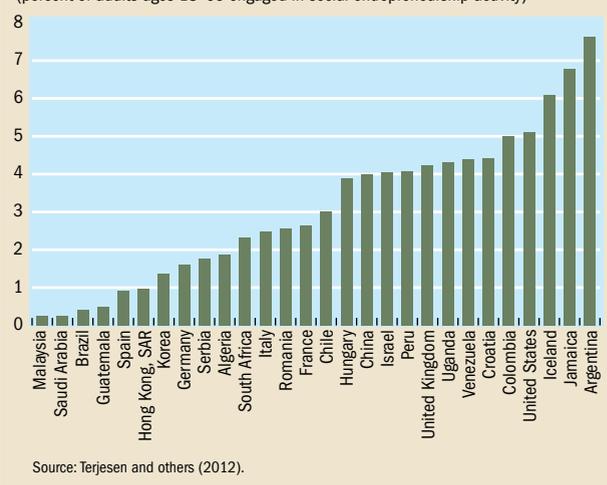
Testing innovative solutions: Social entrepreneurs bring a portfolio of potential solutions to development problems, which can then be examined critically to identify those that are effective and scalable. They have the flexibility to conceive of and experiment with ideas for solving persistent and troublesome development problems that would be stifled in larger organizations or would never spring up in the first place. Social entrepreneurs keep costs and risks low by testing their ideas on a small scale, providing room for adjustment before scaling up. Businesses understand the value of independent entrepreneurship as a testing ground and often scout out innovations among start-ups in their sector. Even as inventive a company as Google has made more than 200 such acquisitions, including Android—which it turned into the largest mobile platform in the world.

Leveraging resources: At a time of scarce public resources, social entrepreneurs bring a nimble business mind-set and tangible private resources to the table. In many cases, private resources fund part or all of their experimentation and can also fund expansion. Social entrepreneurship business model innovations can lower costs relative to impact and help leverage public funds with earned income and private philan-

Getting involved

Engagement in social entrepreneurship varies widely among both developed and developing economies.

(percent of adults ages 18–65 engaged in social entrepreneurship activity)



thropy. In some cases, they eliminate the need for subsidies altogether with market-based models that become sustainable and scalable on their own.

Enhancing adaptive capacity: Social entrepreneurs help societies adapt. Development can best be seen as building a society's capacity for adaptation. How? Nobel laureate Douglass North argues that "adaptive efficiency" is strength-

Social entrepreneurs bring a portfolio of potential solutions to development problems.

ened by "decentralized decision making processes that will allow societies to maximize the efforts required to explore alternative ways of solving problems" (North, 1990, p. 81). Social entrepreneurs are decentralized problem solvers crafting and testing those alternative solutions.

Building a better laboratory

As North says, the ability to adapt is "concerned with the willingness of a society to acquire knowledge and learning, to induce innovation, to undertake risk and creative activity of all sorts, as well as to resolve problems and bottlenecks of the society through time." The more trials in the laboratory, the better, *but only as long as it is part of a learning process*. That's the rub.

Decentralized problem solvers alone won't do the job. Without proper support and discipline, decentralized problem solving can be fragmented, duplicative, and marginal—with the occasional exceptional success, many disappointments, failures that teach little, and efforts whose effectiveness is largely unknown. Fortunately, many players have begun to strengthen this laboratory.

The Skoll Foundation, the Schwab Foundation, Ashoka, Echoing Green, Acumen Fund, Omidyar Network, and others are identifying and supporting promising innovators. The HUB, based in Vienna, Austria, is developing a network of incubators for social innovators in cities around the world: there are now 25 on five continents with more to come. Innovations for Poverty Action (IPA) and the Jameel Poverty Action Lab are applying rigorous evaluation techniques to many innovations. IPA started the Proven Impact Fund to support initiatives with positive results. Impact Investment Exchange Asia is working on a social enterprise stock market. Some countries, such as the United States and the United Kingdom, are experimenting with new types of legal entities. Community interest companies and benefit corporations are examples of this new class of company, which allows for a mix of social purpose and business structure. Creative financial instruments, such as social impact bonds, are repaid by the government only if stated performance thresholds are met. Colombia and the United States have created national offices for social innovation. Many universities around the world have launched research and education programs in this area. This is all still experimental and nascent.

How do those in the world of development—public and private players, unilateral and multilateral—integrate this activity into their work?

In parallel with the three benefits of social entrepreneurship, development players can take these steps:

- **Promote smart social innovations:** Facilitate the development of social innovation, support rigorous evaluation, and promote adoption of ideas with proven impact.
- **Support resourceful approaches:** Encourage and provide incentives for the development of resource-efficient business models, especially models that do not use scarce public resources—or use them efficiently.
- **Enhance local adaptive capacity:** Invest in local mechanisms that foster decentralized problem solving and harvest the benefits, such as competitions for solutions to pressing problems, funding tied to performance, rigorous evaluation, and incubators for social entrepreneurs.

Many agencies are taking the first step, as USAID did with m2m in Kenya.

Support for resourceful approaches, the second step listed above, might involve foundations, impact investors, and others in building an environment that supports market-based and government cost-saving approaches, through hybrid or for-profit social enterprises. The Rockefeller Foundation's work on impact sourcing such as DDD is one example of this kind of support.

The third step requires helping local actors (such as governments, local philanthropists, investors, and universities) build an infrastructure to stimulate and capitalize on social entrepreneurship. This could mean convening leaders and sharing lessons learned about topics such as new legal entities, new financing mechanisms, national offices for social innovation, and so on. It could even mean stimulating the development of university programs on design for extreme affordability, such as the one at Stanford University that generated d.light.

As a living learning laboratory of problem solving, social entrepreneurship is the key to building societies' adaptive capacity. But it can succeed only if national leaders recognize its value and help build institutions and cultures that provide the right mix of discipline and support. ■

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The Power of Cooperation

Networks of creative collaboration can transform lives

President Bill Clinton

INTELLIGENCE, hard work, and ability are evenly distributed around the globe, but investment and opportunities are not. If we're to fulfill the promises of the 21st century, we need to find new ways to extend the circle of opportunity so that every person—in every country—has the chance to succeed, with systems, infrastructure, and networks that enable growth. When people are able to take control of their own destinies, it gives them something to look forward to every day and expands everyone's understanding of what is possible. It enhances the stability of societies, and equally important, it shifts the work of the international aid community from philanthropy to partnerships.

Our world is more interdependent than ever, and our effectiveness as global citizens will be judged by what we do to create an environment that allows everybody to do better and lift themselves up.

The good news is we can all do something, big or small, to advance opportunity. Enlightened government policies, like Brazil's *Bolsa Família* program, which pays families to send their children to school and to get annual checkups, have proved that countries can reduce income inequality while growing the national economy. Corporations are realizing that sales increase when societies and markets are strong and are increasingly integrating the public good into their business models. The number of nongovernmental organizations (NGOs) operating in all parts of the world has exploded in recent years, and technology now allows millions of people to donate small sums via text message or the Internet, democratizing charitable giving like never before and transforming NGOs' work in the field.

We're making the most progress in places where people have formed networks of creative cooperation—where stakeholders from government, business, and civil society have come together to do things better, faster, and cheaper than any could alone. This is what drives the Clinton Global Initiative (CGI), a meeting held in New York each September since 2005 around the opening of the UN General Assembly. We bring people together from all over the world: heads of state, business leaders, philanthropists, and nongovernmental pioneers, and we ask them to make a specific commitment to solve one of the world's most pressing problems.



President Bill Clinton is the founder of the William J. Clinton Foundation and 42nd President of the United States.

Through vigorous discussion, leaders from different sectors forge partnerships and develop innovative solutions to our modern challenges. For example, for the past two years Coca-Cola has lent its expertise in supply chain management to the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

Together they've found better ways to get vital drugs and medical supplies to those who need them most, and at our meeting this September they announced expansion of the scope of the project. Gap, Inc., is working with a team of NGOs to start the Personal Achievement and Career Enhancement—P.A.C.E.—to empower female garment workers through skills training. The program began in India and has been so successful that partners have begun implementing it in Bangladesh, Cambodia, and Vietnam.

In eight years of CGI meetings, our members have made more than 2,300 commitments across a diverse range of issues—reducing poverty, creating educational opportunities, resolving conflict, and pioneering green technology, to name a few. Their commitments have improved the lives of over 400 million people in more than 180 countries, and once fully funded and implemented they will total more than \$73.1 billion. Our members continue to prove how much we can accomplish when we work together, and they help answer the “how” question—how can we transform good intentions into real improvements in people's lives?

Over the years, I've found that within networks of creative cooperation, NGOs are uniquely positioned to answer this question. NGOs often measure themselves by the long-term human benefits they generate—which allows them to take risks and figure out what works. Then they can work to take the solutions to scale with partners in government and the private sector. And the best NGOs are those that conceive projects from day one with the explicit purpose of working themselves out of a job by empowering citizens to take over without reliance on external donations.

I learned firsthand about the power of the “how” question shortly after leaving office. For the 30 years I was in politics, we mostly debated only two questions: what are you going to do, and how much money are you going to spend on it? When my foundation was approached to help solve the AIDS

crisis in 2002, I quickly realized the flexibility NGOs have to address global problems.

At that time, only 230,000 people in the developing world were receiving HIV/AIDS treatment because the prices of anti-retroviral medications were prohibitively high. It wasn't just the costs of production that made them so expensive—the manufacturers had to build in a precautionary high profit margin because payment from low-income countries was uncertain. At the time, it was the only way they could stay in business.

I thought that if we could put together enough donors to guarantee prompt payment, we could convince the drug makers to change to a high-volume, low-margin business model. So my foundation approached wealthier governments to help buy generic drugs for the developing countries that had asked for my assistance, and we were able to get several—led by Ireland and Canada—to commit.

Our team, led by Ira Magaziner, sat down with the manufacturers and argued that they would make more money if they lowered their prices. If we were wrong, I promised, we would rewrite the contracts so they wouldn't take a loss. They agreed, and today more than 8 million people in developing countries receive lifesaving treatment at a much lower cost—more than half under contracts we negotiated. And the drug companies' profits are better than under the old model. They were able to align their financial interests with our social ones, and everyone came out a winner.

This experience taught me the power of NGOs—working with businesses and governments—to expand and organize markets in a way that enables people to help themselves. My foundation put this idea into practice in the poorest farming regions of Africa, where people have the skills and the will to succeed but lack the tools to do so.

At our Anchor Farm Project in Malawi, we operate a large farm that partners with thousands of nearby smallholders so they can buy seed and fertilizer at bulk prices. We also provide direct access to the market—most farmers don't own a wagon, let alone an automobile, so they often must pay a middleman about half their yearly income just to transport their crops.

The results have been remarkable. The talented smallholder farmers who have worked with us are reaping better yields and, on average, have increased their incomes fivefold. They are forging their own paths out of poverty with a system that is life-changing and sustainable.

This model, if scaled up, has the potential to dramatically improve the quality of life in agriculture-based nations across the developing world. It can help governments use their valuable farmland in a way that boosts domestic food security, reduces reliance on imports, takes advantage of export opportunities, and increases farm productivity and incomes. It means countries can begin to build the capacity they need to succeed without foreign aid.

A similar market-based approach can address any number of challenges. My foundation works on several programs in Colombia with Canadian philanthropist Frank Giustra,

who found success in Latin America's mining industry and has since devoted himself to empowering the local communities there. We're helping small-scale local vendors share in the benefits of the country's successful tourism industry by connecting them with large luxury hotels. We've started the country's first on-site job certification program for construction workers, which has already provided free training for more than 5,000 people. We've worked with Shakira's Fundación Pies Descalzos to provide nutritious meals, vocational training, and educational assistance to more than 4,000 students throughout Colombia.

Frank and I have also joined with Fundación Carlos Slim to start a \$20 million investment fund to help small and medium-sized enterprises expand their operations. They employ about 30 percent of Colombia's labor force, but are severely underserved by existing capital markets. We've set up a similar fund in Haiti to help small and medium-sized enterprises overcome the obstacles to growth they have long faced, which were made even more challenging by the devastating 2010 earthquake.

These two funds carefully invest in businesses that, just like the smallholder farmers in Malawi, show every potential to succeed once given the opportunity to overcome the disadvantages of poverty and geography with targeted assistance.

In today's interdependent world, we all have a vital stake in helping other people succeed. When I look around the world today, I am convinced the positive forces of our interdependence will beat out the negative.

I feel optimistic when I see the death rates from AIDS, tuberculosis, and malaria going down. I feel optimistic when I see poor communities putting more girls in school than ever before, an investment with an amazingly outsized rate of return. I feel optimistic when I see NGOs like Partners in Health, the Bill & Melinda Gates Foundation, and the Starkey Hearing Foundation touching lives. I feel optimistic when I see large corporations like Procter & Gamble, Walmart, and Deutsche Bank aligning their financial interests with our social ones, and sharing their expertise with civil society. I feel optimistic when I see countries like Ireland, Norway, and the United Kingdom heroically preserving their foreign aid budgets amid a weak global economy.

As the biologist Edward O. Wilson details in *The Social Conquest of Earth*, the planet's most successful species are the great cooperators: ants, bees, termites, and humans. We humans enjoy the blessings and bear the burdens of consciousness and conscience. We are capable of self-destruction, but we have an amazing capacity to overcome adversity and seize opportunities when we choose cooperation over conflict.

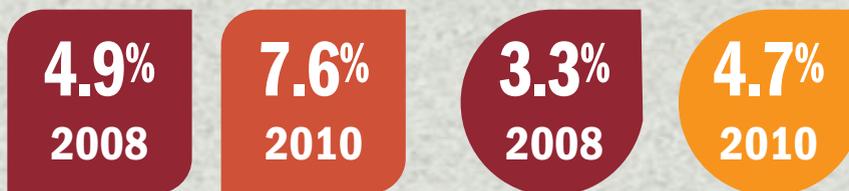
We make the best decisions when we talk to people who know things we don't and understand things differently. If NGOs, businesses, and governments can work together creatively, we can help all the world's people live in dignity. We can all be effective global citizens. ■

The planet's most successful species are the great cooperators.

INVESTING IN PEOPLE

THE recent economic crisis reinforced the importance of a *good education*. People with more education were in general better able to get and keep jobs, even during the global financial crisis, according to a new study from the Organization for Economic Cooperation and Development (OECD).

For example, between 2008 and 2010, unemployment rates in OECD countries for people with only a high school education increased from 4.9 percent to 7.6 percent. By contrast, rates for people with a college education were much lower, rising from 3.3 percent to 4.7 percent during the same period.



UNEMPLOYMENT RATE FOR HIGH SCHOOL GRADUATES

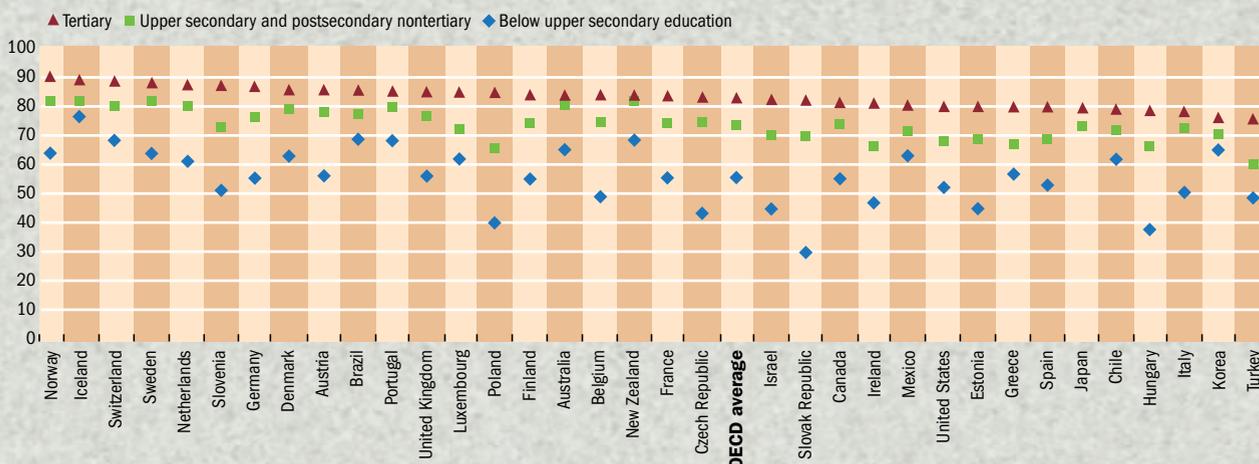
UNEMPLOYMENT RATE FOR COLLEGE GRADUATES

The *Education at a Glance* report reveals stark differences between countries when it comes to higher education opportunities for young people, particularly children from poor families and those whose parents are undereducated. To tackle the growing problem of young people who are not employed, in school, or in training, OECD countries must give priority to policies that ease the transition from school to work and examine such measures as vocational education and training that can productively engage this crucial age group.

ONLY 20%
OF PEOPLE WHOSE PARENTS HAVE LOW LEVELS OF EDUCATION COMPLETE A COLLEGE EDUCATION

Employment prospects increase with the level of education.

(percent of 25- to 64-year-olds in employment, by educational attainment level, 2010)



Note: Data for Brazil are for 2009.

A new study says the global recession underscored the importance of education

62% **17%**

OF YOUNG ADULTS

ENTER COLLEGE PROGRAM

ENTER VOCATIONAL PROGRAM

EXTRA ANNUAL INCOME FROM COMPLETING

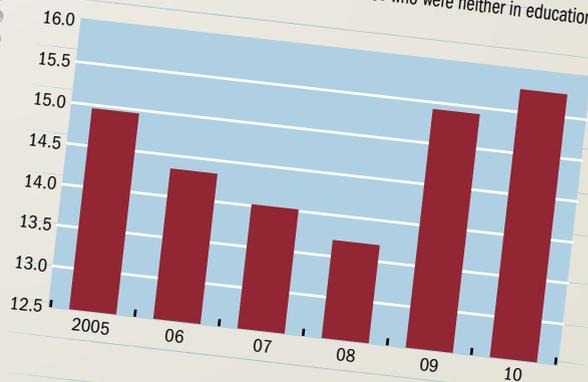


NET RETURNS FROM A COLLEGE EDUCATION OVER WORKING LIFE COMPARED WITH A HIGH SCHOOL EDUCATION



The number of students who were not successful in moving from education to work peaked in 2010.

(percent of 15- to 29-year-olds in OECD countries who were neither in education nor employed)



MALE COLLEGE GRADUATE EARNS

FEMALE COLLEGE GRADUATE EARNS



MORE THAN HIGH SCHOOL GRADUATE

Prepared by Dirk Van Damme, Corinne Heckmann, and Elisabeth Villoutreix. Text and charts are based on Education at a Glance 2012: OECD Indicators, published by the OECD in September 2012. (Unless indicated otherwise, data are for 2010.) The report provides data on the structure, finances, and performance of the education systems in the OECD's 34 member countries plus Argentina, Brazil, China, India, Indonesia, Russia, Saudi Arabia, and South Africa and is available at www.oecd.org/edu/eag2012.htm



China Prompting Western Creativity

Apple store in Grand Central Terminal, New York City.

Chinese manufacturing exporters are capturing low-skill production but driving high-skill innovation in the West

Nick Bloom, Mirko Draca, and John Van Reenen

WHEN the California high-tech company Eye-Fi introduced a new memory chip in 2005 with built-in wi-fi capability it faced a challenge common to many technology firms: how to take a promising prototype and turn it into a mass-market, low-cost product—and get it to market before its rivals.

Eye-Fi's solution was an approach that Western firms increasingly are taking in response to the emergence of China as a manufacturing superpower. It used a local California boutique manufacturer to develop prototypes, which Eye-Fi's engineers refined on an almost daily basis. As demand took off and the product was widely marketed, Eye-Fi moved from low-volume boutique production in the United States to high-volume, low-cost production in China. The high-skill innovation and development took place in the United States, but the lower-skill mass production was moved offshore. As Chinese mass manufacturing increasingly dominates global production, this story is being repeated across the United States, Europe, and Japan.

The stories of Apple's iPhone and iPad are similar. Both were designed and prototyped in California, then produced in China. Chinese manufacturing competition is increasingly capturing low-skill production while simultaneously fostering high-skill innovation in the West.

This reflects how many Western firms are successfully facing the growing economic power of China. The tenfold increase in China's share of imports to the United States and Europe between 1987 and 2007 may have cost many low-skilled workers their jobs (see Chart 1). That is the bad news. But as Eye-Fi illustrates, the dramatic surge in Chinese exports to Europe

and the United States is good news for the economic prospects of Western economies, which must be based on innovation. Chinese exports have encouraged the best firms in advanced economies to get better, powering the innovations that will provide future growth. Of course not everyone will gain—low-skilled workers in Europe and the United States are suffering as employers switch to more highly skilled employees.

Chart 1

On the cheap

China accounted for nearly all of the sharp growth in imports from low-wage countries to the United States and Europe between 1987 and 2007.

(share of imports to Europe and the United States, percent)



Source: Authors' calculations.

Note: Low-wage countries are those whose GDP per capita was less than 5 percent of U.S. GDP per capita between 1972 and 2001.

Take footwear, a classic low-tech sector. Under conventional wisdom, shoe production would be totally offshored to a low-cost producer like China or Vietnam. Indeed, many shoe manufacturers in the United States and Europe have disappeared. But some are innovating with designs that serve parts of the market in which China is less able to compete.

For example, Masai Barefoot Technology (MBT), which makes posture-correcting shoes, began when Karl Müller, a Swiss engineer with a bad back, found relief by walking barefoot on Korean grass. He patented a design to emulate the effect, which has gone on to great success and now attracts many imitators.

Many firms, like MBT and Eye-Fi, have responded to potential inroads by Chinese manufacturers by investing in new technology and human capital and by innovating with highly customized designs. There were far fewer firms doing such innovation before trade integration with China because it is much easier to keep doing things the same way. But a big shock, like competition from Chinese manufacturers, reduces the opportunity cost of innovation and discourages firms from coasting along doing business as usual.

Chinese accession to WTO

A big part of the shock to manufacturers in advanced economies came when China joined the World Trade Organization (WTO) in December 2001 and many trade barriers to Chinese goods were eliminated over the ensuing four years, particularly in textiles. This led to a huge surge in Chinese imports in those economies and to a battle between retailers looking for low-cost products and domestic manufacturers seeking to preserve their markets. Domestic manufacturers, in fact, had partial success in restoring some quotas. Chinese-made clothing, notably women's underwear, piled up in European ports until the European Union and China brokered a deal to end the so-called bra wars.

Events such as China's accession to the WTO are natural experiments for examining the effect of competition from low-wage countries—an opportunity we put to use in our research. In the largest ever study of the impact of China on Western technological change, we tracked the performance of almost half a million manufacturing firms in 12 European countries over the past decade (Bloom, Draca, and Van Reenen, 2011).

We looked in detail at firms' investments in information technology (IT), patenting, research and development (R&D) expenditures, management practices, and productivity growth across all manufacturers. We then quantified the natural experiment offered by WTO accession using detailed information on European textile, clothing, and footwear import quotas.

China effect on technology and jobs

A startling finding is that about 15 percent of technical change in Europe in the past decade can be attributed directly to competition from Chinese imports, an annual benefit of almost €10 billion to European economies. Firms have responded to the threat of Chinese imports by increas-

ing their productivity—adopting better IT, boosting R&D spending, and increasing patenting. Unsurprisingly these actions led to major increases in productivity.

Overall, our findings are consistent with a “trapped factor” explanation of how trade from China drives innovation in exposed firms (Bloom and others, 2012). The intuition behind this model is that some factors of production are costly to move between firms because of adjustment costs

Firms have responded to the threat of Chinese imports by increasing their productivity—adopting better IT, boosting R&D spending, and increasing patenting.

and sunk investment—that is, partially irreversible investments (say in firm-specific skills) that cannot be fully recovered. Although Chinese imports reduce the relative profitability of making low-tech products, firms cannot easily dispose of their “trapped” labor and capital factors. As a result, the shadow cost of innovating and producing a new good falls. That is, by reducing the profitability of current low-tech products, Chinese trade reduces the opportunity cost of innovation, which frees up inputs to produce new products and revamp processes.

The trapped factor effect is well illustrated at a U.S. machinery parts firm we recently visited. Until the early 2000s, the firm churned out a broad mix of products to supply the market. But Chinese firms entered and were able to produce all the standardized catalogue parts at almost half the price. So the U.S. firm simply stopped supplying the catalogue market. This led to some downsizing at the company—low-skilled workers were laid off and parts of the production line were closed down. But at the same time the firm saw it had a market for small production runs that required a fast turnaround (parts needed “tomorrow”), for sensitive customers (military or commercial prototypes), and for products ordered to specification (like the initial production runs for firms such as Eye-Fi). So innovation increased and more engineers were hired, while many low-skilled employees were laid off. Management practices also had to improve substantially to cope with the greater product range and faster turnaround times. Overall, the company shifted from being a mass-market to a niche-market operation, increasing its innovation and IT intensity.

In our study we found rigorous statistical evidence of this trapped factor effect. Big increases in the threat of Chinese competition boosted technical change on average, but the effects were much stronger where there were higher levels of firm-specific or industry-specific capital. Still, not all firms have responded positively by turning to innovation. Inefficient low-tech firms have been much more likely to shed jobs and simply disappear. This in itself raises productivity through the brute force of natural selection, as economic activity shifts from inefficient com-

panies to their more nimble-footed competitors. About a third of the overall effect of Chinese competition occurs in the form of this “creative destruction.” Practically, we find that investing in technology can do much to shield firms in all types of markets from the negative job impact of Chinese competition.

Chart 2 shows creative destruction in action through an examination of job growth in different types of firms in Europe. In the left panel are plants in industries with relatively slow growth of Chinese imports—for example, pharmaceutical and medical device firms. Unsurprisingly, high-tech firms grew faster than low-tech firms. (In the chart we show this disparity for IT intensity, but the same pattern holds for all other technology indicators, such as patents and productivity.) The right panel shows job growth in industries such as furniture, apparel, and textiles in which Chinese import growth was rising dramatically. Just as for the industries less affected by Chinese imports, job growth in high-tech plants was about 10 percent. Although low-tech plants downsized on average in all sectors, many more jobs disappeared in industries more affected by competition from China. In those plants, employment declined nearly 20 percent compared with 10 percent in plants less affected by competition from China. Chart 2 actually underestimates the low-tech decline because it counts only firms that survived. We also found that competition from China increased the failure rate of low-tech firms, but not of high-tech firms.

We measured the effects of Chinese import competition on final goods—those consumed by the purchaser. But there is

an offshoring effect as well on intermediate, or downstream, goods used as inputs by firms in upstream industries. We calculated the effects of this offshoring channel and found that it generated additional positive effects on productivity.

What policies are needed?

There are many benefits of Chinese trade beyond increasing the innovation rate of Western firms. For example, consumers enjoy lower prices, bigger export markets spur investment, and integration means classic gains from specialization.

Although openness improves overall prosperity, the burden of adjustment falls more heavily on poorer, largely unskilled workers, who are now competing with workers in Beijing rather than Birmingham. In addition to the usual channels, our data predict decreased demand for less-educated workers because of accelerated technical change induced by competition from China. Barring retraining or other work support, low-skilled workers face an increasingly bleak future.

It is job losses like these that generate political resistance to trade with China and lead to pressure to act. More export subsidies, labeling China a currency manipulator, and higher trade barriers to benefit industries that are losing out to China are likely to accomplish little and may actually be harmful. Not only will such activities drive up domestic prices—take a walk around a Walmart to see how Chinese goods are saving shoppers money—but restricting imports will also delay necessary restructuring and chill innovation. In fact, trade barriers are likely to persuade firms to divert spending from science and innovation to lobbying and political donations.

The better policy response is to enhance human capital through education and training. This would ease the transition of displaced workers across jobs and allow competitors to seize the opportunity for Chinese trade to drive their creative sectors while producing cheaper goods for their consumers, benefiting both China and the West. And when training is difficult or uneconomic—for example, for workers nearing retirement in heavily depressed areas—regional assistance and generous compensation will soften the blow and help those who wind up losers from globalization. ■

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Chart 2

High-tech saves the day

Jobs in low-tech plants in Europe shrank across the board between 2000 and 2005, especially in those more exposed to competition from China. Jobs in high-tech plants grew, even in industries with heavy import competition from China.

(employment growth, 2000–05, percent)



Source: Authors' calculations.

Note: The chart covers job growth between 2000 and 2005 at 21,000 plants in 12 European countries. The left panel depicts industries that were in the bottom 20 percent of Chinese import growth, such as pharmaceuticals. The right panel depicts industries in the top 20 percent of Chinese import growth. Information technology (IT) intensity measures computers per worker. Plants in the lowest 20 percent (1st quintile) had the fewest per worker; those in the top 20 percent (5th quintile) had the most.



When **Commodity** Prices Surge

Gaston Gelos and Yulia Ustyugova

THE recent surge in food prices means that many countries are soon likely to face a new round of inflation pressure. A severe drought in much of the United States and eastern Europe and problems in other food-producing countries have reduced crop yields. Prospects for continued deterioration in the supply mean prices are likely to stay high in the near term. Oil prices, too, have picked up, driven by geopolitical risks.

In the current global environment of uncertainty and slow economic growth, high and volatile commodity prices, as in 2008, pose a complex challenge. Policymakers must strive to keep the surge in commodity prices from triggering a sustained overall increase in inflation—that is, to prevent the commodity price shock from passing through to so-called core inflation (inflation stripped of volatile fuel and food prices).

This global environment not only causes policymakers to weigh the appropriate policy response, it also highlights the need to

understand which policy frameworks (such as the type of monetary policy pursued and exchange rate approach taken) and structural characteristics—from labor markets to financial markets—help contain the inflationary effects of commodity price shocks. To date, there has been surprisingly little systematic research on this issue.

Myriad questions

Among the dimensions of the policy response to soaring commodity prices are such questions as these: Do countries with more independent central banks or those whose monetary policy targets a specific inflation rate experience lower pass-through of commodity price shocks to domestic inflation—including core inflation? What is the role of an economy's openness to trade or the level of development of its financial sector in the transmission of international price shocks? How important is the pre-existing level of inflation in determining pass-through? To what extent does a country's

A price spike is likely to have more impact on countries with already high inflation levels and weak institutions

governance framework—beyond the institutional features of the monetary regime—influence the impact on inflation? What role does exchange rate flexibility play?

To explore the role of these and other factors, we studied 31 advanced and 61 emerging market and developing economies, using several methodological approaches (Gelos and Ustyugova, 2012). To begin with, we examined how inter-

more developed financial sectors and deeper financial markets. On the other hand, high financial dollarization (use of a foreign currency, often the dollar, in lieu of the domestic currency) is expected to limit the effectiveness of monetary policy, making it harder to ward off pass-through. However, we did not find evidence that either higher financial development or extensive dollarization

There is clear evidence that the higher the inflation rate before the shock, the higher the inflationary impact of a commodity shock.

national commodity price swings affected domestic inflation rates across the countries during 2001–10 by estimating the pass-through from international commodity prices to domestic prices and relating them to country characteristics and policy frameworks (not, though, to any specific policy response). We did this using both country-by-country estimations and panel estimations (which use data from various countries simultaneously). We also analyzed the performance of headline (or overall) inflation and core inflation across the countries in the months surrounding the large 2008 commodity price increases, because the behavior of economic variables may be different when large shocks occur.

The findings confirm that commodity price shocks have stronger effects on domestic inflation in developing than in advanced economies. For example, in advanced economies, the median long-term pass-through to domestic inflation of a 10 percentage point food price shock was 0.2 percentage point. It was about four times larger in emerging market and developing economies. When it comes to fuel prices, the difference is less dramatic. But there is a much greater variance among developing countries in the size of the pass-through. This could reflect the use of price controls and subsidies in some of these countries.

Not surprisingly, food shocks are more likely to have sustained inflationary aftereffects in countries with food as a sizable portion of the basket of goods and services measured by the consumer price index (CPI)—although the difference in pass-through is not fully explained by the different weights assigned to food in advanced and developing economies (see Chart 1). Similarly, fuel price shocks are passed through more in highly oil-intensive economies. According to our panel estimates, a 10 percentage point shock to international food prices, for example, is associated with a 1.4 percentage point increase in inflation in countries whose CPI food share is in the top fifth; the pass-through is only 0.3 percentage point for those with a food share in the bottom fifth.

Some surprises

What came as a surprise, however, is that some other country factors do not seem to affect the inflation response to commodity price shocks in the way economic theory predicts they should. For example, economic theory suggests that monetary policy is more effective in economies with

significantly influenced the way international price shocks affected domestic inflation.

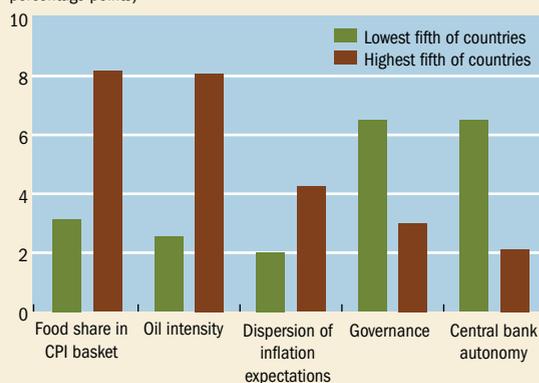
Neither could we document a statistically significant relationship between the pass-through of commodity price shocks to domestic inflation and labor market flexibility; economic theory predicts that economies whose firms can more easily adjust wages and their workforce will experience lower inflation pressure in response to such shocks. Nor can trade openness (measured by the share of exports and imports in total economic activity) generally be blamed for high pass-through of commodity price inflation to domestic prices. However, there is some indication that fuel price shocks have stronger effects on domestic inflation in more open developing economies.

Chart 1

Varieties of pass-throughs

Countries with the smallest share of food in their consumer market baskets, lowest oil intensity, and whose inflation expectations are anchored (not widely dispersed) had the smallest pass-through of commodity price spikes to consumer price index (CPI) inflation during the commodity price surge of 2007–08.

(change in CPI inflation around 2007–08 commodity price shocks, percentage points)



Sources: Arnone and others (2007); authors' calculations; *Consensus Forecasts* (2012); and *International Country Risk Guide* (ICRG).

Note: The chart depicts countries in the bottom and top fifth of the conditions described. Oil intensity measures oil usage as percent of GDP. Governance is based on the ICRG index, which reflects for 140 countries such things as bureaucratic quality, corruption, democratic accountability, and law and order. Central bank autonomy measures the independence of monetary policy from political influence.

There is clear evidence that the higher the inflation rate before the shock, the higher the inflationary impact of a commodity shock. For example, after the 2008 shock, economies with initial inflation above 10 percent experienced, on average, a 6 percentage point higher rise in CPI inflation than countries with preexisting inflation below 10 percent (see Chart 2). Taylor (2000) suggests that the reason for this disparity is that the extent to which firms respond to increases in costs by raising their own prices depends on how persistent the increase is expected to be, and persistence is higher in high-inflation environments. Therefore, low and more stable inflation is associated with a lower inflationary impact of commodity price shocks (Choudhri and Hakura, 2006). There is also some indication that a larger dispersion of inflation expectations (a proxy for the degree of anchoring of inflation expectations) is associated with higher inflation pass-through. (For an early assessment of monetary policy around the 2008 shock, see Habermeier and others, 2009.)

Resisting price swings

What else can be done by policymakers to limit the sensitivity of domestic inflation to international commodity price swings? Our analysis suggests that better overall governance, greater central bank autonomy, and, to a lesser extent, the adoption of inflation-targeting frameworks seem to help anchor inflation expectations and reduce second-round effects of international commodity price shocks.

For example, countries with better governance frameworks as measured by the *International Country Risk Guide* found it

easier to contain the inflationary impact of commodity price shocks over the period 2001–10. This result holds even when controlling for economies that target a CPI inflation rate. In response to a 10 percent increase in food price inflation, a country in the bottom fifth of the governance rating—which covers bureaucratic quality, corruption, democratic accountability, and law and order—on average experienced a 0.9 percentage point higher increase in inflation than a country in the top fifth. Similarly, countries with more autonomous central banks experienced less increase in CPI inflation at the time of the 2008 food price shock and had a smaller pass-through during 2001–10.

However, inflation targeting had a relatively modest impact on the pass-through from commodity price pressure during 2001–10. A 10 percentage point increase in international fuel price inflation, for example, was associated with a long-term inflationary impact on inflation targeters that was only 0.2 percentage point lower than on economies whose central banks do not target CPI inflation. Moreover, although there are indications that in 2008 inflation targeters were somewhat more able than other countries to prevent pass-through of the commodity price surge to general inflation (headline and core), the difference is not statistically significant.

It does appear that in the face of commodity price shocks, overall confidence in institutions is more important than whether a country formally declares itself an inflation targeter. ■

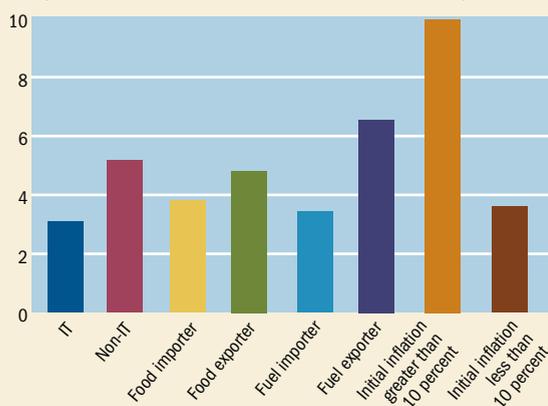
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Chart 2

Difference makers

Many underlying conditions influenced how much of the 2007–08 surge in commodity prices was passed through to headline (that is, overall) inflation, including how high the rate of inflation was before the price shock.

(change in CPI inflation around 2007–08 commodity price shocks, percentage points)



Sources: Authors' calculations; and Roger (2009).

Note: IT refers to inflation targeting, which makes the prime objective of monetary policy achieving a certain rate of consumer inflation. A country is considered a food importer if its five-year average of food imports exceeds its five-year average of food exports; the opposite denotes a food exporter. The same yardstick is used to determine whether a country is a fuel exporter or importer. CPI = consumer price index.

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Spend or SEND

*Rabah Arezki,
Arnaud Dupuy,
and Alan Gelb*

Developing countries can spend commodity windfalls on physical investment, but it may be better in the short run to distribute part of them to their citizens

THE decade-long boom in commodity prices has boosted government coffers in many traditional producing countries. Following a wave of discoveries, new oil and gas producers—such as Ghana, Mozambique, Tanzania, and Uganda—are also emerging (see table). They may not all be major players at the global level, but the revenues they raise will be substantial for them and will brighten the prospects for growth and poverty reduction.

Still, the future is not without its dark side. New oil income will almost certainly relax constraints on government budgets, but it will also create challenges—as conditions in other resource-rich countries show. Many citizens of these countries remain poor, despite large revenues from resources. In some cases competition over resource wealth has fueled or sustained civil conflict. Economic diversification is a further long-run challenge: nonresource sectors tend to lose competitiveness as a result of exchange rate appreciation.

Chart 1

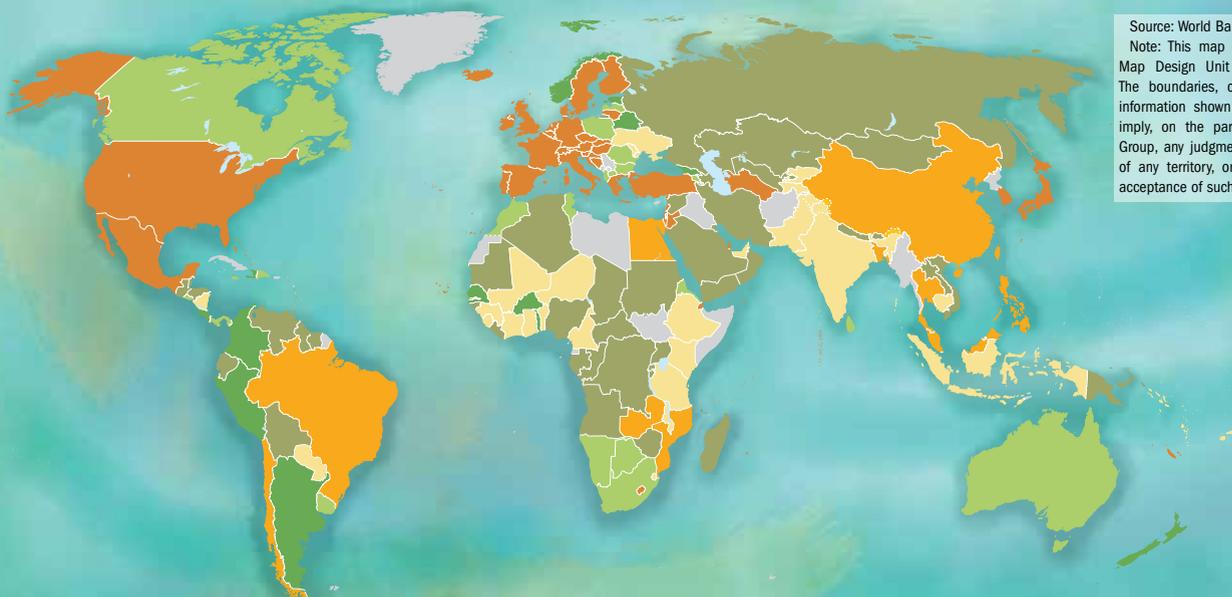
Beyond commodity wealth

The wealth of poor countries tends to be concentrated in natural capital—such as oil and gas deposits and mineral reserves—while advanced economies have moved from natural capital to physical and human capital.

(share of natural capital, percent)



Source: World Bank (2006).
Note: This map was produced by the Map Design Unit of The World Bank. The boundaries, colors, and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.



The big payoff

Recent oil and gas discoveries in Africa may not move world oil markets but are likely to provide a substantial income stream for these countries.

Country	Date	Reserve estimates
Chad	1973	Oil, 1.5 billion barrels
Sudan/South Sudan	1979	Oil, 5 billion barrels
Equatorial Guinea	1995	Oil, 1.2 billion barrels
Uganda	2006	Oil, 3.5 billion barrels
Ghana	2007	Oil, 660 million barrels
South Africa	2009	Shale gas, 16 trillion cubic meters
Mozambique	2010	Gas, 2.8 trillion cubic meters
Tanzania	2010	Gas, 6.5 trillion cubic meters
Kenya	2012	Proving reserves

Sources: Industry and news reports.

Note: The year listed denotes the first substantial discovery of reserves of likely commercial interest.

All of these effects have been seen, for example, in Nigeria in past years. The long-run issues surrounding development become starker in light of the need to rebalance economies by fostering non-commodity-based industries to produce higher-value-added goods and provide a livelihood for people after commodity reserves are depleted. Advanced economies have moved away from natural capital—such as oil and gas deposits and mineral reserves—to physical and human capital (see Chart 1). But the wealth of poor countries tends to be concentrated in natural resources.

The traditional argument is that countries should use their resource revenues to finance public investment. But there are questions about whether this is always the best approach. The limited state capacity of many resource-based countries makes appropriate and effective investment difficult to achieve. Limited capacity reflects not only a government's lack of technical ability to identify, implement, and monitor key investment projects. It is often also the result of public sector corruption that allows those with clout to mispend and misallocate the resource windfall, including through high-value construction contracts that are especially susceptible to mismanagement. As a result, in some cases sharply scaled-up public investment may be the wrong way to go. It may be more effective in the short run to distribute some of the windfall as a direct dividend to citizens and rely on their spending choices to create and foster nonresource industries. In the medium and long run, countries should beef up their governing capacity—investing in investment capacity, so to speak—to relax some of the constraints on the use of revenues.

Avoiding past mistakes

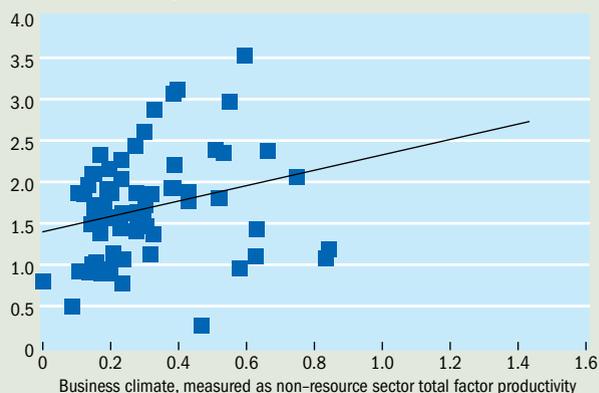
During the booms of the 1970s, many traditional commodity exporters embarked on ambitious, but often wasteful, public spending—including on infrastructure such as roads, ports, and railroads. Case studies document investment projects that were plagued by inefficiency and also contributed to resource misallocation (Gelb, 1988). Even when completed, large projects sometimes failed to provide benefits because governments were unable to cover the high costs of operating and maintaining them.

Chart 2

Different strokes

Good management of public investment and the quality of a country's business climate often do not go hand in hand.

(index, quality of management of public investment)



Sources: Kyobe and others, (2011); Heston, Summers, and Aten (2006); World Bank (2011); and authors' calculations.

Note: The data cover low-income countries eligible for the IMF's Poverty Reduction and Growth Facility. Management quality is measured by the Public Investment Management Index, which has 17 indicators covering strategic guidance and project appraisal; project selection; project implementation; and project evaluation and audit. The scale runs from zero to 4, with a higher score reflecting better public investment management performance. The business climate is measured by non-resource sector total factor productivity (NRTFP), which is the portion of non-resource sector output not explained by the amount of inputs used in production. NRTFP is calculated so that the maximum is 1 and corresponds to the level prevailing in the United States.

Commodity windfalls, because they move directly through government coffers, offer public officials ample opportunity to divert them for personal gain. Manipulation of public spending, especially in the letting of construction contracts, is a major impediment to the successful use of windfalls. A study of 30 oil-exporting countries for the period 1992–2005 shows that large oil windfalls cause a significant increase in corruption (Arezki and Brückner, 2012); this both raises the cost of public investment and reduces its quality. An index of the quality of public investment management produced by the IMF shows markedly lower quality in resource-exporting countries (Kyobe and others, 2011). In addition, spending booms triggered by oil revenues have often overshot available resources and led producing countries, especially those with weak institutions, to fall into debt (Arezki and Brückner, 2011).

To avoid such problems, commodity producers must take into account their institutional conditions when determining the long-term level and type of spending following a commodity windfall. We can model optimal spending decisions for countries with weak governing capacity by assuming that there are inefficiencies—due to poor governance and public institutions—that make the costs of public investment exceed its face value, and we can assume that those costs increase with the size of the commodity windfall. We can also consider the implications of a better or worse investment climate faced by private businesses, which will affect how strongly private investment responds to the opportunities created by public infrastructure spending. Different countries face different combinations of these two institutional conditions (see Chart 2). Some may have a relatively strong public administration but a poor



An oil refinery near Ghana's capital, Accra.

business climate (for example, Algeria), while others with relatively low scores on perceived quality of state institutions manage to sustain quite an efficient private sector (for example, Kenya). We also consider an alternative to public spending: the direct transfer of windfall resource revenues to citizens to supplement their wage income and raise their opportunity to invest and consume.

Citizen gain

The direct transfer of resource windfalls to citizens has been done. The U.S. state of Alaska and the Canadian province of Alberta send their citizens a yearly payment based on oil revenue. Each Alaska resident, for example, received a dividend of about \$1,300 in 2009 (Ross, forthcoming). Mongolia distributes part of its mining revenues to its citizens and has recently pledged to endow each Mongolian with a portfolio

New technology has opened up ways to transfer funds accurately and efficiently to households—and at low cost.

of dividend-yielding preference mining shares. One argument for citizen dividends draws on evidence that taxation has historically been central to the creation of effective modern states: by distributing resource revenues and then taxing back part of them governments improve public accountability because citizens are more inclined to monitor the use of public funds (Sala-i-Martin and Subramanian, 2003; Moss, 2011). More direct arguments relate to the observed inefficiency in public spending, especially as programs are scaled up, and the frequent failure of ordinary people to benefit from the scaled-up public spending programs. Still more immediate arguments relate to increasing evidence of the development impact of cash transfers and the possibility of making them effectively.

Social transfers work and are one of the most effective—and evaluated—mechanisms of development assistance, especially when those transfers are conditioned on actions by recipients—such as keeping children in school. Many studies document how such transfers help households reduce poverty

and improve children's growth indicators, encourage school attendance, and improve access to health services. There is also little evidence that transfers to poor people discourage people from working. On the contrary, recipients seem to use the money to search for jobs. Moreover, transfers appear to encourage productive household activity. Poor households are less constrained by the deficient credit and insurance markets that characterize less developed economies. Small but reliable flows of transfers have helped poor households accumulate private productive assets, avoid distress sales in bad times, obtain access to credit on better terms, and diversify into higher-risk and higher-return activities. There is also some evidence that the introduction of transfers into poor remote areas can stimulate demand and local market development. Transfers are increasingly being integrated into social protection programs. Evidence from many social programs suggests that resource-generated transfers can help both recipient households and the country.

Not long ago, it would have been difficult, if not impossible, to send a windfall dividend to citizens in poorer countries without much of it being lost or appropriated by corrupt civil servants. But new technology has opened up ways to transfer funds accurately and efficiently to households—and at low cost. Cellular phones and biometric smartcards are increasingly being used, even in countries with poor institutions and low capacity. For example, Pakistan's Watan Card program delivered reconstruction support to more than 1.5 million flood-affected households. South Africa's system of social grants effectively uses this technology, as does a program to support demobilized militias in the Democratic Republic of the Congo. Biometric technology can overcome traditional difficulties in identifying recipients, preventing multiple payments, and eliminating "ghost" recipients. Gelb and Decker (2012) consider 19 programs. Not all programs have been

comprehensively evaluated, but the evidence indicates that they can be implemented on a large scale with nearly all funds going for their intended use ("little leakage," in economic parlance), using identification and payment technologies that provide benefits beyond the transfer program itself—such as access to a bank account for precautionary savings and fuller and accurate electoral rolls. Because these technologies can minimize the costs of distributing an oil dividend uniformly across the population, it is reasonable to assume that policymakers can use part of a commodity windfall to provide direct transfers at essentially zero cost.

What to do

Considering all these elements in a model of optimal windfall use leads to a number of conclusions that can help guide policy. All decisions should of course be made in a long-run context that encourages saving when resource income is high to enable spending to continue when that income is

low. But beyond these considerations, institutional features shape how the windfall could best be used. Weaker public administrative capacity reduces the optimal level of public investment in favor of larger transfers to citizens: it is better to give private households part of the funds directly than to waste them on ineffective spending. Moreover, all else equal, a larger commodity windfall should induce lower rather than higher public investment, because the behavior of officials seeking to appropriate the windfall further weakens the country's capacity. These conditions bolster the argument for transfers to citizens.

The underlying business climate also plays a role in determining the optimal use of resource revenues. Good conditions—such as security and stable pro-business regulations that encourage the private sector—may compensate for weak capacity and justify higher public investment. This is because public investment spending is likely to encourage more productive private investment, which in effect raises the return on the public investment. Government capacity may affect the business climate, but good governance and a good business climate do not always go hand in hand, as we show in our examples above. Commodity-producing governments and their strategic economic advisors must take these institutional factors into account when determining how to use their revenues.

Investing in investing

Limited government capacity is a constraint, but not necessarily a fixed one. Some countries—Chile, for example—have strengthened their capacity; others have arguably weakened it. A windfall might well be spent in part on improving a country's capacity to manage its investment program and provide the key public goods and services—such as effective roads, power supply, and regulation—the private sector needs to thrive. To explore such a possibility we extended our basic model by introducing the possibility of reducing the adjustment cost in public investment over time—at a price. We found that optimal public investment increases over time, with reliance on transfers diminishing as ever-increasing public capital attracts more private capital and produces more wage income. In general, the better the business climate, the stronger the arguments for this strategy. There is less point in boosting public investment if it then fails to stimulate private investment to produce valuable output. More research is needed on modeling state capacity, ways to invest in that capacity, and the time frames for such improvement.

To combat corruption, commodity exporters could ensure better transparency in the handling of windfalls. For instance, the Extractive Industries Transparency Initiative provides a global standard for transparency in the oil, gas, and mining industries, while the Natural Resource Charter, which builds on the transparency initiative, offers more comprehensive principles for governments and societies on how to best harness the opportunities for development generated by extractive commodity windfalls. Those initiatives can serve as anchors for enhancing transparency and accountability in commodity-rich countries. More specifically, open pub-

lication of public procurement contracts can help improve investment quality and reduce contract costs and cost overruns (Kenny and Karver, 2012).

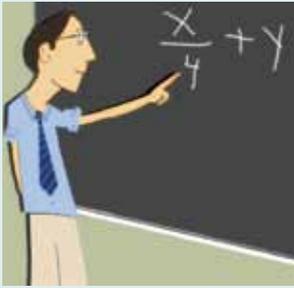
Countries can also boost their technical ability to identify and implement projects. An example is Chile, which for three decades has subjected all public projects to disciplined and transparent cost-benefit analysis. The South American nation standardized the approach to evaluating a project and separated the institution that evaluates a project from the one proposing it. The National System of Investments is based at the Ministry of Planning and is administered jointly with the Ministry of Finance. A combination of efforts to increase technical capacity and eradicate corruption is the best way to harness the power of commodity windfalls in developing countries. ■

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What Is LIBOR?

The London interbank rate is used widely as a benchmark but has come under fire

John Kiff

EVERY weekday at about 11 a.m., 18 large banks, under the auspices of the British Bankers' Association, report the rate at which they believe they can borrow a "reasonable" amount of dollars from each other in the so-called London interbank market. They report rates for 15 borrowing terms that range from overnight to one year. The financial news agency Thomson Reuters gathers the reported rates on behalf of the bankers' group, throws out the four highest and four lowest, and averages the rest. It then announces that average rate at which banks say they can borrow dollars for each of the 15 maturities.

The process is carried out for nine other currencies as well. The average—often referred to in the singular even though there are 150 rates—is called the London interbank offered rate (LIBOR). It is one of the best known and most important interest rates in the world.

LIBOR's importance derives from its widespread use as a benchmark for many other interest rates at which business is actually carried out.

But it is not important because banks actually transact business with each other at the announced rate—although that can happen. Rather, LIBOR's importance derives from its widespread use as a benchmark for many other interest rates at which business is actually carried out. According to a recent U.K. Treasury report, \$300 trillion in financial contracts are tied to LIBOR—and that doesn't include rates on uncounted tens of billions of dollars of adjustable rate home mortgages and other consumer loans around the globe in which LIBOR, in one way or another, is referenced.

Because the U.S. dollar is the most important of the world's currencies, U.S. dollar LIBOR rates are probably the most widely used and cited. Other panels—ranging in size from 6 banks to 16—report daily what it would cost them to borrow Australian dollars, British pounds sterling, Canadian dollars, Danish kroner, euros, Japanese yen, New Zealand dollars, Swedish kronor, and Swiss francs short term in the London interbank market.

Much is likely to change, though, as a result of controversy over how some banks report the rates at which they "believe" they can borrow and because of some underlying problems

with the LIBOR concept. In late September the U.K. government announced proposals to bring the setting and maintenance of this important benchmark under government purview, base it on actual transactions, and eliminate most of the 150 separate rates.

A recent innovation

Although banks in London have been lending to one another for centuries, LIBOR is a relatively new idea. It has its roots in the sudden growth in the early 1980s use of futures contracts to hedge against interest rate risk. Good benchmark rates were needed to settle those contracts. Markets turned to the banking industry trade group and the Bank of England to provide such a rate. The British Bankers' Association launched LIBOR in 1986—initially with only three currencies—the dollar, the yen, and the pound sterling.

LIBOR was established as a standardized benchmark for the pricing of floating-rate corporate loans. However, its introduction coincided with the growth of new interest rate-based financial instruments—such as forward rate agreements and interest rate swaps—that also require standardized and transparent interest rate benchmarks.

LIBOR is supposed to reflect reality—an average of what banks believe they would have to pay to borrow a "reasonable" amount of currency for a specified short period. That is, it represents the cost of funds—although a bank may not actually have a need for the funds on any given day.

But LIBOR has long been dogged by perceptions that the method for setting the rates is flawed and prone to distorted results during periods of market stress when banks stop lending to each other across the full maturity spectrum, from overnight to one year.

A more direct challenge to its authenticity came from attempts to manipulate LIBOR (and other benchmark rates) by the big British bank Barclays, for which it agreed in June 2012 to pay fines totaling about \$450 million to regulators in the United Kingdom and the United States. Other banks are

also under investigation for misreporting LIBOR rates, with bank equity analysts estimating that fines and lawsuits could total almost \$50 billion.

But even before the controversy over manipulation called into question its accuracy, LIBOR was often called a “convenient fiction” because of the disconnect between the LIBORs used as benchmarks and actual borrowing in the London interbank market. Most banks loan each other money for a week or less, so most LIBORs for longer maturities are set on the basis of educated guesses. Yet almost 95 percent of transactions that reference one of the LIBORs—from interest rate derivatives to home mortgages—are indexed to rates for maturities three months or longer. The U.S. three-month maturity period (or “tenor,” as the maturity period is called) is the most popular, according to the U.K. Treasury. A further hint that unsecured term lending has become a fiction was the decision by ICAP, a large London broker-dealer, to stop publishing its one- and three-month New York Funding Rate (NYFR) indices, an alternative to LIBOR, due to a lack of data from New York-based banks.

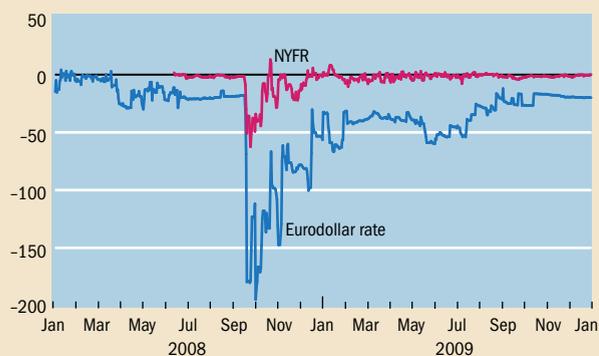
Nevertheless, LIBORs have been found to be reasonably accurate, most of the time tracking closely similar benchmarks that are tied to actual unsecured bank funding rates such as those for commercial paper.

The glaring exception was the period immediately after the September 2008 failure of the New York investment banking firm Lehman Brothers, which triggered the global financial crisis. The three-month U.S. LIBOR diverged from two publicly available similar short-term rates—the ICAP NYFR and the three-month rate on Eurodollar deposits, which are U.S. dollar-denominated deposits at banks located outside the United States.

Sharp divergence

The three-month U.S. London interbank offered rate (LIBOR) was markedly lower than two similar interest rates—the three-month Eurodollar deposit rate and the three-month New York Funding Rate (NYFR)—after the collapse of Lehman Brothers in September 2008.

(difference between LIBOR and the NYFR and Eurodollar rates, basis points)



Source: Author's calculations.

Note: Eurodollar deposits are U.S. dollars on deposit at banks located outside the United States. The NYFR was compiled by the London broker-dealer ICAP from information reported by prime banks operating in New York and was designed to reflect short-term borrowing costs of those banks. ICAP stopped reporting the NYFR in August 2012. A basis point is 1/100th of 1 percent.

LIBOR was lower than the Eurodollar rate during early 2008 but was markedly lower in the period immediately following the Lehman collapse. LIBOR appears to track the NYFR very closely, except in the immediate aftermath of the Lehman failure, when it too was decidedly lower (see chart).

In part, LIBOR may have been lower after the Lehman failure because of an unintended consequence of a British Bankers' Association rule meant to ensure that banks reported their borrowing costs truthfully: immediate publication of individual banks' reports. While normally this would encourage honesty, in 2007–08 this safeguard may have backfired. Banks were reportedly loath to suggest that they were having trouble obtaining funds by reporting a rate higher than other banks were being charged. So to mask its liquidity problems, a bank with funding problems had an incentive to report lower rates than it really believed it would be offered. Indeed, a number of studies have suggested that banks submitted lowball rates after the collapse of the investment bank Bear Stearns in March 2008 as well as after the Lehman collapse six months later.

Other studies have found situations that suggest a bank was not reporting accurately. But studies that looked for bank-specific signs of collusion have been generally inconclusive.

Following the scandal there were some calls to eliminate LIBOR. But because it is so important and pervasive as a benchmark, the British government decided it could not be junked and should be saved.

First, the British government proposed to take over supervision of LIBOR from the bankers' group, which Martin Wheatley, managing director of the U.K. Financial Services Authority, said, “clearly failed to properly oversee the LIBOR setting process.” Wheatley outlined the government's proposed changes in a report published in late September.

Under the proposed reform, LIBOR would still be set daily based on reports to a U.K. regulator by panels of banks. But the banks would be required to provide data to show that the rates they submit are an accurate reflection of their borrowing costs. And although the government would still report the submitted rates publicly, it would do so with a three-month lag so that banks would not have an incentive to lie about their costs during a period of stress. Moreover, Wheatley said, the government proposes to impose criminal sanctions on banks that misreport.

And to focus the production of LIBORs on interest rates that matter—and for which there are verifiable funding costs—the Australian, Canadian, Danish, New Zealand, and Swedish currencies would be phased out and four maturities eliminated. The number of LIBORs would drop from 150 to the 20 that are most important to market participants.

Nevertheless, many of the rates would still be unsupported by actual interbank transactions. So the Wheatley report encourages market participants to rethink their use of LIBOR as a benchmark and consider the need for a backup plan if the rates are no longer produced. ■

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Francesca Bastagli, David Coady, and Sanjeev Gupta

Fighting income inequality with redistributive social spending has been more effective in advanced than in developing economies

RISING income inequality is at the forefront of public debate both in advanced and in developing economies. Globalization, labor market reforms, and technological advances—all of which tend to favor higher-skilled workers—are important drivers of this divergence of fortunes.

Policymakers and commentators alike have expressed deep concern about the economic and social consequences of the persistent, and often sharp, increase in the share of income captured by higher-income groups. Many think reducing income inequality is crucial to promoting more widespread access to economic, social, and political opportunities.

Some inequality is necessary as an incentive for investment and growth, but there is evidence that when the disparity is too great it can stymie growth (see “Equality and Efficiency,” *F&D*, September 2011). Recently, a number of prominent experts have argued that rising income inequality was an important driver of the financial crisis.

How can public policy address high inequality? In a recent IMF study, we examined global trends in income inequality and the role fiscal—government spending and taxation—policies can play in reducing it.

In *advanced economies*, fiscal policy has done much to reduce inequality, but protecting its redistributive role is likely to become harder with prolonged fiscal adjustment over the coming decades as many countries try to reduce public debt to sustainable levels.

On the other hand, fiscal policy has done little to redistribute income in *developing economies*, which do not have the resources to finance redistributive public spending. To reduce inequality, governments in these economies must raise more revenue and develop more redistributive spending instruments, such as public pensions and targeted transfers.

The path of income inequality

To study global trends in income inequality we assembled a comprehensive database on disposable income (that is, how much people

Fair Share

have to spend, including social benefits and minus income taxes) in 150 advanced and developing economies between 1980 and 2010. We used the most common indicator of income inequality, the Gini coefficient, to assess changes in income distribution. (The Gini coefficient ranges from zero, when everyone has the same income, to 1, when a single individual receives all the income.)

We found that inequality in disposable income increased in most advanced and many developing economies over recent decades (Chart 1) and that inequality is substantially higher in developing than in advanced economies.

Data are available for a large sample of advanced and developing economies for 1990 to 2005. During this period, inequality increased in 15 of 22 advanced economies and in 20 of 22 emerging market economies in Europe. In Latin America and the Caribbean—the region that already had the least equitable income distribution—inequality increased in 11 of 20 countries, although it has since decreased in most countries. In Asia and the Pacific, inequality increased in

13 of 15 countries, as it did in 9 of the 12 countries in the Middle East and North Africa. In sub-Saharan Africa, the only region in which average inequality decreased over the period, it still increased in 10 of 26 countries.

Another striking trend is the sharp increase in the share of income captured by the very rich since the early 1980s (see “More or Less,” *F&D*, September 2011). The evidence has focused on the share of market income (income before taxes and social transfers) captured by the richest segments of the population.

For example, in the United States, the richest 10 percent earned 30 percent of market income in 1980 and 48 percent in 2008. There was a similar trend in other advanced economies, as well as in India and China, but it was much less pronounced in Scandinavian and southern European countries and was almost nonexistent in other continental European countries and Japan.

Reducing advanced economy inequality

Taxes and public transfers have played a significant role in offsetting the increase in inequality in nearly all advanced economies. Over the past two decades, fiscal policy reduced inequality by about one-third in Organization for Economic Cooperation and Development (OECD) countries. Fiscal policy has also tended to have a larger redistributive impact in countries with higher market income inequality. In 2005, for example, fiscal policy reduced income inequality, as measured by the Gini coefficient, by 20 or more points in Belgium, France, Germany, Italy, and Portugal—all of which had some of the highest market income inequality among advanced economies, with Gini coefficients between 0.48 and 0.56.

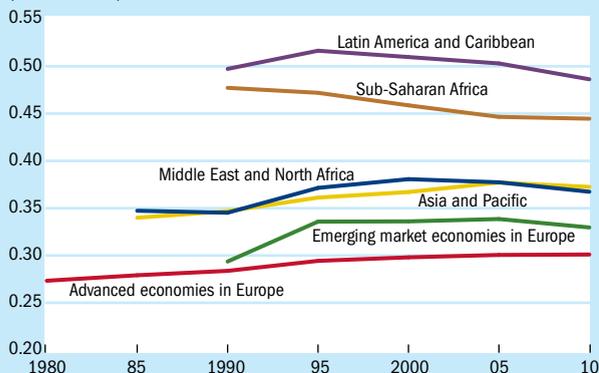
Most of this redistribution was achieved through expenditures—especially transfers that citizens receive regardless of their income, such as public pensions and universal child care benefits. These transfers are distributed much more equally than market income and account for fiscal policy’s relatively larger redistributive impact in Austria, Belgium, Hungary, Poland, and the Scandinavian economies. On average, the redistribution achieved by these transfers is twice as large as through taxes (see Chart 2).

Chart 1

Unequal trends

Income inequality is highest, albeit falling, in Latin America and lowest in advanced and emerging market economies in Europe.

(Gini coefficient)



Source: Authors' calculations based on various inequality databases.

Note: The Gini coefficient ranges from zero, when everyone has the same income, to 1, when a single individual receives all the income.

Income taxes are another key redistributive tool. In fact, in most economies, income taxes redistribute wealth better than means-tested transfers (based on the recipient's income) though not as well as non-means-tested transfers.

The redistributive impact of fiscal policy is even greater when in-kind transfers, such as public education and health spending, are included. These transfers lower the Gini coefficient for disposable income by as much as 6 percentage points and reflect universal access to education and health services. More equal access to education also has the added benefit of reducing the inequality of market incomes.

Limits on developing economies

The increase in inequality in advanced economies over recent decades pales in comparison with the gap between developing and advanced economies.

Substantially higher inequality in developing economies stems largely from limited redistributive fiscal policy in these countries. This, in turn, reflects their lower levels of taxation and public spending and the use of less progressive tax and spending instruments.

Taxes in advanced economies, on average, exceed 35 percent of GDP, but in developing economies (excluding emerging Europe) they are generally much lower, at 15 to 20 percent of GDP (see Chart 3). Consequently, government spending is also substantially lower in developing economies, especially in Asia and the Pacific and in sub-Saharan Africa, where lower transfer spending explains most of the difference.

For example, in a study of the early 2000s, almost three-quarters of the difference in disposable income inequality between Latin America and advanced European economies can be explained by fiscal policy. In six Latin American coun-

tries (Argentina, Brazil, Chile, Colombia, Mexico, Peru), fiscal policy reduced the average Gini coefficient by only about 2 percentage points, from 0.52 to 0.50. In 15 European economies the decrease was about 20 percentage points—from 0.46 to 0.27. But there is some evidence that the more recent decrease in inequality in Latin America is in part a result of more redistributive fiscal policy.

Less impact in advanced economies

A worrisome trend is the diminishing redistributive impact of fiscal policy since the mid-1990s in many advanced economies. Chart 4 shows how market- and disposable-income inequality for working-age households has changed since the mid-1980s; the difference represents the redistributive impact of fiscal policy in each period.

Between the mid-1980s and mid-1990s, the Gini coefficient for market income rose by 3 percentage points, while that for disposable income grew by only 0.8 of a percentage point. In other words, inequality between what people earned went up a lot, but the difference between what they had available to spend changed little.

Fiscal policy therefore offset 73 percent of the increase in market income inequality over this decade. Although the inequality of market income increased less over the subsequent decade, the redistributive impact of fiscal policy also diminished. As a result, during the two decades from the mid-1980s to the mid-2000s, fiscal policy offset only 53 percent of this increase, and market income inequality grew by twice as much as redistribution.

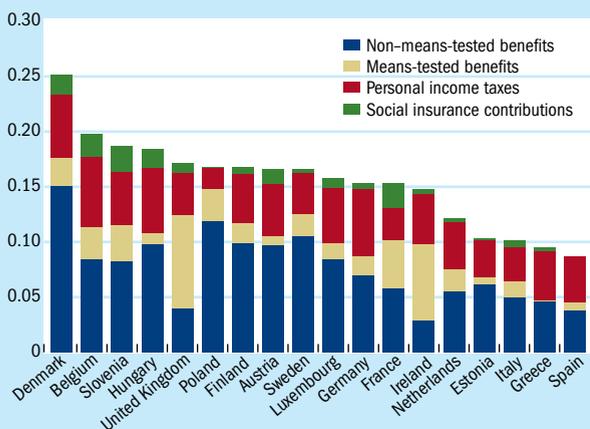
This decreasing impact of fiscal policy in recent decades is surprising since without policy reform, progressive tax-benefit systems tend to become increasingly redistributive as market-income inequality increases—for example, because of higher unemployment or rising incomes of higher-income groups. Evidence suggests that the blunting of fiscal policy reflects reforms that made the tax-benefit system less pro-

Chart 2

Toward equality

Universally available benefits have the greatest effect on inequality.

(decrease in the Gini coefficient in EU countries due to taxes and transfers)



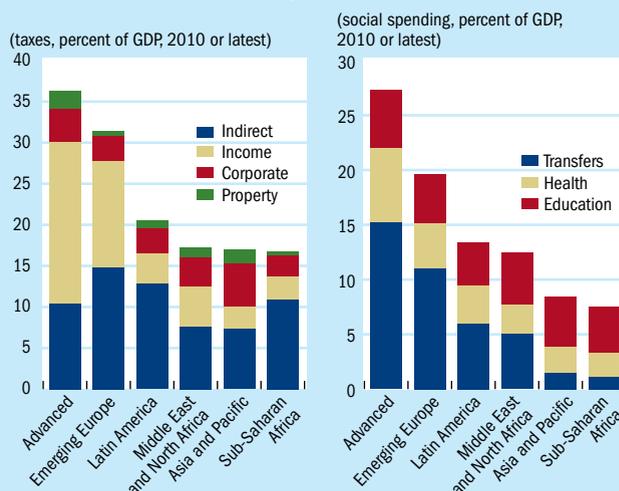
Source: Bastagli, Coady, and Gupta (2012).

Note: Policies simulated reflect those in effect between 2000 and 2005, with precise dates varying by country. For presentation purposes, Gini impacts of various taxes and transfers are stacked, although the total combined impact is not strictly the sum of each tax's and transfer's impact.

Chart 3

Doing more with more

Advanced economies feature higher income taxes and social spending.



Source: Bastagli, Coady, and Gupta (2012).

gressive overall. In many economies, reforms since the mid-1990s have cut social benefits, particularly unemployment and social assistance payments, while also reducing income tax rates, especially at higher income levels.

On the tax side, progressive revenue measures can head off the need for large cuts in transfers, although the effectiveness of such measures is limited if taxes are already high. Removing opportunities for tax avoidance and evasion,

During the coming period of fiscal retrenchment, policy reforms must protect the redistributive role of taxation and spending.

This deterioration in redistributive impact is even more worrisome because many advanced economies must cut back on spending and increase taxes over the coming decade to reduce high public debt. In the past, such fiscal cut-backs resulted in short-term increases in inequality due to increased unemployment—especially of unskilled laborers—and heavy reliance on expenditure cuts.

During the coming period of fiscal retrenchment, policy reforms must protect the redistributive role of taxation and spending.

In the short term, fiscal policy can lessen the adverse impact of fiscal retrenchment through what are known as automatic stabilizers, such as unemployment benefits. Expenditure cuts that increase inequality can be tempered by protecting the most progressive social benefits and targeting them better. This approach has been used in Denmark, Germany, Iceland, and Sweden. Reforms to less redistributive spending, such as military funding, subsidies, and public sector wages, can reduce the need for cuts in more redistributive social transfers. In addition, expanding active labor market programs such as job-search support, targeted wage subsidies, and training programs can help speed up employment when economic growth resumes.

which typically benefit mainly higher-income groups, can simultaneously improve both the efficiency and the distributional impact of the tax system, as can a greater reliance on progressive wealth and property taxes.

Enhancing redistribution in developing countries

The challenge in developing economies is to develop fiscal policy that enhances redistribution while promoting growth and maintaining fiscal sustainability. This will require both a strengthened capacity of governments to mobilize resources and more redistributive expenditure programs.

On the tax side, the focus should be on broadening tax bases rather than increasing tax rates. Expanding corporate and personal income tax bases by reducing tax exemptions, closing loopholes, and improving tax compliance would raise revenues to finance redistributive transfers. Expanding the consumption tax base—for example, through a value-added tax—would increase tax revenues. Such consumption taxes can be designed to avoid adverse distributional impacts—for example by exempting small businesses and applying excises to luxury goods.

But limited revenues and heavy demands on these resources to finance development mean public spending has to become more redistributive. This can be achieved through greater reliance on social expenditures that are targeted, rather than universal, and aim to protect at-risk households from poverty and to improve the education and health outcomes of poor households. Many countries can save a lot of money quickly by eliminating universal price subsidies, which are expensive and inefficient. Conditional cash transfer programs link benefits to household investment in the education and health of family members. These programs have been successful in many developing economies and should play a greater role in social protection strategies. Expanding coverage of public pension systems is another effective way to reduce inequality. Where such expansion faces short-term constraints in administrative and fiscal capacity, greater use of targeted “social pensions” may be warranted until pension coverage can be broadened. ■

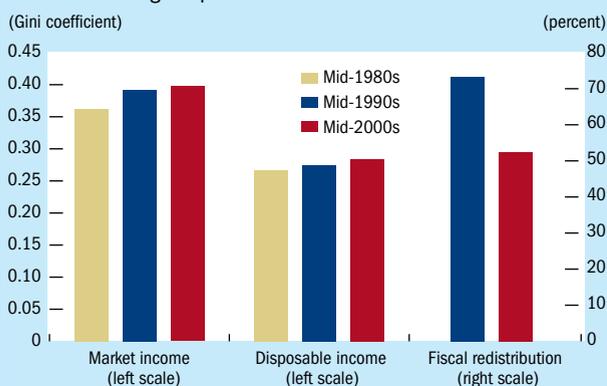
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This article is based on the authors' IMF Staff Discussion Note 12/08, "Income Inequality and Fiscal Policy."

Chart 4

Slowing impact

Fiscal policy's effect on inequality since the mid-1990s has been lower than during the previous decade.



Source: Bastagli, Coady, and Gupta (2012).

Note: "Fiscal redistribution" bars indicate how much of the increasing inequality in market incomes was offset by fiscal policy from the mid-1980s to the mid-1990s (blue bar) and from the mid-1980s to the mid-2000s (red bar).

Rethinking Sustainable Development

A new development agenda needs to be truly global, relevant to all, and realistic in assigning responsibilities

Nemat Shafik



Nemat Shafik is Deputy Managing Director of the International Monetary Fund.

AS the 2015 deadline for achieving the Millennium Development Goals approaches, much thought is being devoted to what should succeed that framework for measuring global progress against hunger, disease, and poverty. Any successor framework must reflect global aspirations and arise from a rich consultative process. I believe that the new framework must embrace a broader understanding of development—one that is relevant for all countries, rich as well as poor.

The world today looks very different from a few years ago. Many countries have high levels of debt that could make it difficult to undertake spending initiatives for many years. Financial sector incentives and regulation may have to be rethought, existing growth models refined to deliver sufficient new employment opportunities, and the functioning of the international monetary system revisited.

The most immediate challenge is restoration of confidence in the global recovery. After showing some resilience in 2011, global growth has slowed again, mainly because of continuing uncertainty about developments in the euro area and a potential fiscal crisis in the United States. Any efforts at restoring confidence in advanced economies must be accompanied by efforts to tackle the high and pervasive unemployment and the shortage of decent job opportunities in many countries around the world, especially in Europe and the Middle East. The jobs crisis is particularly acute for young people. A rebound in growth will help, but even then the pace of job creation will have to accelerate very rapidly to absorb both the existing unemployed and the new entrants coming into the labor market.

Other issues include globalization and the difficult job of managing that process; policy and market failures exposed by the crisis that still have not been addressed, especially in the financial sector; and longer-term trends such as widening disparities in income distribution, aging and imbalanced population growth, global food insecurity, and climate change.

Finding a cooperative solution to these challenges is even more urgent than at the turn of the century, when the world community joined forces through the United Nations' Millennium Development campaign to defeat the scourge of poverty and the hunger, disease, and lack of opportunities that accompany it.

New imperatives

The Millennium Development Goals focused attention on the need to reduce absolute poverty. And while significant gaps remain relative to the targets set out in the Millennium Declaration, the achievements are remarkable. Let's not forget, for instance, that the incidence of extreme poverty in the world has been halved since 2000.

But the global economic crisis was a huge setback—one from which the world economy has still not fully recovered. Europe continues to battle its debt crisis, with Japan and the United States also in need of fiscal reform. The Middle East and North Africa region is undergoing a historic transition: hopes for a brighter, more democratic future rest crucially on the economic transformation that sustains high and equitable growth. And then there is the challenge of ensuring that rapidly rising incomes in other emerging market and developing economies continue, but in a manner that is socially and environmentally sustainable.

Consider these developments:

- **Income inequality has widened.** The past decades have seen unprecedented economic growth, which has raised living standards on average. But overall, the rich have done much better than the poor. This growing inequality breeds social resentment and generates political instability.
- **Chronic unemployment and pervasive underemployment have escalated.** Five years after the crisis first erupted in the U.S. mortgage market, 200 million people worldwide still cannot find decent work, including 75 million young people who are at risk of becoming members of a lost generation.
- **Populations are growing unevenly.** By 2050, the global economy must provide food and jobs for more than 9 billion people, 85 percent of whom will live in what are now developing countries.
- **Climate change is worsening.** Biodiversity loss is enormous and global warming continues—carbon dioxide emissions are at deeply worrisome concentrations.

A truly global agenda

All these problems are intertwined and cannot be solved in isolation. That's why the post-2015 global development agenda must go beyond our traditional understanding of development—that is, helping less developed countries catch up with those that are more advanced. The agenda must also address the various imbalances in the global economy, including spillovers that ultimately affect the poor and vulnerable everywhere.

A new agenda needs to be truly global in scope, relevant to all in its goals, and realistic in how it assigns responsibilities—to advanced, emerging market, and developing economies. Safeguarding the well-being of future generations is a joint responsibility of all members of the international community, but we must also distribute fairly the burden that responsibility entails, given the enormous differences in capabilities among countries.

Increased interconnectedness calls for greater policy coordination. We need effective global leadership, and we need it fast. With its global membership, the United Nations should continue to play a leading role in fostering effective international cooperation. But multilateral coordination needs to become more effective. To put it bluntly, we cannot afford to waste time on endless discussions among countries, only to arrive at the lowest common denominator. We need a bold yet realistic approach, one that allows us to move quickly from words to implementation.

The IMF's part

The IMF has played a key role in helping the global economy recover from the economic crisis, and it continues to work with its 188 member countries on many fronts to put the global economy on a sounder footing. There has been tremendous change these past five years, but there is still much to do:

- **Strengthen global stability.** The IMF has improved its ability to connect the dots between countries and focus on

the stability of the global economy as a whole. An *upgraded framework* for economic monitoring enables deeper analysis of spillovers and cross-border effects. The IMF has sharpened its assessment of countries' policies from a multilateral perspective. It is also placing greater focus on the critically important financial sector.

- **Support countries in downturns.** Since the start of the global economic crisis, the IMF has committed well over \$300 billion in loans to its member countries. It has overhauled its *lending framework* to enable it to better target the varied needs of its member countries and has streamlined conditions attached to its loans. In recognition of *low-income member countries'* need for financial assistance, the IMF has also quadrupled its concessional lending.

We need effective global leadership, and we need it fast.

- **Build a crisis firewall.** To meet ever-increasing financing needs, the IMF has greatly bolstered its *lending capacity* by securing \$461 billion in pledges from member countries to boost its resources.

- **Make growth more inclusive.** IMF *research* shows that countries with more equitable income distribution do better at sustaining growth. The IMF has been working with the International Labor Organization to formulate more effective *policy advice on employment and labor market issues*, and with the World Bank and other international organizations to help countries strengthen social protection.

- **Design policies for the green economy.** Our policy advice encourages the transition to a *greener economy* by ensuring that prices reflect the full cost of adverse environmental side effects. For example, replacing costly energy price subsidies that mostly benefit the well-off with financial assistance targeted to the poor can help free up money for social and development spending and also combat climate change.

A collective response to the faltering global recovery is the most immediate priority. Global vulnerabilities in an increasingly interlinked world make this a must. Witness the ripple effects on global confidence of the problems in the euro area and the tepid recovery in the United States. Growth in emerging markets is slowing; there is great concern in low-income countries about rising food prices and volatile commodity prices; and frustrations are growing across the Middle East. The renewed setbacks to the global recovery can be tackled only if we work together.

Fostering sound economic and financial management is the most important contribution the IMF can make to sustainable development. It lays a foundation for economic growth that creates jobs, generates resources to protect the poor and the environment, and ultimately sows the seeds of peace and stability. We stand ready to work with our member countries and with other international organizations to take the global agenda to the next level. ■



The developing world is reevaluating what it means to be poor

A man uses a mobile phone at a camel fair in Pushkar, India.

A Relative Question

Martin Ravallion

RISING average living standards in many developing countries have triggered a reassessment of what it means to be considered poor. In response, some of those countries have increased their poverty lines (the income level below which a person or household is deemed poor). For example, China recently doubled its national poverty line from 90 cents a day to \$1.80 (adjusted to reflect constant 2005 purchasing power). Other countries—including Colombia, India, Mexico, Peru, and Vietnam—have also recently revised their poverty lines upward.

These revisions are hardly surprising. The poverty measure in any given setting will be accepted only if it accords reasonably well with prevailing ideas of what poverty means in that setting. Sustained overall growth will undoubtedly result in more countries raising their standards. The same thing happened over time in most of today's rich countries.

What does this mean for how we should monitor overall progress against poverty? Should the poverty line also vary with average income?

Assessing progress

These questions hark back to an old debate—whether poverty is absolute or relative. An absolute poverty line is intended to represent constant purchasing power over commodities

in different places and at different dates. An example is the World Bank's international poverty line of \$1.25 a day, which is converted to local currencies at so-called purchasing power parity (PPP). By contrast, prevailing relative lines are set at a constant proportion of the country- or year-specific mean (or median) household consumption or income per person (or equivalent single adult). The poverty lines typically used in western Europe are examples.

The choice of method matters to assessments of progress against poverty and to long-standing policy debates about the potential for reducing poverty through economic growth. Indeed, when the poverty line is fixed in real terms, any standard poverty measure will automatically fall during a growth period in which all incomes rise proportionally. But the same growth process will have no effect on the poverty measure when the line is set at a constant percentage of average income or consumption.

Low- and middle-income countries have tended to favor absolute lines, while most high-income countries have preferred relative lines. Richer countries also tend to use higher poverty lines. This preference for a higher national poverty line can be called the "relativist gradient."

Chart 1 plots the national poverty lines for about 100 countries against consumption per capita, both at PPP. The highest

line is in Luxembourg, at \$43 a day, while the United States, with a similar level of average consumption to Luxembourg, has a \$13-a-day line. The relativist gradient is evident as consumption levels decline. The average poverty line of the poorest 20 or so countries is \$1.25 a day—which is how the World Bank’s international absolute line was set. Even among developing countries that use absolute lines, countries with higher average incomes tend to have higher real lines. Across countries it seems that poverty is indeed relative.

A social norm

The question for development specialists is whether global poverty monitoring should allow the poverty line to vary with average income. The answer depends on how the gradient in national lines in Chart 1 is interpreted.

One can think of a poverty line as the monetary equivalent of an underlying concept of human welfare in a specific setting—a *social norm* that can vary from one setting to another. The poverty measure in any given setting will be accepted only if it accords reasonably well with prevailing ideas of what poverty means in that setting. Norms differ between rich and poor societies and evolve over time in growing economies. But using a lower real poverty line in poorer countries will mean that two people judged to have the same standard of living—that is their income can buy an equivalent assortment of goods and services—end up being treated differently depending on where or when they live. This inconsistency has motivated the past emphasis on measuring absolute poverty using a common real poverty line, such as \$1.25 a day.

However, there is another interpretation of why richer countries have higher poverty lines that is grounded in the idea that there are “social effects” on welfare. The absolute approach views individual welfare as dependent on an individual’s *own consumption*. In this view, where a person lives is irrelevant to whether that person is deemed to be poor because the absolute line represents the same real level of consumption across countries. A relative line, by contrast, encompasses certain social determinants of welfare that vary with the context. In this view, poverty lines reflect the welfare effects of *relative deprivation*—that even though two people have the same real income, the one living in the richer country will feel worse off—and the costs of *social inclusion*, namely the extra expenditures necessary to participate in a rich society compared with a poor one. Research in various fields—anthropology, psychology, and economics—has found evidence consistent with the existence of such social effects on individual welfare.

So there are two competing explanations for Chart 1. Under the *social norms* interpretation, individual welfare depends solely on a person’s own consumption. The relativist gradient stems from a tendency for richer countries to use higher welfare norms in deciding who is poor.

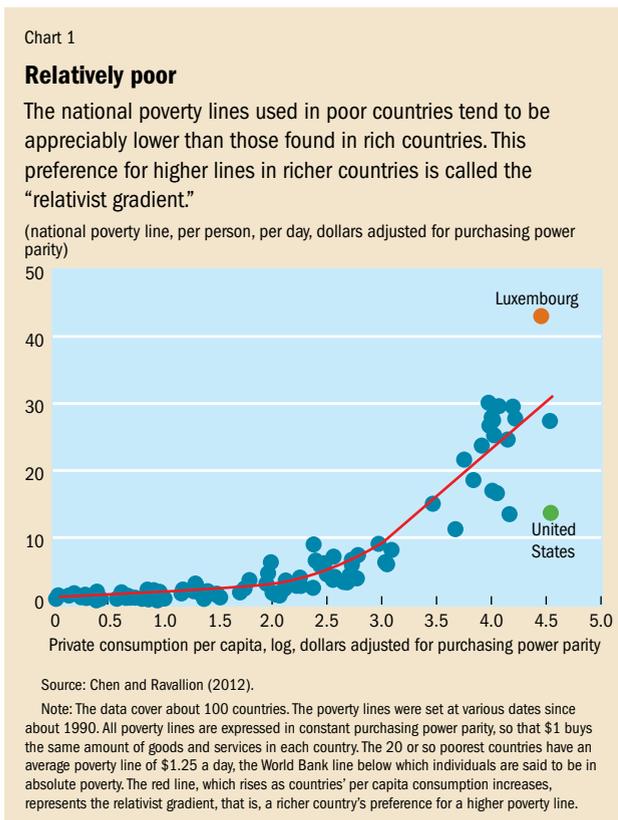
The *social effects* interpretation does not require different norms, but postulates instead that living in a richer country requires a higher level of consumption to attain the same level of welfare. Then the welfare-consistent poverty lines—anchored to a common level of welfare—will tend to rise with the average consumption of a country.

This admittedly subtle theoretical distinction between social norms of welfare and social effects on welfare has dramatically different implications for global poverty measurement. The social norms interpretation points us toward absolute measures, while the social effects interpretation points us toward some concept of relative poverty. The uncertainty about which interpretation is right makes it essential to consider both approaches when measuring global poverty.

A global measure of relative poverty

The question for analysts then is how to devise a reasonable global measure of relative poverty, to complement prevailing absolute measures. Setting relative poverty at a constant proportion of the mean income requires implausible assumptions. In particular, it requires either the assumption that people are concerned solely with relative deprivation (so that their own consumption does not matter independent of their relative consumption) or the assumption that the costs of social inclusion can be nearly zero in the poorest places.

World Bank researchers have developed new poverty measures that take social effects on welfare seriously (Ravallion and Chen, 2011). Technically, these are called “weakly relative” measures, meaning that the poverty line rises with average income but not as a constant proportion of that income. It can also be thought of as an inverse measure of “social inclusion,” in that fewer people living below the weakly relative line means that more people have attained the social inclusion needs deemed relevant to the society in which they



live. Each country then has two poverty lines, namely the absolute \$1.25 a day line and a higher (or, at least, no lower) line intended to reflect higher costs of social inclusion in the country concerned. In the poorest of countries, the second line is also an absolute measure.

Weakly relative measures have been constructed that are consistent with the relativist gradient described above. And they are consistent with evidence on subjective perceptions of welfare in developing countries. Weak relativity is also suggested by the recent signs that the idea of what poverty means in developing countries is changing. This does not necessarily reflect a higher welfare threshold—it may instead be that a higher income is deemed necessary to attain the same level of welfare.

When this new approach is applied to the data, we find that 47 percent—slightly less than half—of the developing world's population was relatively poor in 2008. Of that 47 percent, 22 percent lived below the absolute line of \$1.25 a day.

To put this in perspective, the corresponding relative poverty rate for high-income countries (calculated on a consistent basis) is 24 percent for 2008. However, as best can be determined from the available data, no one in that 24 percent in high-income countries lived below \$1.25 a day (though some very poor people may not have been picked up in the sample surveys, notably the homeless).

We find that the incidence of relative poverty has fallen in the developing world, from 63 percent of the population in 1981 to 47 percent in 2008 (Chen and Ravallion, 2012). But even though the proportion declined, a growing population meant that the total number of relatively poor people rose by about 360 million over that period.

At the same time, there has been a decline in the incidence of absolute poverty in the developing world. The overall percentage of the population living below \$1.25 a day was 52 percent

in 1981, compared with 22 percent in 2008. In 2008, 1.3 billion people lived below \$1.25 a day, compared with 1.9 billion in 1981. Progress has been uneven across regions, but absolute poverty counts fell in all regions during the 2000s.

Success against absolute poverty will probably swell the ranks of the relatively poor.

Chart 2 shows the numbers of absolutely and relatively poor people in the developing world between 1981 and 2008. More than 80 percent of the relatively poor in 1981 were absolutely poor, but by 2008 the proportion had fallen to less than half.

So a substantial increase in the number of people who are relatively poor but no longer absolutely poor came hand in hand with the developing world's success against absolute poverty. Economic growth has generally meant a lower absolute poverty rate, but over time it has also meant that in many developing countries relative considerations have become more important. The relative measure of poverty is naturally less responsive to economic growth and puts a somewhat higher weight on inequality. Rising numbers of people who are relatively poor can thus be seen as the other side of falling numbers of those who are absolutely poor. Success has come with a change in what it means to be successful.

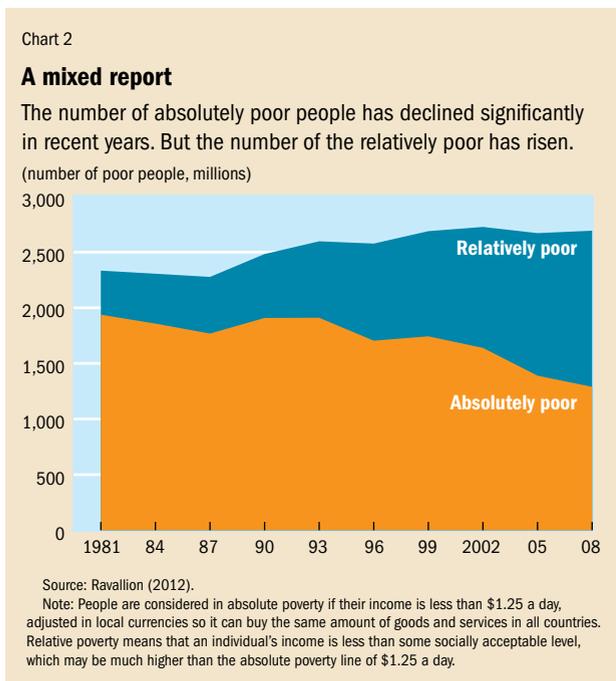
Fighting absolute poverty

It would not be fair to the more than 1 billion people who still live on less than \$1.25 a day to abandon the emphasis on fighting absolute poverty. Eliminating such extreme poverty must remain the global development community's number one priority. But the world is changing rapidly. The convergence in living standards across the globe is accompanied by emerging convergence in our ideas about what poverty means—although it will be a long time before, say, China's poverty line reaches the U.S. line, let alone Luxembourg's. New poverty targets will undoubtedly emerge that reflect these new perceptions. We can recognize that fact, and recognize that success against absolute poverty will probably swell the ranks of the relatively poor, without diverting our efforts at bringing the poorest people in the world out of extreme poverty. ■

Martin Ravallion is Director of the World Bank's Research Department.

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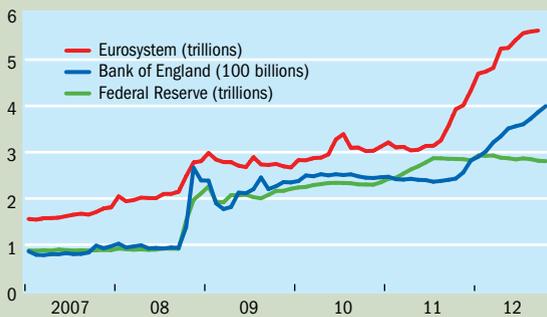
Ballooning Balance Sheets

Major central banks have been injecting liquidity to contain the effects of the global financial crisis

SINCE the onset of the financial crisis in 2007, there has been a dramatic expansion in the size of the balance sheets of the Bank of England (BOE), the European Central Bank (ECB), and the U.S. Federal Reserve (Fed). Central banks found themselves in a policy quandary. They had difficulty further lowering their policy interest rates to ward off the recession because the rates were already quite low. As a result, these central banks undertook unconventional policies aimed at stabilizing financial markets and fighting the recession by boosting total demand.

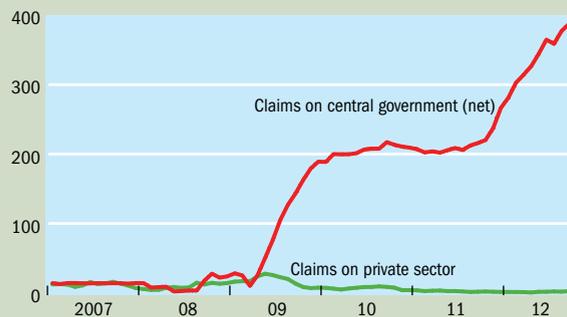
Central banks' total assets have surged during the global financial crisis.

(total assets, end-of-month values, national currency)



The BOE purchased government securities.

(end-of-month values, billion pounds)



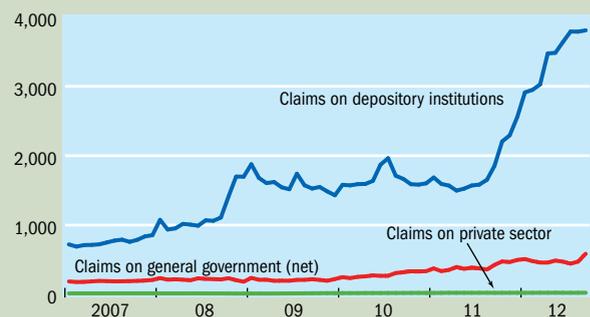
Although each of the central banks had a different approach, all three acted aggressively to inject liquidity into their economies and promote growth. The BOE engaged in a targeted quantitative easing policy that focused mostly on the purchase of government securities. Since March 2009, the BOE's purchases of government securities (called gilts) have totaled 14 percent of GDP. The ECB has conducted a range of measures, including long-term financing operations and a limited securities market program for sovereigns. The Fed's

quantitative easing used purchases of both government bonds and mortgage-backed securities to reduce long-term yields, especially on residential mortgage rates.

Despite their somewhat different focus, a common result has been a rapid ballooning of all three central banks' balance sheets. Since the onset of the subprime mortgage crisis in August 2007, the BOE's balance sheet has grown 380 percent; the Eurosystem's has mushroomed by 241 percent; and the Fed's has grown 221 percent.

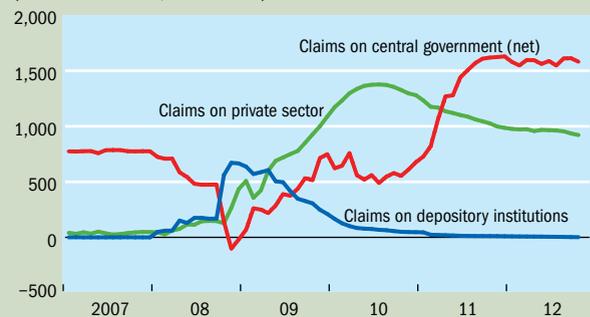
The Eurosystem provided more credit to banks.

(end-of-month values, billion euros)



The Fed bought government bonds and mortgage-backed securities.

(end-of-month values, billion dollars)



About the database

The data are derived from the International Financial Statistics database, which contains current statistics for 194 countries covering all aspects of international and domestic finance. The database is available at <http://elibrary-data.imf.org>

Prepared by Ricardo Davico and Brian John Goldsmith of the IMF's Statistics Department.

Sheltered from the **STORM**

Europe's central, eastern, and southeastern countries have been largely insulated from the ongoing euro area crisis, but that could change quickly

Bas B. Bakker and Christoph Klingen

CENTRAL, eastern, and southeastern Europe have been notably absent from the euro area crisis. Financial markets have been very concerned about Greece, Ireland, Portugal, and—more recently—Italy and Spain. But they do not yet appear overly concerned about the 22 countries in central, eastern, and southeastern Europe (see box), despite their close ties with the euro area.

In a radical break with the past, investors are often demanding lower risk premiums for the debt of these smaller, less affluent European countries than for that of western European nations: Estonian risk premiums have at times been lower than those paid by the Netherlands and those of Bulgaria and Romania lower than for Italy and Spain.

That wasn't the case a few years ago, when the turmoil in western Europe that followed the onset of the global financial crisis in 2008 quickly spilled over to the central and eastern European economies. The region had many prosperous years, supported largely by easy credit from western Europe. But after the failure of Wall Street investment bank Lehman Brothers in September 2008, banks in the euro area countries abruptly stopped new lending, triggering a sharp contraction in domestic demand in most central and eastern European economies. A massive slump in global trade exacerbated the crisis, battering the region's exports. As a result, the countries in the region suffered an unprecedented economic contraction in 2008 and 2009. By the time the region started to recover in 2010, GDP had declined by as much as 25 percent in some countries, although a few, such as Albania and Poland, escaped relatively unscathed.

Except for a scare in late 2011, countries in the region have been largely untouched by the euro area crisis that began two years ago—mainly because they rely far less today on easy credit from western European banks to support domestic spending and because they have taken steps to rein in government deficits.

Links still strong

This seeming ability to sidestep the euro area turmoil is occurring despite continued strong links between western and eastern countries. Since the Soviet Union dissolved two decades ago, western and eastern Europe have become increasingly interconnected, through both trade and financial channels.

Western Europe is the region's largest export market. Some of the exports are inputs for western Europe's exports. Many of the countries in the region have become part of a supply chain that provides inputs to final producers in western Europe. German car makers, for instance, have set up pro-

On the euro border

Central, eastern, and southeastern Europe comprises the Baltic countries of Estonia, Latvia, and Lithuania; the central European Czech Republic, Hungary, Poland, and Slovak Republic; the southeastern European nations of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, former Yugoslav Republic of Macedonia, Montenegro, Romania, Serbia, and Slovenia; and in the east Belarus, Moldova, Russia, and Ukraine. Turkey, which is in both Europe and Asia, is considered part of the region.



Shopping and leisure complex in downtown Warsaw, Poland.

duction facilities in central Europe and shifted part of their production to that region.

Trade linkages are especially important for central Europe. Although large commodity exporters such as Russia and Ukraine trade extensively with countries outside Europe, the prices their exports fetch in international markets are nonetheless linked to the well-being of the western European economies. By contrast, southeastern Europe is less integrated with western Europe.

But as central as trade is to the relationship, financial links—mainly through banks—are more important still. The region's banking systems are tightly integrated with western European banks, both in terms of ownership and financing.

Foreign-owned banks (here meaning those in which a foreign entity has a stake of more than 25 percent and is the largest shareholder) account for about 35 percent of the market in Belarus, Russia, Slovenia, and Turkey, whereas in Bosnia and Herzegovina, Croatia, the Czech Republic, Estonia, Romania, and the Slovak Republic foreign banks have up to 80 percent of the market. By contrast, foreign banks on average account for less than 20 percent of the market in the euro area.

A foreign-owned bank, however, does not necessarily rely on foreign funding. For example, foreign-owned banks dominate in the Czech Republic, but their operations are locally funded, mostly through deposits. Such banks are less vulnerable to a sudden cutoff in foreign—in this case head office—funding.

But cross-border funding by foreign banks is important in many economies in the region. It exceeded 30 percent of GDP

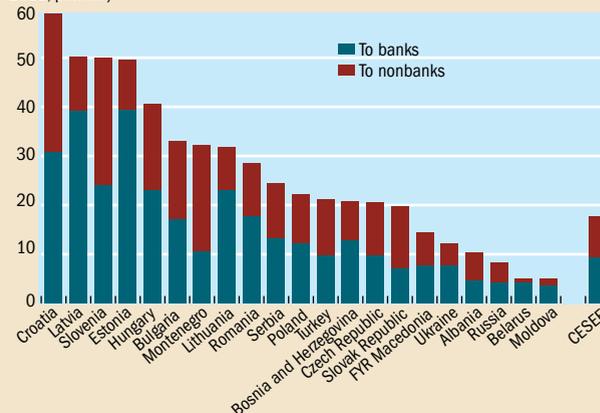
in Bulgaria, Croatia, Estonia, Hungary, Latvia, Lithuania, Montenegro, and Slovenia at the end of 2011 (see Chart 1). This funding takes the form of western European parent banking groups financing the operations of their local affili-

Chart 1

Closely tied

Major foreign banks provide a substantial amount of cross-border funding to bank and nonbank borrowers in central, eastern, and southeastern Europe.

(lending by advanced economy banks relative to recipient country GDP, fourth quarter 2011, percent)



Sources: Bank for International Settlements (BIS), *Locational Banking Statistics*; IMF, World Economic Outlook database; and IMF staff calculations.

Note: The lending is by banks with international operations in advanced economies. Their central banks report the information to the BIS, which compiles the data. The BIS is the central bank of central banks. Data for Kosovo are unavailable. CESEE = central, eastern, and southeastern Europe.

ates, as well as direct cross-border lending to large corporations. In Russia and Turkey, even though market penetration of foreign banks is relatively low, local banks often supplement their deposits by borrowing in international interbank and bond markets to fund domestic lending.

These tight financial linkages portended a big impact on central, eastern, and southeastern Europe from shocks originating in western Europe. That is what happened during 2008–09. Before the Lehman Brothers failure, western European parent banks financed the rapid expansion of domestic credit, which fueled an asset price and domestic demand boom. But when the global crisis hit western Europe, those flows suddenly stopped, plunging the region into a deep recession, which began to abate only after a revival of exports to western Europe in 2010 (see Chart 2).

Despite these strong continuing connections between eastern and western Europe, the euro area crisis that began two years ago has not had the same impact as the 2008–09 financial crisis. While borrowing costs in the countries in the euro area periphery—first Greece, then Ireland, then Portugal—rose relentlessly to reflect rising concerns of investors, relative borrowing costs for countries in central and eastern Europe remained flat or continued to decline as the region climbed out of the deep recession.

The main reason the region was so little affected by the current euro area crisis this time is the absence of large imbalances. In 2007 and 2008, the region was vulnerable to a sudden stop in capital inflows because countries were borrowing considerable amounts from abroad (mainly from banks in western Europe) to finance their large current account deficits. By 2011, a large portion of these imbalances had disappeared (see Chart 3). Today, economies are not overheating, and growth is increasingly driven

by exports rather than domestic demand booms fueled by inflows of foreign capital.

Countries have also embarked on programs to reduce their fiscal deficits. In the run-up to the 2008–09 crisis, public finances were weak, although a rise in boom-related tax revenues created the illusion of a strong fiscal position. The end of the boom made it clear that the tax revenues were largely temporary: in 2009 the region's fiscal balance swung from a surplus of 2 percent of GDP to a deficit of 6 percent. But by 2011, after most countries implemented large-scale fiscal consolidation, the region's deficit was reduced to ½ percent of GDP.

Still, many countries face considerable risks. The need to refinance large external debt keeps borrowing requirements high. Large stocks of foreign currency loans constrain exchange rate and monetary policy. And Russia and Ukraine remain susceptible to declines in commodity prices. Fiscal deficits are still substantial in a number of countries, despite fiscal consolidation efforts to reduce deficits and debt. And banking systems are saddled with a large stock of nonperforming loans—a problem that did not exist prior to 2008.

A whiff of contagion

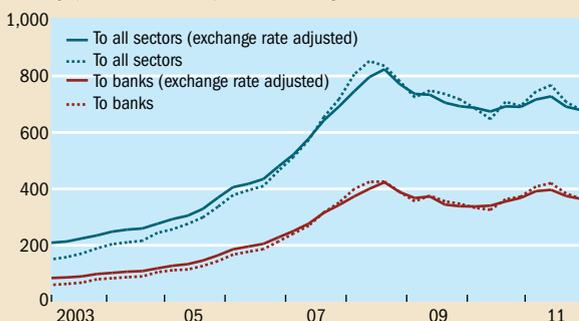
The limits to the region's resilience were tested in the second half of 2011, when the problems in the euro area escalated. Euro area banks came under significant funding pressure. In response they pulled back on foreign funding operations. Foreign banks reduced their financing to central, eastern, and southeastern Europe by 6½ percent between June and December—compared with about a 3 percent reduction for Africa, the Middle East, and the Asia Pacific region and an increase of 2 percent for Latin America and the Caribbean.

Chart 2

Pulling back

Banks in advanced economies sharply increased their lending to central, eastern, and southeastern Europe until the financial crisis that began with the failure of Lehman Brothers in September 2008.

(lending by advanced economy banks to the region, billion dollars)



Source: BIS.

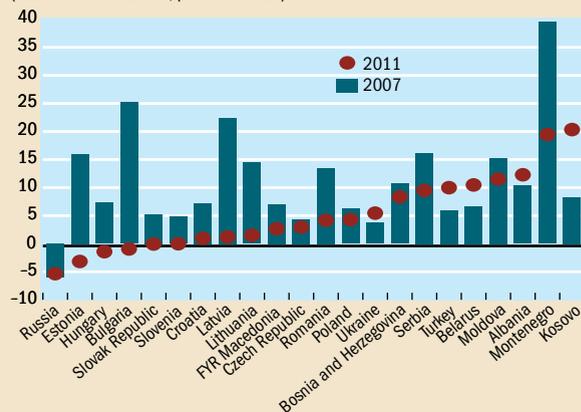
Note: The chart covers banks that have international operations in the countries that are members of the BIS, an international central bank for domestic central banks. Exchange rate adjustments try to eliminate any change in valuation that occurs because of changes in exchange rates for data reported in a common currency, in this case the U.S. dollar.

Chart 3

Disappearing deficits

In 2007 countries in central, eastern, and southeastern Europe were running sizable current account deficits that shrank dramatically by 2011.

(current account deficit, percent of GDP)



Source: IMF World Economic Outlook database.

Note: The current account measures a country's income from exports, investments abroad, and cash transfers from other countries minus expenditures on imports, income transferred to foreign owners of domestic investments, and cash transfers abroad.

Although that funding squeeze was partly offset by local deposit growth and an increase in lending by local banks, credit growth was negative in the Baltic countries, Hungary, Montenegro, and Slovenia.

The funding squeeze for the region eased when the European Central Bank (ECB) offered banks unlimited liquidity at low interest for a period of three years in late 2011 and early 2012.

Europe would be severely affected through both trade and financial channels. Exports would suffer if euro area growth declined rapidly, financial markets strains would intensify, parent bank funding would likely be scaled back, and capital inflows would drop—further affecting domestic demand.

The region is in better shape than in 2008, when it was an accident waiting to happen. Large imbalances had made the

Despite the recent improvements in financial markets, growth . . . has slowed sharply this year—a spillover from the recession in the euro area.

The July 2012 commitment by ECB President Mario Draghi to “do whatever it takes to preserve the euro” further eased market anxieties and helped relieve funding pressure.

Despite the recent improvements in financial markets, growth in the region has slowed sharply this year—a spillover from the recession in the euro area. The IMF, in its October 2012 *World Economic Outlook*, projects growth in central, eastern, and southeastern Europe of only 2.8 percent, down from 4.9 percent in 2011.

Moreover, tight trade and financial linkages keep the region at risk from renewed deterioration in the euro area. If the euro area crisis were to intensify, central, eastern, and southeastern

area very vulnerable to a sudden stop in capital inflows. This is no longer the case—the likelihood of home-grown crises is much reduced.

But this does not mean that the region is fully sheltered—it could still be affected by what happens in the euro area. Despite its newfound resilience, the region could be quickly overwhelmed by a worsening of the euro area crisis. That underscores the continuing need to rebuild buffers and hone crisis preparedness. ■

Bas B. Bakker is an Advisor and Christoph Klingens is a Deputy Chief, both in the IMF's European Department.



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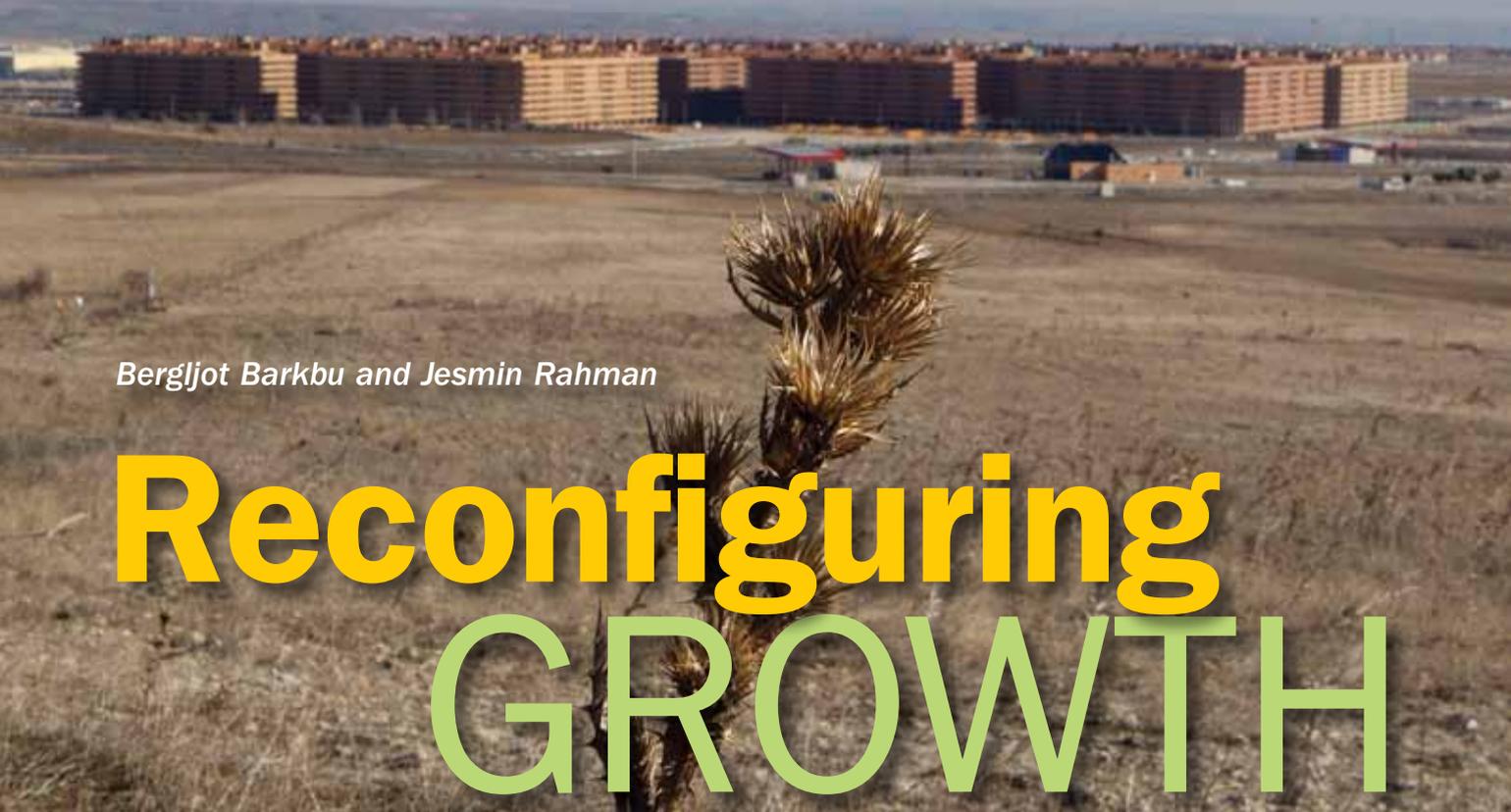
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Bergljot Barkbu and Jesmin Rahman

Reconfiguring GROWTH

Vacant apartment blocks in Toledo Province near Madrid, Spain.

To stimulate growth, the euro area must combine aggressive structural reform and policies to promote demand

EUROPEAN policymakers have long known that the EU economy needs fundamental structural changes. Aware that Europe was lagging the United States, the European Union launched the Lisbon Strategy in 2000 to make the region “the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion” by 2010.

Well before the current crisis, Jean-Claude Trichet, then head of the European Central Bank, wrote, “There are four key priorities for reform in Europe, namely, getting people into work, increasing competition, unlocking business potential, and supporting an innovative environment” (OECD, 2005).

Indeed, according to our research, the long-term gains from product and labor market reforms are substantial and offer a much-needed opportunity to increase Europe’s growth potential. Moreover, a simultaneous EU-wide push for reform could lead to positive spillovers across countries.

The ongoing euro area crisis underlines the importance of reforms—but also increases the complexity of achieving them. Without an independent exchange rate, structural reforms must take the lead when it comes to delivering relative price adjustment for individual countries. But reforms often take

time to bear fruit, and the need for growth is immediate. As a result, to generate growth and jobs now, longer-term structural changes must be combined with shorter-term measures to support demand. To anchor these efforts and restore confidence in the viability of the currency union, the euro area should move toward a more complete union.

European policymakers have taken unprecedented action in response to the crisis, both at the central and individual country level. The elements of a solution are there, but further implementation is needed.

What caused the problem?

Lack of growth in some parts of the euro area stems both from severe imbalances in trade and capital flows that built up after the adoption of the common currency and from weaknesses caused by lack of competitiveness, particularly on the labor front, reinforced by higher price increases and labor costs in southern countries since the beginning of the monetary union.

Problems with the labor market are well known. They include, for example, hiring and firing difficulties, high minimum wages, centralized wage bargaining, and restricted access to jobs and certain markets.

To lift growth, policymakers must tackle both imbalances and weak competitiveness.

During the past decade, euro area countries have gone in different directions in pur-

suit of growth. Exports drove growth in northern euro area countries like Germany and the Netherlands, while southern countries, such as Greece and Spain, relied on domestic demand. Not surprisingly, current account balances and relative prices, including nominal wages, have progressed differently in what are effectively two subregions—North and South. Demand in southern countries was financed largely by borrowing from the northern countries. The southern countries had big current account deficits, while the northern countries ran surpluses.

Once the crisis struck, the southern countries were hit in two ways. They had to begin reducing their accumulated imbalances as private capital flows and credit growth slowed, hurting growth. At the same time, markets started differentiating between surplus and deficit countries—pushing up private and public sector borrowing costs in countries with deficits.

A large share of new employment in southern euro area countries was in cyclical sectors, such as real estate, which rode the wave of rapid credit growth that accompanied the economic boom.

As credit dried up and the economic boom gave way to deep recession, unemployment surged in the southern euro area countries. The disparate growth strategy in the euro area has left southern countries with large imbalances, an unsustainable debt burden, and limited space for policy adjustment. Although these countries reversed some of their imbalances and competitiveness gaps in past years, the improvement was achieved largely through labor shedding. More relative price adjustment is needed. Unemployment remains at unprecedented levels and market access is severely limited. As a result, growth prospects are dismal (see Chart 1).

These are not simply short-term difficulties: they are fundamental barriers to long-term growth in the euro area. For example, Italy's energy prices are among the highest in Europe, reflecting limited competition and inadequate infrastructure; in Spain, reforms of the goods and service markets would not only help raise its growth potential, it would also accelerate employment recovery.

These structural flaws prevented the euro area from keeping up with other major economies—particularly the United States—over the past three decades, even though EU growth has been relatively inclusive. Falling trend growth in the euro area reflects for the most part declining productivity growth, especially in southern countries. In addition, lower labor utilization (or productive hours worked)—a structural aspect of many European economies—explains much of the difference in the GDP per capita level between the euro area and the United States.

Will deep reforms make a difference?

Because many of the euro area's underlying problems are fundamental in nature, fixing them requires structural reform—action to correct long-brewing problems that emanate from certain underlying features of the economy.

For example, studies of Europe find that strong employment protection, longer and more generous unemployment benefits, and collective bargaining systems that favor

wages over employment have held down productivity, in turn keeping growth low. To make employers more amenable to hiring, certain structural aspects of the labor market must be changed, including moderating minimum wages, decentralizing collective bargaining, phasing out closed professions, relaxing job protection, and increasing job training. These actions are different from macroeco-

To lift growth, policymakers must tackle both imbalances and weak competitiveness.

nomical policies, which involve monetary or fiscal policy instruments, such as reducing the interest rate or bringing the budget into balance.

Empirical evidence shows that *product market* reforms, such as reducing barriers to competition and improving the business environment, can lift growth substantially. *Labor market* reforms, in addition to raising growth and employment in the long term, can help achieve price realignment and restore some countries' lost competitiveness by giving employers more flexibility in hiring and firing and keeping wage growth under control.

Holding down nominal wages and using taxation to adjust relative prices between consumption and labor—technically known as fiscal devaluation—can help accelerate this rebalancing process. Reallocation across sectors could be supported by more active policies at the central EU level, including targeting investment and leveraging EU-wide funding resources.

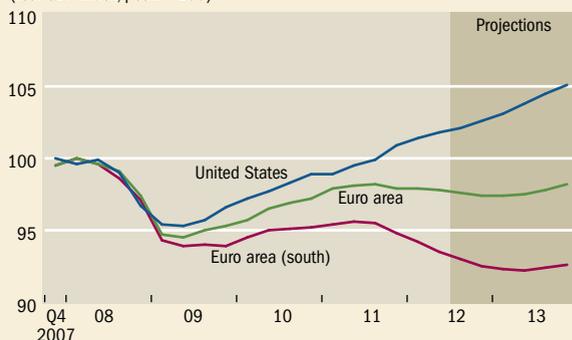
Europe's experience shows that structural reform can yield a strong payoff (see Box 1), and most empirical studies point

Chart 1

Growing gap

Growth in Europe, especially in the south, is projected to diverge sharply from that in the United States.

(real GDP index, peak = 100)



Source: IMF, World Economic Outlook database.

to labor and product market reforms' positive long-term effects on productivity, growth, and employment.

To compare short- and long-term impacts, we simulated the effects of individual structural reforms on output using the IMF's Global Integrated Monetary and Fiscal model (GIMF—see Box 2). The Organization for Economic Cooperation and Development (OECD) has identified best practices in labor and product markets and pension policies. Our study found that if euro area countries made changes that close by 50 percent the gap between their labor market and pension policies and OECD best practices, GDP would rise on average by almost 1½ percent over a five-year period.

Box 1

Payoff from reform

The Netherlands in the 1980s and Sweden in the 1990s are examples of how reforms can turn poor economic performance around.

Before the reforms, both countries experienced a prolonged period of subpar performance. When the malaise was further exacerbated by a deep recession (Netherlands, 1980–82) or a banking crisis (Sweden, 1990–92), policies shifted course, and over a decade, extensive macroeconomic policy and supply-side reforms were implemented. The public expenditure-to-GDP ratio was lowered significantly, allowing a reduction in both the high fiscal deficit and high taxes; labor markets were made more flexible, and the incentives to work increased; and product markets were reformed to boost competition. Sweden has experienced two decades of rapid growth, and the Netherlands is renowned for its employment miracle.

What are the lessons of these experiences for other countries?

First, reforms are *country specific*. In the Netherlands, reforms focused on increasing the very low employment rate (the result of too rapid wage increases); in Sweden, reforms focused on boosting dismal productivity growth (which was held back by outdated industries and excessive regulation). In Sweden, large downward adjustment in the real effective exchange rate resulting from currency depreciation helped jump-start the economy. Reforms in both countries, however, had common elements—reducing the role of the government in the economy, increasing competition, and changing incentives.

Second, reforms need to *adapt over time*, as bottlenecks change. In the Netherlands, the problem initially was a lack of demand for labor, so policies focused on reducing wage costs. As employment expanded, reforms shifted to boosting labor supply.

Third, the full impact of reforms *builds up over time*.

Box 2

The model

The Global Integrated Monetary and Fiscal model (GIMF) is a general equilibrium model that is used extensively inside the IMF, and at a small number of central banks, for policy and risk analysis involving a number of countries.

The traditional strength of the GIMF is its usefulness in fiscal policy analysis and the study of macrofinancial linkages.

The gains increase by another 2¼ percent if product market reforms are also pursued (see Chart 2).

Other analyses reach similar conclusions. For example, the OECD found that comprehensive and ambitious reforms would add 1 percentage point a year to GDP growth for 10 years in most euro area countries (OECD, 2012).

These potential gains are substantial, but the effort required to implement them is also large and the payoff is modest in the very short run, particularly for product market reforms, which take time to put in place. Because product markets lag best practice more than labor markets, focusing reform in that area appears to yield a considerably higher return.

Our simulation results also point to sizable mutually reinforcing effects from a broad spectrum of reform. For example, a country that works to close only the gap in its labor market is expected to experience a smaller growth payoff than one that makes an effort to close the gap in its product markets as well.

Moreover, reforms in one country can also help other countries, mainly through increased trade and productivity spillovers. If Spain reforms its labor market, that has a positive effect on growth in the rest of the euro area. Generally speaking, the analysis shows that southern euro area countries would gain more from reforms in northern countries than northern countries would benefit from reforms in the south. That's because the northern euro area countries have bigger economies and higher productivity levels.

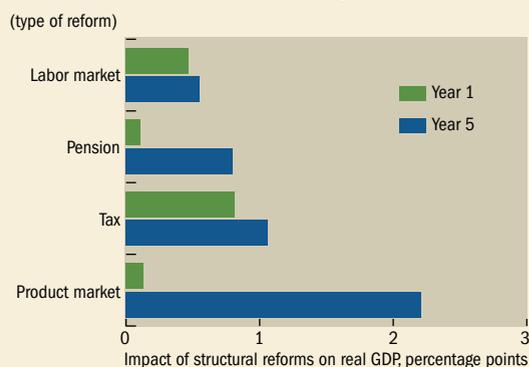
But reforms are unlikely to deliver a sufficient boost to short-run activity during the current economic slump. And implementing them during a downturn may be more difficult than in better times. Structural reforms such as those of product and labor markets are geared toward improving competition and productivity, thereby enhancing an economy's supply side, and may yield no payoff in the short run if aggregate demand is weak and there is excess capacity.

For example, adapting employment protection may not stimulate hiring in the short term, but might in fact increase

Chart 2

Making change

If euro area countries implement reforms that match OECD best practices, GDP could increase significantly.



Source: Authors' calculations based on the IMF's Global Integrated Monetary and Fiscal model.

unemployment as employers shed excess workers without penalty. Similarly, reducing unemployment insurance or raising the retirement age would reduce the disposable income of those induced to seek work who do not find it. But these changes are critical to reinvent trend growth.

Policy options

So what can be done? Against a backdrop of low trend growth, competitiveness problems in several countries, and the need for fiscal consolidation to reduce unsustainable debt and large deficits, the euro area must take a multipronged approach. But trying to grow out of the crisis with a precrisis growth model based on vibrant domestic demand in southern countries would be an illusion. It proved to be an unsustainable strategy.

First, structural reforms should be put in place quickly because they take time to deliver their full potential. Some countries, particularly in the south, have made noteworthy progress in the past couple years, but there are still significant gaps between actual and potentially growth-maximizing benchmarks. Barkbu, Rahman, and Valdés (2012) discuss progress so far and lay out concrete and country-specific reform priorities for all euro area countries.

In the southern euro area, structural policies must improve the efficiency of tradable goods production to help restore competitiveness. Elsewhere, policy must open up business opportunity in the service sector to boost potential growth.

Labor market reforms should be country specific, targeted toward relative price adjustment in the south and increased labor force participation in the north.

Second, to avoid unduly harsh contractions that are very hard to reverse, these reforms should be complemented by policies that boost aggregate demand in the short run. This is not a recommendation for simple fiscal stimulus, but a way to counteract factors that make reform more difficult. It is

consistent with rapid fiscal consolidation where market pressure is severe and gradual consolidation elsewhere, allowing automatic stabilizers to work and for adjustment to be as growth-friendly as possible.

Reducing the imbalances within Europe will be less disruptive to economic activity if relative prices adjust further.

Since the beginning of the monetary union, southern euro area countries' more rapid increases in prices and labor costs have rendered those countries noncompetitive. Some of this competitiveness gap has been reversed over the past few years, but more is needed to channel additional external demand to the south and preserve the common currency.

Prices in southern Europe must increase less than prices in the north, which calls for nominal wage restraint in the south and wage growth in line with productivity in the north (see Chart 3).

Third, the euro area needs to move unequivocally toward a more complete union (see IMF, 2012). To build on recent policy progress, which has helped reduce risks, Europe needs to deliver on commitments already made to move toward more supportive pan-European policies and repair the broken monetary transmission mechanism.

The first building blocks of a banking union agreed at the June 2012 EU summit—a single supervisory framework—must be implemented and complemented with a euro-area-wide deposit insurance program and bank resolution mechanism with adequate common backstops.

To reduce the tendency for economic shocks in one country to imperil the euro area as a whole, greater fiscal integration—combining stronger central governance with more risk sharing—must accompany the banking union.

In addition, any sensible strategy must acknowledge that some of the current poor performance is unavoidable as a number of countries correct the excesses of the past. The region must repair its balance sheets and reduce excessive borrowing, with its negative short-term implications for economic activity. Bank deleveraging—a necessary unwinding of the precrisis credit boom—higher private sector saving, and unavoidable fiscal consolidation to reduce debt and deficits are continued powerful headwinds to growth.

Combined with structural and selective demand policies to boost growth and correct the competitiveness gap, firm commitments by policymakers to a more solid union will lift confidence and support the recovery. ■

Bergljot Barkbu and Jesmin Rahman are Senior Economists in the IMF's European Department.

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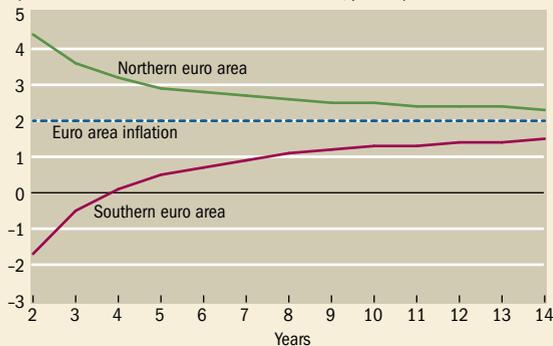
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Chart 3

Reversing differentials

To correct imbalances, inflation must rise in northern Europe and fall in the south, channelling demand from the former to the latter.

(northern and southern euro area inflation rates, percent)



Sources: IMF, Information Notice System; and authors' calculations.
 Note: Combinations of inflation rates (consistent with a 2 percent euro area average) and the number of years required to close the accumulated gap in real effective exchange rates since 1998.

Japanese Youth Speak Out

A student essay contest for Japanese university students, organized by the IMF, the Japanese Ministry of Finance, and the Bank of Japan, asked contestants to write about the global economy and the role of the IMF. The three winners were invited to participate in a Youth Dialogue panel at the 2012 IMF-World Bank Annual Meetings in Tokyo with IMF Deputy Managing Director Nemat Shafik and youth representatives from across Asia.



Tomoko Kaida is an international studies student at Kanazawa University, who has co-launched a nonprofit to promote understanding between the Japanese people and foreign nationals in Japan for educational and business purposes.

Being young in a time of global economic crises is extremely frustrating. You feel like an invisible observer whose interests and future are at stake, yet you cannot influence events or partake in almost any way.

Young people in developed countries feel that it is likely that they shall be deprived from opportunities their fathers and grandfathers had—while at the same time, youth in the underdeveloped and developing world disappointedly consider that their future is not going to be as bright as they expected.

I would say that this sums up the youth perspective on the current shape of the global economy.

The IMF has a clear mandate, among other things, to promote global macroeconomic stability. With its instruments, it financially stabilizes and alleviates economic conditions of states (and their citizens) and saves them from monetary failure. Accordingly, the position and responsibility of the IMF in the stabilization of the global economy is noteworthy. Yet, although there are some positive developments (such as the IMF Youth Dialogue Initiative), there is just too little “youth” in the policies and practices of the IMF. Though financial stabilization of a country generally has a positive effect on the level of employment of its population, including youth, it is just not enough, and the IMF should become much more youth sensitive.



Daisuke Gatanaga is a chemistry student at Yale University. He studied in Kyoto, Japan, in summer 2011 and interned at the United Nations World Food Programme (WFP) at the United Nations University in Tokyo in summer 2012.

Actually, the IMF should move forward and attach something I call National Youth Policy Conditionality (NYPC) to its lending practices. Today, when lending funds, the IMF looks for the readiness of a government to adjust policies to deal with possible problems and repay loans. The IMF’s perspective should be expanded beyond classic economic policies. Governments that expect to receive IMF support in the future should have to show what kind of youth-friendly economic policies they have (or they are going to have) and that a respective portion of loan funds received from the IMF will be invested in creation of opportunities for the youth. Extensive youth employment programs, formal education, and vocational projects, etc., should be looked at.

Additionally, it should be noted that this concept has economic logical advantages for the IMF. By attaching NYPC to its loan policies, the IMF will motivate countries to invest in the generation that (likely) will repay the loan. In that way the IMF will secure repayment, which is naturally, in the long term, in accordance with its business interest. At the same time, the youth of the loan-taking countries will have a sense of ownership and inclusion. Looking back they’ll say: “Yes, we remember, a portion of this and that IMF loan was invested in (our) future, and we believe that is legitimate debt—we actually personally benefited from it.”

To conclude, the IMF’s attempts to augment the role of the youth in tackling worrying economic issues of today are duly noted. Yet much more IMF corporate youth conscientiousness is expected, and I took the liberty of christening it IMF Global Youth Responsibility (GYR). The youth of the world are expecting it. ■

As a chemistry major at Yale, I admit I occasionally found myself too enraptured in my studies of electrons and protons to care about much else. This summer however, I stepped outside the insular world of the chemistry lab to intern at the WFP. The images that I encountered through my work there were breathtaking and alarming. In the Sahel, mothers boil otherwise inedible

toxic plants, trying desperately to provide their children with meager amounts of food. In South Sudan, violence has erupted over poor harvests displacing many and leaving them with little hope or livelihood. Around the world, these food crises have

The IMF must not forget that the economy affects real people.

been exacerbated by economic conditions, including high inflation, rising food and fuel prices, and volatile global markets.

Having lived the majority of my life relatively comfortably in developed countries such as the United States and Japan, I can hardly fathom the distress of lacking even basic subsistence. Perhaps I should even feel grateful that the worst my family suffered in the recent global economic crisis was the loss of my father's job last year. But even that, inevitably, wrought a numbing apprehension and gloom on my family as my father faced a seemingly cold and unsympathetic job market.

I cannot profess to be able to propose groundbreaking advice to solve such economic problems. But my own experiences with the WFP and with my father's unemployment have illuminated personally the realities of today's global financial system and its recent financial crises. Though the reverberations of these

crises differ from country to country, it seems apparent, especially in light of the 2007–08 global financial crisis, that flags were raised around the world. Given that internationalization continues to link national economies into international networks, global institutions such as the IMF must play essential roles in macroprudential supervision and in ensuring universal economic growth and financial stability. At the same time, however, it is critical that the IMF not forget—amid the objective numbers and data and calculations that go into monetary surveillance and analysis—that the economy affects real people, that there are real voices behind such statistics.

I believe the role of the IMF, then, is to be a medium through which people around the world—including young adults like me—can voice their opinions and engage in bilateral conversation. As an international monetary institution, the IMF is uniquely situated to provide such a forum, incorporating a wide range of people from a spectrum of backgrounds. Only when people feel they have a stake and a voice in the future is there hope of international cooperation and understanding, or any prospect of eliminating the deficiencies in information, communication, and transparency that spurred past economic crises. In a world that is becoming increasingly interconnected, my conviction is that the IMF provides a foundation from which we can look to the future with optimism as we strive to forge international monetary cooperation. ■



Kenji Nakada is an undergraduate economics student at the University of Tokyo from Shizuoka, Japan, who has interned with Citigroup, *The Economist*, and the Bank of Japan.

In this essay, I argue that the IMF can, with some improvements, contribute more effectively to the global economy as a platform for international dialogue. I first point out several changes in the economic environment brought by globalization. Next, I adduce a recent example of an international monetary problem in which the IMF could have played an important role, and then propose points of improvement to ensure its vigorous contribution.

Globalization brings about strong connections between economies, in which three Ds—dependence, diversity, and dispute—prevail. In a globalized world, economies are interdependent and communities diversified. Dependence and diversity often entail the other D, dispute. As became apparent in the wake of the current financial crisis, there are countless economic disputes around the world—about currency regimes, cross-border capital flows, bank regulation, current account imbalances. The new generation has to work together to settle these disputes, and I believe the key to solution is the fourth D, dialogue. International dialogue improves mutual understanding among countries, which is a basis for financial stability.

A recent dispute in which the IMF could have played an important role is about monetary policy. In response to the ongoing crisis, industrialized countries have adopted aggressive monetary policies to underpin growth. Some emerging

economies claim that the overflow of money resulting from those policies is harmful to them because it induces inflation. In my opinion, monetary authorities of industrialized countries should take this complaint more seriously, since, in a globalized world, setbacks to emerging economies badly affect other economies via export channels. The IMF could have initiated international policy coordination in G20 meetings, for instance, to make monetary policies more effective in industrialized economies and at the same time less harmful to emerging economies.

The IMF is eligible for this role because it has two advantages over other international financial institutions. The first is its outstanding research capability backed by the Article IV consultations. Based on its own research, the IMF can provide consistent interpretation of economic situations and thus set a benchmark for dialogue among countries. The second advantage is the funds it has. The IMF can motivate cooperative policies by providing financial contributions and is the only existing institution that can afford such incentives. Despite these advantages, the IMF has to change. The research capability should be enhanced to tackle increasingly sophisticated problems. Furthermore, it is critically important that the IMF be regarded as truly fair and neutral so that its research and proposals are fully trusted. If these improvements are made, I believe the IMF can function better to stabilize the financial system.

The further globalization progresses, the more important the role of the IMF to facilitate international dialogue becomes. Through this role, the IMF can encourage cooperation among shareholders of the global monetary system and, by doing so, it can help economies benefit from globalization while avoiding downsides. This, I believe, will lead to financial stability and a healthier world economy. ■

Credit-Welfare Trade-off

Monica Prasad

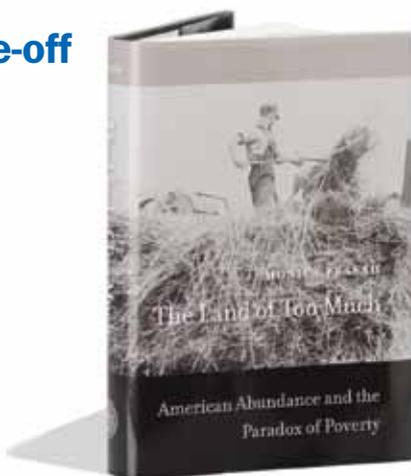
The Land of Too Much

American Abundance and the Paradox of Poverty

Harvard University Press, Cambridge, Massachusetts, 2012, 344 pp., \$39.95 (cloth).

Easy credit has been the U.S. alternative to a welfare state. The United States has more poverty and a less-developed welfare state than western Europe because it chose between the 1890s and 1930s to promote consumption-driven economic growth made possible by easily available credit. So argues Monica Prasad, a Northwestern University sociologist, in her compelling new book.

Prasad presents interlocking arguments about credit, taxation, consumption, regulation, welfare state development, interest-group politics, overproduction, and poverty in explicating the past 120 years of U.S. economic history and how it differs from that of continental Europe. She asserts that the United States is not



and welfare, according to Prasad, is that European countries restrained wage growth and consumption to facilitate higher investment in social spending, while the United States developed a more rudimentary welfare state that has left more of its population poor.

Prasad traces these differences to late 19th and early 20th century agricultural overproduction that led to bouts of deflation and the concurrent growth of large industrial enterprises. This galvanized agrarian reformers such as the Populists and their successors to advocate for regulation and a progressive income tax system, rather

spur growth and raise living standards. The role of easy credit—from federal housing and college loan programs to private sector innovations such as installment buying and credit cards—in U.S. prosperity is also well known.

Prasad's achievement is that she takes these arguments farther. First, she convincingly demonstrates that the United States went well beyond other countries in regulating the market—from food safety to banking—to protect consumers and foster consumption. Second, she makes the case that government went to great lengths to facilitate private borrowing for home ownership, college, and other consumption—from the Federal Housing Authority's institutionalizing low-down-payment long-term mortgages to tax policy that made mortgage interest (and, for a while, other types of interest) tax deductible. Third, she says that a political coalition of Democrats and farm-state Republicans led the United States, in the 1920s and 1930s, to develop a progressive income tax rather than a national sales tax, which would have dampened consumption.

Prasad's history leapfrogs from the early New Deal to the 1970s, when economic stagnation led both Republicans and Democrats to deregulate finance to make credit even more available. At this point, we come to the familiar tale of Americans taking on too much debt, leading to speculative bubbles and the 2008 financial meltdown.

History is where Prasad's book runs into problems. She fails to address the fact that the U.S. economy boomed during the period of extensive welfare-state development—from the Social Security Act through the Great Society. And her argument that regressive taxation contributes to flourishing European social welfare states raises questions about why the shift toward less-progressive taxes in the United States since 1981 has ush-

The United States is not the laissez-faire market economy of political lore; it has a strong interventionist history.

the laissez-faire market economy of political lore; it has a strong interventionist history characterized by more regulation and more-progressive taxation than France, Germany, or Scandinavia.

Whereas Europeans, particularly since World War II, constructed elaborate welfare states that provided universal health care, generous public pensions and social insurance, and redistributive social spending, the United States has used regulatory and tax policy to stimulate consumption and economic growth. The flip side of this trade-off between credit

than more regressive but more efficient consumption taxes. The course of reform in the United States between the 1890s and 1930s, from William Jennings Bryan to Huey Long and Franklin Roosevelt, becomes the story of democratizing credit so much that mid-20th century U.S. growth was propelled by what Prasad calls "mortgage Keynesianism."

Historians such as Lizabeth Cohen and Meg Jacobs have argued that U.S. policymakers from Franklin Roosevelt to Richard Nixon devoted themselves to increasing mass purchasing power and consumption to

ered in not growth but scaling back in U.S. public benefits.

Prasad also assigns too much influence to the Populists and early 20th century agrarians, and conflates these very different movements with those of urban Progressive and New Deal reformers. While the United States has been an outlier in developing credit to promote consumption, as the author says, government policy has not been the only driver. Innovative business leaders, including department store magnates and Henry Ford, shrewdly saw the value of extending credit to customers, and working-class movements did much to spur the democratization of credit through the creation of building and loan associations and credit unions.

Moreover, Prasad's argument about poverty, while provocative, is not well developed, and she glosses over questions of distribution. Prasad asserts that "progressive interventions

backfired," but the regulatory interventions of the Progressive and New Deal eras were not intended to reduce poverty. The extension of credit may have served as an alternative to welfare, but it too was intended to fuel growth, not alleviate poverty. In addition, although European welfare states have more successfully used social spending to reduce poverty and inequality, America's steep progressive income tax in the 1950s and 1960s and the more recent Earned Income Tax Credit have reduced poverty and inequality through their redistributive effects.

It is unclear how applicable Prasad's thesis is to developing economies whose welfare states, regulation, and credit are typically weak. Brazil and China have followed periods of rapid growth and poverty reduction with expanded social welfare programs, but the jury is out as to whether they will be as successful as Scandinavia or the

United States in lifting their people out of poverty.

The book is occasionally repetitive, and the author makes several odd assertions. For example, she says that France created the "neoliberal financial architecture of the 1990s," that the U.S. labor movement opposed a national sales tax for "pro-capitalist" reasons, and that the U.S. Affordable Care Act has achieved "universal health insurance."

Nonetheless, many of Prasad's arguments about the trade-off between credit and welfare and about the effects of the U.S. strong regulatory state and its progressive tax policies (until recent decades) are elegant and thought provoking. Although it lacks policy recommendations, this book certainly will stimulate debate over ways developed economies can provide that rare trifecta of growth, social justice, and economic stability.

Raymond Offenheiser
President, Oxfam America

Monetary Bliss: Bringing Currencies Together



Harold James

Making the European Monetary Union

Belknap Press, Cambridge, Massachusetts, 2012, 592 pp., \$35.00 (cloth).

Princeton History Professor Harold James's *Making the European Monetary Union* combines a concise historical narrative of the events leading up to the

European Monetary Union (EMU) with a thought-provoking account of its origin, performance, and problems. This in-depth history will appeal to academic readers looking for extensive details about the EMU.

This fascinating and well-written book couldn't be timelier. Well organized, thorough, and filled with historical facts, it explores the EMU's political and economic roots.

When almost 10 years of relative ease for the EMU's single currency came to an abrupt end with the start of the Greek debt crisis in 2010, the debate over the euro's sustainability quickly turned to the question of whether there can be a monetary union without some sort of fiscal union.

According to James, Europe's financial crisis cannot be blamed on the euro. The current crisis goes deeper, to a series of problems that were debated but not resolved at the time of the euro's creation.

The origins of the eurozone crisis are explained in this informative study of the Committee of Central Bank Governors, which became the European Central Bank. The book follows the process from preparation to execution of the concept of European monetary union and a common currency.

Here is an account that helps readers understand the European monetary crisis in depth, by tracing behind-the-scenes negotiations. As this book makes clear, it was the constant tension between politicians and technocrats that shaped the euro.

The EMU was an enormous undertaking, and it continues to work toward ensuring European price stability among members by integrating monetary systems and by means of a major cross-national currency, the euro. Drawing on newly available archives from the Committee

of Central Bank Governors and the Delors Committee of 1988–89, James shows that although the EMU

It was the constant tension between politicians and technocrats that shaped the euro.

has grown and evolved, the lack of coordination in policymaking, complex decision making, and the sheer number of interrelationships between monetary and economic variables have led to serious problems.

The EMU was originally seen as another stepping stone to a politically unified Europe. Yet with the fall of the Berlin Wall, the disintegration of the Soviet Union, and the unification of Germany, the need for European political union as a means to ensure

peace in Europe has largely disappeared. Given fading desire for full political union, the euro project has

lost the prospect of a stable platform in the foreseeable future.

From the outset the euro was a controversial construct. Design flaws in the euro zone were well known from its inception—including a lack of fiscal union and no mechanisms to deal with asymmetric shocks and diverging competitiveness. However, political imperatives trumped economic concerns in the creation of a united states of Europe, and the euro was the showpiece of this political project.

The constant media reports of the EMU's immediate demise continue unabated, and there are no quick fixes to this complex situation. The book covers the historical circumstances that produced the EMU and the euro after decades of European cooperation toward ending centuries of intra-European conflict. It also offers a balanced treatment of the current financial crisis. James's book is an essential reference for everyone with an interest in the EMU—whatever their political position. It will appeal to euro enthusiasts, euro skeptics, and euro realists alike.

John Ryan

Fellow, Centre for International Studies, London School of Economics and Political Science

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